## SANTA ANA COLLEGE

## 2019-2020 CATALOG



INSPIRE TRANSFORM EMPOWER

SAC.EDU

SANTA ANA COLLEGE


# AND ANNOUNCEMENT OF COURSES <br> SANTA ANA COLLEGE 

1530 West 17th Street • Santa Ana, CA 92706 • 714-564-6000
SCHOOL OF CONTINUING EDUCATION
2900 West Edinger Avenue • Santa Ana, CA 92704•714-241-5700 • sac.edu/sce
DIGITAL MEDIA CENTER
1300 South Bristol Street • Santa Ana, CA 92706 • 714-241-5812 • ranchodmc.com
ORANGE COUNTY SHERIFF'S REGIONAL TRAINING ACADEMY
15991 Armstrong Blvd. • Tustin, CA 92782 • 714-566-9200 • sac.edu/ocr
JPTC-CN - Joint Powers Fire Training Center-CENTRAL NET
18301 Gothard St., Huntington Beach
RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT
2323 North Broadway • Santa Ana, CA 92706-1640 • 714-480-7300 • rsccd.edu
Santa Ana College • Santiago Canyon College
Rancho Santiago Community College District serves residents of Anaheim Hills, Orange, Santa Ana, Villa Park, and a portion of Garden Grove.

ACCREDITED BY THE WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES
Santa Ana College and Santiago Canyon College are accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges,
(10 Commercial Blvd., Suite 204, Novato, CA 94949, 415-506-0234), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the
U.S. Department of Education.

sac.edu

## COLLEGE CREDIT INSTRUCTIONAL CALENDAR 2019-2020

## FALL SEMESTER 2019

August 19-21
August 22-23
August 26
September 2
September 8

September 13

Faculty Projects
Common College Flex Days
INSTRUCTION BEGINS
Labor Day - holiday
Last day to add and to drop full-term classes without "W" grade with enrollment fee refund
Deadline for Graduation Petition for Associate Degrees for Transfer (ADT) - only for eVerify
September 27 Last date to file Pass/No Pass (semester-length courses)
October 11 Deadline for Degree/Certificate/Certification Petitions
November 11 Veterans Day - holiday
November 17 Last day to drop semester-length classes with a "W" grade
November 28-30 Thanksgiving - holiday
December 15 INSTRUCTION ENDS
Dec. 16-Jan 5
Holiday break
INTERSESSION 2020
January 6 INSTRUCTION BEGINS
January 13 Last day to file Pass/No Pass
January 20 Martin Luther King's Birthday - holiday
February 2 INSTRUCTION ENDS
SPRING SEMESTER 2020
February 3-5 Faculty Projects
February 6-7 Common College Flex Days
February 10 INSTRUCTION BEGINS
February 13
Deadline for Graduation Petition for Associate Degrees for Transfer (ADT) - only for eVerify

February 14 Lincoln's Birthday - holiday
February 17 President's Day - holiday
February 23
Last day to add and to drop full-term classes without "W" grade with enrollment fee refund
March 13 Last date to file Pass/No Pass (semester-length courses)
March 13 Deadline for Degree/Certificate/Certification Petitions
March 31 Cesar Chavez Day (observed)
April 6-12
May 10
Spring recess
Last day to drop semester-length classes with "W" grade
May 25 Memorial Day - holiday
June 4 Commencement - Santa Ana College
June 5 Commencement - Santiago Canyon College
June 7 INSTRUCTION ENDS

## SUMMER SESSION 2020

June 15 INSTRUCTION BEGINS
June 26 Deadline for Graduation Petition
July $3 \quad$ Independence Day - holiday
August 9 INSTRUCTION ENDS

| AUGUST 2019 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | T | W | T | F | S |
|  |  |  |  | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |


| SEPTEMBER 2019 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | T | W | T | F | S |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |  |  |  |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |  |  |  |  |  |  |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |  |  |  |  |  |  |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |  |  |  |  |  |  |
| 29 | 30 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| OCTOBER | 2019 |  |  |  |  |  |  |  |  |  |  |  |
| S | M | T | W | T | F | S |  |  |  |  |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  |  |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |  |  |  |  |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |  |  |  |  |  |  |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |  |  |  |  |  |  |
| 27 | 28 | 29 | 30 | 31 |  |  |  |  |  |  |  |  |

## NOVEMBER 2019

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |


| DECEMBER 2019 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | T | W | T | F | S |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |  |  |  |  |

## JANUARY 2020

S M T W T F S

|  |  |  | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |


| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |


| 26 | 27 | 28 | 29 | 30 | 31 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| FEBRUARY 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | T | W | T | F | S |
|  |  |  |  |  |  | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |


| MARCH 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | T | W | T | F | S |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |  |  |  |  |

## APRIL 2020

S M T W T F S

|  |  |  | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 |  |  |

MAY 2020

| S | M | T | W | T | $1$ | $\begin{aligned} & \mathrm{S} \\ & 2 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 |  |  |  |  |  |  |
|  | NE | 2020 |  |  |  |  |
| S | M | T | W | T | F | S |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 |  |  |  |  |

JULY 2020
S M T W T F S

|  |  |  | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 |  |

AUGUST 2020
S M T W T F S

|  |  |  |  | 1 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |


| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |

$\begin{array}{lllllll}23 & 24 & 25 & 26 & 27 & 28 & 29\end{array}$
3031

## CONTENTS

College Credit Instructional Calendar 2019-2020 .....  1
Santa Ana College Philosophy and Mission .....  6
Institutional Learning Outcomes (Core Competencies) .....  6
Accreditation ..... 6
RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT ..... 7
Administrative Organization .....  8
Nondiscrimination Policy. ..... 11
Política de No Discriminación ..... 11
Chính Sách Bất Kỳ Thị ..... 11
Academic Freedom Policy ..... 11
Rates of Student Progress Student Right-To-Know Act ..... 12
Violence Against Women Act (VAWA) ..... 12
Student Consumer Information
Right-To-Know Disclosure Information ..... 12
Family Education Rights and Privacy ..... 12
F.E.R.P.A. Family Education Rights and Privacy Notification ..... 12
Sexual Misconduct, Intimate Partner Violence, and Stalking ..... 13
Harassment and Discrimination ..... 14
Smoking and Tobacco Use In District Facilities and Vehicles ..... 14
ADMISSIONS AND REGISTRATION ..... 15
Admission Eligibility ..... 15
Application ..... 15
Residency ..... 15
AB 540 . ..... 16
International Student Admissions ..... 16
International Transcripts - Evaluation Practices ..... 16
Student Success and Support Program ..... 17
Assembly Bill AB 705 ..... 17
Registration ..... 17
Schedule of Classes ..... 18
Student Photo Identification Card ..... 18
Full-Time - Part-Time Definition ..... 18
Classification of Students ..... 18
Summer Session ..... 18
Weekend College ..... 18
Career Advanced Placement Program (CAP) ..... 18
Prerequisites, Corequisites and Recommended Preparation ..... 19
Important Definitions ..... 19
Prerequisite Challenge Policy and Procedures Course PrerequisitePolicy19
Prerequisite Challenge Process ..... 19
Multiple and Overlapping Enrollments (BP4226). ..... 20
Fees, Tuition, and Expenses ..... 20
Drop for Non-Payment ..... 20
Refund Of Tuition and Enrollment Fees ..... 20
Withholding Of Student Records ..... 20
Solomon Amendment for Military Recruiters ..... 20
Open Educational Resources (OER) ..... 20
Zero Textbook Cost (ZTC) ..... 20
FINANCIAL AID
Direct Loan Programs ..... 21
Stafford Loan ..... 21
Chaffee Grant ..... 21
California State Programs ..... 21
California College Promise Grant (CCPG) ..... 21
Cal Grants ..... 21
DEGREES, CERTIFICATES AND TRANSFER PLANNING ..... 23
Associate Degrees ..... 23
Associate Degrees for Transfer. ..... 23
Certificate Of Achievement Programs ..... 23
Certificate Of Proficiency Programs ..... 23
Distance Education. ..... 23
Associate Degrees for Transfer ..... 24
Certificate and Associate Degree Programs ..... 25
The Associate Degree ..... 26
General Education Philosophy ..... 26
General Education Categories ..... 26
General Education Requirements for the Associate Degree PLAN A: 2019-2020 ..... 28
California State University General Education Breadth (CSU GE) PLAN B: 2019-2020 ..... 30
Intersegmental General Education Transfer Curriculum (IGETC) PLAN C: 2019-2020 ..... 32
Advanced Placement Policies ..... 34
The College-Level Examination (CLEP) Policies ..... 37
International Baccalaureate (IB) Policies ..... 39
Transfer To Other Colleges ..... 40
University Transfer Center ..... 40
Transferability Of Courses ..... 40
Course Requirements for Transfer Students .... ..... 40
Honors Program Transfer Agreements ..... 40
California State University ..... 41
California State University - Admission Requirements for Transfer. 41
California State University General Education Requirements ..... 41
Certification of General Education for Transfer To CSU ..... 41
Associate Degree for Transfer: A Pathway To The CSU Degree. ..... 41
University of California ..... 42
University of California - Admission Requirements for Transfer ..... 42
University of California General Education Requirements ..... 42
Certification of General Education for Transfer to UC or CSU ..... 42
Associate Degree for Transfer and The University of California ..... 42
Independent and Out-of-State Colleges and Universities ..... 43
General Education Requirements for Independent and Out-of-State Colleges and Universities ..... 43
Begin a Transfer Major at Santa Ana College ..... 44
University of California (UC)
Transfer Course Agreement 2019-2020 ..... 45
Baccalaureate Degree ..... 47
STUDENT RESOURCES ..... 50
Academic Computing Center. ..... 50
Assessment Center ..... 50
Bookstore ..... 50
CalWORKs ..... 50
Career Development/Career Education Student Success Center ..... 50
College Advancement/Foundation ..... 50
Community Services ..... 50
Continuing Education Program. ..... 50
Counseling Services ..... 50
Disability Services ..... 51
English Language Academy ..... 51
Extended Opportunity Programs and Services (E.O.P.S.) ..... 51
Health and Wellness Center ..... 51
High School and Community Outreach ..... 52
Honors and Awards ..... 52
Instructional Locations ..... 52
Intercollegiate Athletics ..... 52
Learning Center ..... 52
Library Services ..... 52
Math Center ..... 53
MESA ..... 53
Promise Center ..... 53
Public Affairs ..... 53
Puente ..... 53
Scholarships ..... 53
Student Activities ..... 53
Student Life At Santa Ana College ..... 53
Student Placement ..... 53
Teacher Ed ..... 53
U-Link. ..... 53
University Transfer Center ..... 53
Veterans Resource Center ..... 54
Veterans Upward Bound(VUB) \& Veteran Student Support Services Progam (VSSS) ..... 54
YESS Program ..... 54
COLLEGE POLICIES AND STANDARDS ..... 55
Absence/Non-Participation/Drop ..... 55
Attendance ..... 55
Auditing ..... 55
Study Load ..... 55
Academic Honesty Policy Information ..... 55
Academic Honors ..... 55
Academic Renewal ..... 56
Campus Regulations ..... 56
Cooperative Work Experience Education ..... 56
Course Repetition ..... 56
Credit By Examination ..... 57
Right To Review And Challenge Records ..... 57
Pass/No Pass Petition ..... 58
Withdrawal From Class ..... 58
Extenuating Circumstances ..... 58
Incomplete Work ..... 58
Transcripts ..... 58
Discrimination Complaints ..... 59
Grievance Procedures for Students ..... 59
Honors Program and Honors Courses ..... 59
Independent Study ..... 60
Open Enrollment ..... 60
Photography ..... 60
Probation - Dismissal ..... 60
Standards of Student Conduct ..... 61
Guidelines for Student Conduct ..... 61
Transportation ..... 62
Transfer Credit ..... 62
Unit of Credit ..... 63
Registered Sex Offender Information ..... 63
Wait List Policy ..... 63
COLLEGE CREDIT INSTRUCTIONAL PROGRAMS ..... 64
Course Codes ..... 65
Accounting ..... 66
Administration of Justice ..... 71
American Sign Language ..... 71
Anthropology ..... 72
Architecture ..... 73
Art ..... 73
Automotive Technology ..... 78
Biology ..... 81
Biotechnology ..... 82
Black Studies ..... 83
Business. ..... 84
Business Applications ..... 85
California State University General Education Breadth Certificate ..... 89
Chemistry ..... 89
Chicano Studies ..... 90
Child Development ..... 90
Communication Studies ..... 95
Communications \& Media Studies ..... 96
Community Social Services ..... 98
Computer Information Systems ..... 98
Computer Related Programs ..... 100
Computer Information Systems ..... 100
Computer Science ..... 100
Criminal Justice ..... 102
Dance ..... 104
Diesel Technology ..... 105
Drafting Technology ..... 108
Dressmaking and Alterations ..... 108
Earth Science ..... 108
Economics ..... 108
Education ..... 109
Engineering ..... 112
Engineering Transfer ..... 113
English ..... 118
Entrepreneurship ..... 120
Ethnic Studies. ..... 121
Fashion Design Merchandising ..... 122
Fire Technology ..... 125
Foreign Languages ..... 129
Geography ..... 129
Geology ..... 131
History ..... 132
Home Economics ..... 133
Hospital Pharmacy Technology ..... 133
Human Development ..... 133
Industrial Technology ..... 133
International Business ..... 133
Journalism ..... 136
Kinesiology ..... 136
Law ..... 139
Liberal Arts Degree ..... 140
Library Technology ..... 150
Management ..... 151
Manufacturing Technology ..... 153
Marketing ..... 157
Mathematics. ..... 158
Medical Assistant ..... 158
Modern Languages ..... 159
Music. ..... 161
Nursing. ..... 163
Nutrition and Food ..... 166
Occupational Therapy Assistant ..... 168
Oceanography ..... 169
Office Technology ..... 169
Paralegal ..... 169
Pharmacy Technology ..... 171
Philosophy ..... 174
Photography. ..... 175
Physics ..... 175
Plant Biology ..... 176
Political Science ..... 176
Psychology ..... 177
Science ..... 179
Sign Language. ..... 180
Social Science ..... 180
Sociology ..... 180
Speech-Language Pathology Assistant. ..... 182
Teaching ..... 183
Television/Video Communications ..... 183
Theatre Arts ..... 186
Welding Technology ..... 189
Women's Studies ..... 191
ANNOUNCEMENT OF COURSES ..... 192
Course Identification Numbering System (C-ID) ..... 193
Accounting (ACCT) ..... 196
American Sign Language (ASL) ..... 197
Anthropology (ANTH) ..... 198
Art (ART) ..... 199
Asian American Studies (ASIA) ..... 206
Astronomy (ASTR) ..... 206
Automotive Technology (AUTO) ..... 206
Banking (BANK) ..... 208
Biology (BIOL) ..... 208
Black Studies (BLST) ..... 211
Business (BUS) ..... 211
Business Applications (BA) ..... 213
Chemistry (CHEM) ..... 216
Chicano Studies (CHST) ..... 217
Child Development (CDEV) ..... 217
Chinese (CHNS) ..... 220
Communication Studies (CMST) ..... 220
Communications \& Media Studies (CMSD) ..... 222
Computer Science (CMPR) ..... 223
Counseling (CNSL) ..... 226
Criminal Justice (CJ). ..... 228
Criminal Justice Academies (CJA) ..... 229
Culinary Arts (CULN) ..... 236
Dance (DNCE) ..... 237
Diesel (DSL) ..... 242
Earth Science (ERTH) ..... 244
Economics (ECON) ..... 245
Education (EDUC) ..... 245
Emergency Medical Technician (EMT) ..... 246
Engineering (ENGR) ..... 246
English (ENGL). ..... 250
English As A Second Language (ESL) ..... 252
English For Multilingual Students (EMLS) ..... 252
Entrepreneurship (ENTR) ..... 253
Environmental Studies (ENVR) ..... 255
Ethnic Studies (ETHN) . ..... 255
Fashion Design Merchandising (FDM) ..... 255
Fire Academy (FAC). ..... 258
Fire Officer Training (FOT) ..... 261
Fire Public Safety (FSA) ..... 268
Fire Technology (FTC) ..... 269
French (FREN) ..... 269
Geography (GEOG) ..... 270
Geology (GEOL). ..... 271
History (HIST) ..... 272
Interdisciplinary Studies (IDS) ..... 273
Italian (ITAL). ..... 273
Japanese (JAPN) ..... 274
Kinesiology Activities (KNAC) ..... 274
Kinesiology Adapted Activities (KNAD) ..... 277
Kinesiology Aerobic Fitness (KNAF) ..... 278
Kinesiology Aquatics (KNAQ) ..... 279
Kinesiology Fitness (KNFI) ..... 279
Kinesiology Health Education (KNHE) ..... 280
Kinesiology Intercollegiate Athletics (KNIA) ..... 281
Kinesiology Professional (KNPR) ..... 284
Kinesiology Sports Medicine (KNSM) ..... 285
Law (LAW) ..... 285
Library \& Information Studies (LIBI) ..... 286
Library Technology (LIBR) ..... 286
Management (MGMT) ..... 286
Manufacturing Technology (MNFG) ..... 287
Marketing (MKTG) ..... 290
Mathematics (MATH). ..... 291
Medical Assistant (MA) ..... 294
Music (MUS) ..... 295
Nursing-Continuing Education (NCE) ..... 301
Nursing-Registered (NRN). ..... 301
Nutrition and Food (NUTR) ..... 305
Occupational Studies (OS) ..... 306
Occupational Therapy Assistant (OTA) ..... 307
Paralegal (PARA) ..... 308
Pharmacy Technology (PHAR) ..... 310
Philosophy (PHIL). ..... 312
Photography (PHOT). ..... 313
Physical Science (PSC) ..... 314
Physics (PHYS) ..... 314
Political Science (POLT) ..... 314
Psychology (PSYC) ..... 315
Reading (READ) ..... 316
Sociology (SOC) ..... 317
Spanish (SPAN) ..... 317
Special Services (SPEC) ..... 318
Speech-Language Pathology Assistant (SLPA) ..... 319
Study Skills (STDY). ..... 320
TV/Video Communications (TELV) ..... 320
Theatre Arts (THEA) ..... 323
Vietnamese (VIET) ..... 327
Welding (WELD) ..... 328
Women's Studies (WMNS) ..... 331
SANTA ANA COLLEGE SCHOOL OF CONTINUING EDUCATION
Instructional Calendar 2019-2020 ..... 332
Mission Statement ..... 333
Goals ..... 334
Counseling ..... 334
Program Objectives ..... 334
Goals and Program Objectives ..... 334
Instructional Programs ..... 335
Career Education ..... 335
Student Services ..... 335
Instructional Programs and Student Services. ..... 335
Admission and Fees ..... 336
Adult High School Diploma Program ..... 337
Student Services and Special Needs ..... 340
NONCREDIT INSTRUCTIONAL PROGRAMS AND COURSES ..... 343
Diploma/Career Development \& College Preparation Certificates ..... 343
Adult Secondary Education (ASE) ..... 344
Adult Basic Education (ABE) ..... 344
Career Education ..... 345
English As A Second Language (ESL). ..... 347
Academic ESL Certificates ..... 347
ESL Core Certificates ..... 348
ESL Support Course Certificates ..... 348
Vocational ESL Certificates ..... 349
Adult Basic Education (ABE) ..... 350
Citizenship (CTZN) ..... 351
Counseling (CNSL) ..... 351
English As A Second Language (ESL) ..... 351
High School Subjects - Math (HSMTH) ..... 354
High School Subjects - Arts (HSART) ..... 355
High School Subjects - English (HSENG) ..... 355
High School Subjects - Other (HSOTH) ..... 357
High School Subjects - Reading (HSRDG). ..... 357
High School Subjects - Social Sciences (HSSOC) ..... 357
High School Subjects- Natural Sciences (HSSCI) ..... 358
Health \& Safety (SAFE) ..... 359
High School Subjects (HSS) ..... 359
Home Economics (HOMEC) ..... 360
Learning Support (LRN) ..... 360
Older Adults (OAP) ..... 360
Parent Education (PRNT) ..... 360
Secondary Subjects GED (HSGED) ..... 361
Substantial Disabilities (SSD) ..... 361
Vocational - Business (VBUS) ..... 361
Vocational - Construction (VCNST) ..... 364
Vocational - Food (VFOOD). ..... 364
Vocational - Health (VHLTH). ..... 364
Vocational - Hospitality (VHOSP) ..... 365
SANTA ANA COLLEGE ADMINISTRATORS ..... 366
SANTA ANA COLLEGE FACULTY ..... 368
MAP - Sata Ana College ..... 378
MAP - Centennial Education Center ..... 379
INDEX ..... 380

## CREDITS

| Editorial Content | Anh-Phuong Tran |
| :---: | :---: |
|  | . . . Reyes Vazquez |
| Cover Design | .Jay Smith |
| Desktop Publishin | .Nancy Smith |

## SANTA ANA COLLEGE PHILOSOPHY AND MISSION

## SANTA ANA COLLEGE MISSION STATEMENT

Santa Ana College inspires, transforms, and empowers a diverse community of learners.
Catalog Content
The Rancho Santiago Community College District and Santa Ana College have made every reasonable effort to determine that everything stated in this catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the administration of the district for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the district and the colleges. The district and the college further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.

## INSTITUTIONAL LEARNING OUTCOMES (CORE COMPETENCIES)

1. Communication Skills
a. Listening and Speaking

Students will listen actively and respectfully to analyze the substance of others' comments. Students will speak in an understandable and organized fashion to explain their ideas, express their feelings, or support a conclusion.
b. Reading and Writing

Students will read effectively and analytically and will comprehend at a college level. Students will write in an organized and grammatically correct fashion to explain their feelings and support a conclusion.
2. Thinking and Reasoning

Students will identify and analyze real or potential "problems" and develop, evaluate, and test possible solutions using creative thinking, analysis and synthesis, quantitative reasoning, and/or transfer of knowledge and skills to a new context as appropriate.
a. Creative Thinking

Students will develop the skills to formulate original ideas and concepts in addition to integrating those of others in the creative process.
b. Critical Thinking

Students will think logically in solving problems; explaining their conclusions; and evaluating, supporting, or critiquing the thinking of others.
c. Ethical Reasoning

Students will demonstrate an understanding of ethical issues that will enhance their capacity for making sound judgments and decisions.
d. Quantitative Reasoning

Students will use college-level mathematical concepts and methods to understand, analyze and explain issues in quantitative terms.
3. Information Management
a. Information Competency

Students will do research at a level that is necessary to achieve personal, professional and educational success. They will use print material and technology to identify research needs, seek, access, evaluate and apply information effectively and responsibly.
b. Technology Competency

Students will use technology learning tools and technology applications at a level appropriate to achieve discipline-specific course requirements and standards. Demonstrated skills might include, but are not limited to: word processing and file management; use or development of simulations, web pages, databases; graphing calculators; etc.
4. Diversity

Students will develop individual responsibility, personal integrity, and respect for diverse peoples and cultures of the world.
a. Cultural

Students will respect and work with diverse people including those with different cultural and linguistic backgrounds and different abilities.
b. Social

Students will interact with individuals and within groups with integrity and awareness of others' opinions, feelings and values.
c. Environmental

Students will demonstrate an understanding of ethical issues that will enhance their capacity for making decisions and sound judgments about the environment.
5. Civic Responsibility

Students will take personal responsibility for becoming informed, ethical and active citizens of their community, their nation and their world.
6. Life Skills
a. Creative Expression Students will produce artistic and creative expression.
b. Aesthetic Appreciation Students will respond to artistic and creative expressions.
c. Personal Growth Students will demonstrate habits of intellectual exploration, personal responsibility, and practical and physical well-being.
d. Interpersonal Skills

Students will participate effectively in teams, committees, task forces, and in other group efforts to make decisions and seek consensus.
7. Careers

Students will develop the knowledge and skills necessary to select and develop careers.

## ACCREDITATION

Santa Ana College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC), an institutional accrediting body recognized by the Council for Higher Education Accreditation, the U.S. Department of Education, and the Veterans Administration. The college holds membership in the Community College League of California and the American Association of Community and Junior Colleges.
In addition to the current ACCJC college-wide accreditation, specified programs at Santa Ana College are also accredited by external accrediting bodies:

1. American Psychological Association (APA): for Doctoral Internship Program
2. Automotive Technology: National Automotive Technicians Education Foundation (NATEF)
3. Basic Fire Academy - Accredited CA Flrefighter I (FFI) Training Academy (OSFM). Graduates earn CA FFI Certificate of Training with IFSAC and Pro Board seals.
4. Emergency Medical Technician: Orange County Emergency Medical Services (OCEMS)
5. Fire Technology Program - Accredited as a regional Training Program (ARTP) by the CA Office of the State Fire Marshal (OSFM)
6. International Business: National Association of Small Business International Trade Educators (NASBITE)
7. Occupational Therapy Assistant: Accreditation Council for Occupational Therapy Education (ACOTE)
8. Paralegal Studies: American Bar Association (ABA)

## RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

9. Pharmacy Technology: American Society of Health-System Pharmacists (ASHP)
10. Registered Nursing: Approved by the Board of Registered Nursing (BRN) and accredited by the Accreditation Commission for Education in Nursing (ACEN)
Documents concerning the college's accreditation, licenses, and approvals are maintained in the Office of The President of Santa Ana College. Students wishing to examine these documents may do so by contacting the Office of the President. Additional information about accreditation, including filing complaints against member institutions, can be found at: www.accjc.org.

## Rancho Santiago Community College District

Governed locally by a seven-member Board of Trustees elected by the citizens of the district, Rancho Santiago Community College District (RSCCD) is a part of the California community college system, one of the three segments of the public post-secondary educational systems in the state.
RSCCD, located in central Orange County, encompasses 193 square miles with a population of approximately 770,000 . The district's boundaries include all of the K-12 schools within the Orange and Santa Ana Unified School Districts, as well as a portion of the Garden Grove Unified School District. RSCCD's boundaries extend from the eastern portion of the city of Garden Grove, around the perimeters of Santa Ana, Orange, Villa Park, and Anaheim Hills, and east to the Riverside County line.
Enrollment in district programs for fall 2018 totaled 52,361 with 39,277 enrolled in college credit courses and 13,084 enrolled in Continuing Education. The Community Services Program serves 2,189 residents districtwide in not for credit, fee-supported classes.

## Santa Ana College and Santiago Canyon College

Santa Ana College opened in 1915 as an upward extension of Santa Ana High School, and is the fourth oldest community college in California. Initially located on the campus of Santa Ana High School, it moved to downtown Santa Ana in 1933, and then to its current location in 1947. Santa Ana College serves the city of Santa Ana and portions of the cities of Tustin, Irvine, and Garden Grove.
Santiago Canyon College is among the newest community colleges in California and began offering classes in 1985 as the Orange Campus within
the Rancho Santiago Canyon Community College District. Santiago Canyon College earned its independent accreditation in January 2000, and serves the communities of Orange, Villa Park, and Anaheim Hills.
Enrollment in Santa Ana College programs during the Fall of 2018 totaled 36,411 with 27,361 students in college credit courses and 9,050 in classes for Continuing Education students. The Community Services Program serves another 1,349 residents in fee-based not for credit classes.
Santa Ana College offers 271 degrees and certificates in credit programs that prepare students for transfer to 4-year universities or careers. In addition, over 1000 classes are offered to students in a variety of noncredit programs including 27 certificates and an Adult High School Diploma program in Continuing Education programs.

## District Facilities

Santa Ana College is located on approximately 65 acres at 1530 W. 17th Street in Santa Ana. The college was first opened in 1915 as an upward extension of Santa Ana High School. It is the fourth oldest community college in California. Located first on the high school campus, the college was moved to downtown Santa Ana and then to the present site in 1947. Present day market value of Santa Ana College is estimated at more than \$125 million dollars.
Santiago Canyon College is situated on 82 acres at 8045 E. Chapman Avenue in Orange. It opened its first phase of classrooms in fall 1985 under the name of the Orange Campus of Rancho Santiago College. The Child Development Center opened in fall 1991 to provide childcare services. Centennial Education Center in Santa Ana and the Santiago Canyon College Orange Education Center house the college's extensive Continuing Education programs, which provide high school diplomas, English as a Second Language and older adults courses.

## Opportunity

The Rancho Santiago Community College District provides opportunities for the pursuit of excellence through educational programs and services for local residents. The purpose of these programs and services is to enhance the quality of human life by providing public access to college education. A significant number of classes are scheduled off-campus each semester in order to enhance accessibility to students. The map indicates the locations of the major instructional sites within the district.


## KEY TO LOCATIONS

1. RSCCD District Office 2323 N. Broadway, Santa Ana
2. Santa Ana College 1530 W. 17th St., Santa Ana
3. Santiago Canyon College 8045 E. Chapman Ave., Orange
4. Orange Education Center 1465 N. Batavia St., Orange
5. OEC Provisional Education Facility 1937 W. Chapman Ave., 2nd Floor, Orange
6. Centennial Education Center 2900 W. Edinger Ave., Santa Ana
7. Santa Ana College - Orange County Sheriff's Regional Training Academy 15991 Armstrong Blvd., Tustin
8. Digital Media Center 1300 S. Bristol St., Santa Ana
9. Joint Powers Fire Training Center 18301 Gothard St., Huntington Beach
10. College and Workforce Preparation Center 1572 N. Main St., Orange

## RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT ADMINISTRATIVE ORGANIZATION



| PRESIDENT'S OFFICE | Music |
| :---: | :---: |
|  | Chair................................... . Brian Kehlenbach, D.M.A. |
| Assistant to the President . . . . . . . . . . . . . . . . . . . . . . . . . . . Vacant | TV/Video Communications |
| Director, Student Information Support . . . . . . . . . . . . . . . . John Steffens | Chair.............................................. Michael Taylor |
| Public Information Officer................................. Vacant | Theatre Arts |
| Assistant Dean . . . . . . . . . . . . . . . . . . . . . . . . . . Teresa Mercado Cota | Chair.............................................. Chris Cannon |
| Research Department-Director of College Research. . . . . . Janice Love | KINESIOLOGY, HEALTH AND ATHLETICS DIVISION |
| Advancement Office | Dean................................... . R. Douglas Manning, Ph.D. |
| Executive Director........................... Christina Romero | Athletic Director. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Mary Hegarty |
| Coordinator - Development. . . . . . . . . . . . . . . . . . . . . . . Jessica Hamman | Sports Information Coordinator-Public Affairs. . . . . . . . . Cammie Lewis |
| Coordinator - Scholarships ............................ . Nandini Puri | Chair............................................. . Brian Sos, Ph.D. |
| ADMINISTRATIVE SERVICES | Counselors . . . . . . . . . . . . Daniel Peraza, Jeff Cutkamp, Harvey Chew |
| Vice President. . . . . . . . . . . . . . . . . . . . . . . . . . Simon B. Hoffman, Ed.D. | Head Coach - Baseball. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Tom Nilles |
| Campus Budget Manager . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Vacant | Head Coach - Basketball-Men .......................... . David Breig |
| Director, Physical Plant \& Facilities . . . . . . . . . . . . . . . . . . Mario Gaspar | Head Coach - Basketball-Women. . . . . . . . . . . . . . . . . . . . . Flo Luppani |
| Director - Auxiliary Services . . . . . . . . . . . . . . . . . . . . . . . Jennie Adams | Head Coach - Cross Country-Men \& Women . . . . . . . . . . Miriam Mitzel |
| Coordinator - Community Services . . . . . . . . . . . . . . . . . . Lithia Williams | Head Coach - Football .............................. . Adam Nyssen |
| ACADEMIC AFFAIRS | Head Coach - Soccer-Men. . . . . . . . . . . . . . . . . . . . . . . . . . Jose Vasquez |
| Vice President. . . . . . . . . . . . . . . . . . . . . . . . . . . Jeffrey N. Lamb, Ph.D. | Head Coach - Soccer-Women ........................ Jaymie Baquero |
|  | Head Coach - Softball. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Kim Nutter |
| Coordinator-Dual Enrollment . . . . . . . . . . . . . . . . Basti Lopez De La Cruz | Head Coach - Swimming-Men \& Women. . . . . . . . . . . . . . . . . . . Vacant |
| Enrollment Reporting Manager. . . . . . . . . . . . . . . . . . . . . . . . . . Vacant | Head Coach - Track and Field -Men \& Women . . . . . . . . . . Miriam Mitzel |
| Coordinator-Institutional Effectiveness and Assessment/Accreditation | Head Coach - Volleyball-Women. . . . . . . . . . . . . . . . . . . . . . . Troy Abbey |
| Liaison Officer ............................................ Vacant $^{\text {. }}$ | Head Coach - Water Polo-Men \& Women . . . . . . . . . . . . . . . . . . . Vacant |
| Distance Education | Head Coach - Wrestling............................... Vince Silva |
| Coordinator. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Cherylee Kushida | HUMANITIES AND SOCIAL SCIENCES DIVISION |
| Counselor .......................................... Jodi Coffman | Dean.......................................................$^{\text {Vacant }}$ |
| BUSINESS DIVISION | Counselor . .......................................... . Rey Robledo |
|  | American Sign Language |
| Academic Computing Center. . . . . . . . . . . . . . . . . . . . . . Jazmin Quijada | Chair............................................ . Monica Collins |
|  | Anthropology/Sociology/Women's Studies |
| Accounting and Business Administration | Chair............................................ Mario Robertson |
| Chair................................................. . Jinhee Trone | Economics/Geography |
| Business Applications and Technology | Chair................................................. . . Bill Courter |
| Chair................................................ . Dori Dumon | English |
| Computer Science | Chair.......................................... Ashly Bootman |
| Chair............................................... . James Hester | EMLS |
| Engineering | Chair.............................................. Dalva Dwyer |
| Chair................................. Craig Takahashi, Ph.D. | Ethnic Studies |
| Global Business and Entrepreneurship | Chair............................................. Rodrigo Valles |
| Chair............................................. . Gabriel Shweiri | History |
| Legal Studies | Chair.......................................... Moises Medina |
| Co-Chairs . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Richard Manzano, J.D. | Honors Transfer Program |
| Kristen Robinson, J.D | Coordinator..................................... Kathy Patterson |
| CAREER EDUCATION AND WORKFORCE DEVELOPMENT | Learning Center |
| Dean................................................. Vacant | Coordinator. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Kathy Walczak |
| Career Education Director . . . . . . . . . . . . . . . . . . . . . . Kimberly Mathews | Modern Languages |
| Career Education Counselor . ........................ Daniel Peraza | Chair.................................. . .eticicia Lopez-Jaurequi, Ph.D. |
| FINE AND PERFORMING ARTS DIVISION | Philosophy |
| Dean....................................... . . Kellori Dower, Ed.D. | Chair........................................... . Zachary Fish, Ph.D. |
| Counselor . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Ana Meckes | Political Science |
| Art | Chair...................................... . Philippe Andrade, Ph.D. |
| Chair.............................................. Phillip Marquez | Psychology |
| Dance | Chair.............................................Ricardo Castillo |
| Chair.............................................. . . . . | Reading |
| Communication Studies | Chair.............................................. . Molly Colunga |
|  | HUMAN SERVICES AND TECHNOLOGY DIVISION |
| Communications and Media Studies | Dean...................................... . . . ${ }^{\text {arisa Sergeyeva Ed.D. }}$ |
| Chair.................................................. . . Charles Little | Counselor ..................................... Reina Sanabria |



International Student Office. ..................... Carmelita Eustaquio

## COUNSELING DIVISION

Dean.............................................. . Maria Dela Cruz, Ph.D.
Associate Dean, Counseling ........................ Armando Soto, Ph.D.
Co-Chairs . . . . . . . . . . . . . . . . . Thu Nguyen, Rey Robledo, Ana Meckes
Articulation Officer . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Paula Canzona
Counselor/Coordinator-MESA. . . . . . . . . . . . . . . . . . . . . . . Cathie Shaffer
Counselor/Coordinator-PUENTE ............................ Reina Sanabria
Counselor/Coordinator-Teacher Education . . . . . . . . . . . . Steve Bautista
Counselor/Coordinator-Transfer Center . . . . . . . . . . . . . . . . . Martha Vargas
Counselor/Coordinator-U-LINK. . . . . . . . . . . . . . . . . . . . . . . . Rochelle Zook
Career/Job Resource Center............................. Sandy Morris
Counselor/Coordinator-Assessment. . . . . . . . . . . . . Maria Aguilar Beltran
Service Learning Center Office ........................... Sandy Morris
DISABILITY SERVICES (DSPS)
Associate Dean.................................... Veronica Oforlea, Ed.D.
Adaptive Kinesiology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Alternative Media ............................................ . Angela Tran
Deaf \& Hard of Hearing Services . . . . . . . . . . . . . . . . . . . . . . Ruth Rodriguez
Learning Disability Specialist. . . . . . . . . . . . . . . . . . . . . . . . . . . . Louise Janus
Learning Disability Specialist. . . . . . . . . . . . . . . . . . . . . . . . . . . . . Mark Turner
Mental Health Services . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . jill Kapil, Psy.D.
EOPS/CARE and CaIWORKs
Associate Dean ........................................... Christine Leon Counselor/Coordinator-CARE/CalWORKs Programs. . . . . Ann Lockhart Coordinator-EOPS Resource Center. . . . . . . . . . . . . . . . Gabriela Sanchez

FINANCIAL AID
Associate Dean......................................... . . Robert Manson
Student Placement. . . . .................................................

## STUDENT AFFAIRS

Dean.................................................. Alicia Kruizenga
Associate Dean-Student Development . . . . . . . . . . . Jennifer De La Rosa Director-Office of School Community Partnerships ... Alicia Kruizenga
Coordinator-SSSP/Upward Bound . . . . . . . . . . . . . . . . . Romelia Madrigal
Coordinator-Student Outreach............................. . . Daniel Marquez
Director-Talent Search . ................................. Rosio Becerra
Director-Veterans Upward Bound, Veterans Student Support Services
and Veterans Resource Center ................... Brenda Estrada, Ed.D.
Counselor/Coordinator-Guardian Scholars............. . Sylvia Sanchez
Student Transition Program................................... . Luisa Ruiz

## CONTINUING EDUCATION

Vice President. . . . . . . . . . . . . . . . . . . . . . . . . . . . . James Kennedy, Ed.D.
Dean-Instruction/Student Services-Santa Ana . . . Stephanie Paramore Dean-Instruction/Student Services-Santa Ana . . . . Sergio Sotelo, Ph.D.
Dean-Instruction/Student Services . . . . . . . . . . . . . . . . . . . Christine Kosko
Director-Special Programs. . . . . . . . . . . . . . . . . . . . . . . . . . . Lorena Chavez
Registrar .............................................. Phuong Nguyen
Adult Basic Education/GED
Co-Chairs ...............................................Adrianna Gonzalez,
John Tashima
Adult Secondary Education
Chair............................................................ . Carrie Patton
Career Education
Chair. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Osiel R. Madrigal, Ed.D.
Counseling
Chair..................................................... Patty Siguenza
English as a Second Language
Co-Chairs . ................................................................. Henry Kim

This chart reflects the RSCCD organization as of August 2019

## POLICIES

## NONDISCRIMINATION POLICY

The Rancho Santiago Community College District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities.
The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.
The Chancellor shall establish administrative procedures that ensure all members of the college community can present complaints regarding alleged violations of this policy and have their complaints heard in accordance with the Title 5 regulations and those of other agencies that administer state and federal laws regarding nondiscrimination.
No District funds shall ever be used for membership, or for any participation involving financial payment or contribution on behalf of the District or any individual employed by or associated with it, to any private organization whose membership practices are discriminatory on the basis of national origin, religion, age, gender, gender identity, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or because of his or her association with a person or group with one or more of these actual or perceived characteristics. Inquiries regarding compliance and/or grievance procedures may be directed to District's Title IX Officer and/or Section 504/ADA Coordinator. RSCCD Title IX Officer and Section 504/ADA Coordinator: Tracie Green, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7489.

## POLÍTICA DE NO DISCRIMINACIÓN

I Distrito está comprometido a ofrecer la igualdad en oportunidades para programas educativos, empleos, y a todo acceso a los programas institucionales y actividades.
El Distrito, y cada persona que representa al Distrito, debe proveer acceso a sus servicios, clases y programas sin importar el lugar de nacimiento, religión, edad, sexo, identidad de género, expresión del género, raza o etnicidad, color, condición médica, información de genética, descendencia familiar, orientación sexual, estado civil, incapacidad física o mental, embarazo, categoría militar o de veterano, o por creer que él o ella tiene una o más de las características mencionadas, o en base a estar relacionado con una persona o grupo que se cree tenga algunas de estas características. El Canciller debe establecer procedimientos administrativos para asegurarse que todos los miembros de la comunidad del colegio puedan presentar quejas sobre supuestas violaciones a esta política y que sus quejas sean escuchadas de acuerdo a los reglamentos señalados en el Título 5 y por aquellos de otras agencias que administran las leyes estatales y federales sobre la no discriminación. Ningún fondo del Distrito debe ser utilizado para la membrecía, o para la participación incluyendo pagos financieros o contribuciones hechas a organizaciones privadas de parte del Distrito o de cualquier individuo empleado por el Distrito o con asociación, cuyas practicas de membrecía son discriminatorias en base a lugar de nacimiento, religión, edad, sexo, identidad de género, expresión del género, raza, color, condición médica, información de genética, descendencia familiar, orientación sexual, estado civil, incapacidad física o mental, embarazo, categoría militar o de veterano, o por creer que él o ella tiene una o más de las características mencionadas, o en base a estar relacionado con una persona o grupo que se cree tenga algunas de estas características.

Preguntas sobre el cumplimiento y/o el procedimiento para quejas pueden ser dirigidas al Oficial del Distrito a cargo del Título IX en RSCCD y Coordinador de la Sección 504/ADA de RSCCD: Tracie Green, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7489.

## CHÍNH SÁCH BẤT KỲ TH!

Sở Giáo dục Hệ thống Đại học Rancho Santiago (RSCCD) hạ quyết tâm tạo cở hội bình đẳng trong chương trình giáo dục, trong việc thuê mướn nhân viên, và trong tất cả chương trình và sinh hoạt thuộc phạm vi Sở.
Sở và mỗi cá nhân đại diện cho Sở, sẽ cung cấp dịch vụ, lớp học, và chương trình mà không phân biệt nguồn gốc quốc gia, tôn giáo, tuổi tác, phái tính, đặc điểm phái tính, cách thể hiện phái tính, chủng tộc hoặc dân tộc, màu da, tình trạng sức khoẻ, thông tin về di truyền, nguồn gốc tổ tiên, khuynh hướng tính dục, tình trạng hôn nhân, có khuyết tật hoặc bệnh tâm thần, có thai, đang trong quân đội hoặc giải ngũ, hoặc vì người đó được cho là có một hay hơn một đặc tính kể trên, hoặc dựa vào sự liên đới với một người hoặc nhóm có hoặc được cho là có một hay hơn một đặc tính kể trên.
Vị tổng quản trị sẽ đặt ra các thủ tục hành chánh nhằm bảo đảm rằng mọi thành viên trong trường đại học có thể khiếu nại việc vi phạm chính sách này, và các khiếu nại được lắng nghe tuân theo các quy định thuộc Điều 5 và các quy định của các cơ quan thi hành luật lệ tiểu bang và liên bang liên quan đến việc bất kỳ thị.
Ngân quỹ của Sở sẽ không bao giờ được dùng để làm hội viên, hoặc tham gia bất cứ việc gì có trả tiền hoặc đóng góp tiền trên danh nghĩa của Sở hoặc của nhân viên làm việc cho Sở hoặc liên đới với Sở, cho bất cứ tổ chức tư nhân nào mà có sự kỳ thị dựa trên căn bản nguồn gốc quốc gia, tôn giáo, tuổi tác, phái tính, đặc điểm phái tính, cách thể hiện phái tính, chủng tộc, màu da, tình trạng sức khoẻ, thông tin về di truyền, nguồn gốc tổ tiên, khuynh hướng tính dục, tình trạng hôn nhân, có khuyết tật hoặc bệnh tâm thần, có thai, đang trong quân đội hoặc giải ngũ, hoặc vì người đó được cho là có một hay hơn một đặc tính kể trên, hoặc vì sự liên đới của người đó với một người hoặc nhóm có hoặc được cho là có một hay hơn một đặc tính kể trên. Nếu có thắc mắc về việc tuân thủ luật lệ và/hoặc về thủ tục khiếu nại, xin liên lạc viên chức chương trình Title IX của Sở và/hoặc điều hợp viên chương trình 504/ ADA. Viên chức chương trình Title IX của RSCCD và cũng là điều hợp viên chương trình 504/ADA là Tracie Green, địa chỉ 2323 N. Broadway, Santa Ana, CA 92706, số điện thoại 714-480-7489.

## ACADEMIC FREEDOM POLICY

The teacher should be free to think and to express ideas, free to select and employ materials and methods of instruction, free from undue pressures of authority, and free to act within his/her professional group. Such freedom should be used judiciously and prudently to the end that it promotes the free exercise of intelligence and student learning. Academic freedom is not an absolute. It must be exercised within the law and the basic ethical responsibilities of the teaching profession. Those responsibilities include:

1. An understanding of our democratic tradition and its methods.
2. A concern for the welfare, growth, maturity, and development of students.
3. The method of scholarship.
4. Application of good taste and judgment in selecting and employing materials and methods of instruction.
(BP4201 Faculty)

## SANTA ANA COLLEGE RATES OF STUDENT PROGRESS STUDENT RIGHT-TO-KNOW ACT

The rates below are placed here in accordance with the federally mandated Student Right-to-Know Act
Student Right-to-Know Rates for Fall 2011 Cohort
Completion Rate: 29.09 \%
Transfer Rate: 5.10 \%
In compliance with the Student Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of our college district to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2011, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a six year period. Their completion and transfer rates are listed above. These rates do not represent the success rates of the entire student population at the College nor do they account for student outcomes occurring after this six year tracking period.

Based upon the cohort defined above, a Completer is a student who attained a certificate or degree or became 'transfer prepared' during a six year period, from Fall 2011 to Spring 2017. Students who have completed 60 transferable units with a GPA of 2.0 or better are considered 'transfer prepared '. Students who transferred to another post-secondary institution, prior to attaining a degree, certificate, or becoming 'transfer prepared' during a eleven semester period, from Spring 2012 to Spring 2017, are transfer students.

## VIOLENCE AGAINST WOMEN ACT (VAWA)

On March 7, 2013, President Obama signed into federal law the Violence Against Women Reauthorization Act of 2013 (VAWA), which is aimed at improving how colleges and universities in the U.S. address sexual violence. This new law imposes obligations for the District to revise its policy and practices to comply with new regulations that addresses and prohibits acts of violence such as, sexual assault, domestic violence, dating violence and stalking, and it clarifies the rights of victims. The new regulations also include:

- Reporting campus crime statistics beyond the crime categories that the Clery Act already mandates, to which now include incidents of domestic violence, dating violence and stalking, as well as crimes motivated by gender identity or national origin;
- Providing comprehensive educational prevention and awareness programs for incoming students and new employees, in addition to ongoing prevention and awareness campaigns for students, faculty and employees that identifies and defines sexual assault, rape, acquaintance rape, domestic violence, dating violence and stalking; and
Conducting annual training for investigators and hearing officers who investigate and review reported offenses. In addition, both Title IX and VAWA legislation permits the District to assist both the victim and the accused with:
- An investigation
- Counseling and medical services Choosing a support person to accompany them throughout proceedings
- Allowing the victim and the accused to attend different classes
- Academic support services


## STUDENT CONSUMER INFORMATION RIGHT-TO-KNOW DISCLOSURE INFORMATION

Federal regulations require all campuses to provide specified information to prospective and current students, staff and the general public. Listed below are those items that must be available for review per federal regulation.
The federal Higher Education Act, the federal Equity in Athletics Disclosure Act (EADA), and regulatory guidance provided in the Code of Federal Regulations (CFR) require direct individual notices of prescribed information to certain target audiences including prospective students; currently enrolled students; current employees; parents, coaches and counselors of prospective student athletes; and the general public. Disclosures are to include crime/security statistics, student completion/graduation rates, FERPA privacy/security rights, financial aid program information, and gender-specific information on athletic participation and financial support.
Please go to www.sac.edu and click on "Discover SAC" to review all the current Student Consumer Information including

## FAMILY EDUCATION RIGHTS AND PRIVACY

As required under the provisions of the Family Education Rights and Privacy Act of 1974, the Rancho Santiago Community College District will make public without student consent only certain directory information. This information consists of the following: a student's name; city of residence; major field; participation in officially recognized activities and sports; weight, height, and age if a member of an athletic team; dates of attendance; degree and awards received; and the most recent previous educational institution or agency attended by the student.
A student may request the Admissions and Records Office to withhold this information. Such request must be in writing and submitted each semester.

## F.E.R.P.A. FAMILY EDUCATION RIGHTS AND PRIVACY NOTIFICATION

The Family Education Rights and Privacy Act of 1974 provides colleges the right to consent to disclose personally identifiable information contained in the student's education records to third party vendors who are identified as School Officials and who have legitimate educational interests. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his/her professional responsibility.
A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including district safety personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees, or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks.
Santa Ana College contracts with the following School Officials:

- Auditors (Vicenti-Lloyd-Stutzman)
- CCCApply (Unicon)
- Credentials (Online transcript request)
- ECS Imaging (optical imaging)
- Ellucian Colleague
- Image Now (optical imaging)
- Medpro and Quest (Health Center)
- National Student Clearinghouse
- SARS (Counseling Center)
- Xerox


## SEXUAL MISCONDUCT, INTIMATE PARTNER VIOLENCE, AND STALKING

Any sexual misconduct or physical abuse, including, but not limited to, rape, as defined by California law, whether committed by an employee, student, or member of the public, that occurs on or off district property, is a violation of district policies and procedures, and is subject to all applicable punishment, including criminal procedures, civil litigation and employee or student discipline procedures. Students, faculty, and staff who report sexual misconduct, dating or domestic violence (intimate partner violence) and stalking shall be treated with dignity and provided comprehensive assistance.
The District has established administrative procedures that ensure that students, faculty, and staff who are victims of sexual and other forms of misconduct receive appropriate information and treatment, and that educational information about preventing sexual violence is provided and publicized as required by law (please see Administrative Regulation 3540 for complete procedures). The use of alcohol or drugs never makes the Complainant at fault for reports of misconduct, intimate partner violence or stalking; therefore, Complainants should not be deterred from reporting incidents out of a concern that they might be disciplined for related violations of drug or alcohol policies. Except in extreme circumstances, Complainants shall not be subject to discipline for related violations of the Standards of Student Conduct. Santa Ana College has the resources to assist and refer students who experienced sexual misconduct, dating or domestic violence, and stalking. Immediate care and confidential counseling can be provided by the Health and Wellness Center, in The Village, VL-211or call (714) 564-6216. When the Health and Wellness Center is closed, contact Campus Safety and Security (not a confidential resource) directly in the $X$ building or call (714) 628-6330. If you have questions regarding an allegation, specific behavior or if you would like to discuss a concern with an administrator, please contact the Title IX Coordinator at (714) 480-7404. Additional off-campus resources can be found below:

Waymakers: 949-831-9110
https://waymakersoc.org/
Human Options: 1-877-854-3594
https://humanoptions.org/
Supporting Survivors: 714-517-6100
http://www.ochealthinfo.com/bhs/services/support/ss
Laura's House: 866-498-1511
https://www.laurashouse.org/
National Suicide Prevention Lifeline: 1-800-273-8255
https://suicidepreventionlifeline.org/
Rape, Abuse \& Incest National Network: 1-800-656-HOPE https://hotline.rainn.org/online

## HARASSMENT AND DISCRIMINATION

Board Policy 3430 (BP 3430) prohibits all forms of harassment that are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as this policy, and will not be tolerated. Administrative Regulation 3435 details the procedures for the resolution of such complaints (https://www. rsccd.edu/Trustees/Pages/policies-and-regulations.aspx). This policy is widely published and publicized to all employees and students, including incoming employees and students. The District is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation, including acts of sexual misconduct, dating or domestic violence, and stalking. The District shall also be free of other unlawful harassment or discrimination, including that which is based on any of the following statuses: race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, or sexual orientation of any person, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics. The Title IX Coordinator is responsible for resolving reports of sexual misconduct, sex or gender-based discrimination or harassment, dating or domestic violence, and stalking. To report an incident or file a complaint, please contact:
V. Jean Estevez

Title IX Coordinator
2323 North Broadway, Suite 407-1, Santa Ana, CA 92706-1640 Email: Estevez_Jean@rsccd.edu
Telephone:714.480.7404
The District seeks to foster an environment in which all employees and students feel free to report incidents of harassment without fear of retaliation or reprisal. Retaliation for exercising one's right of protection from discrimination and/or harassment or for participating in the investigation of a complaint is prohibited by law and this policy, and will not be tolerated. All allegations of retaliation will be swiftly and thoroughly investigated. If the District determines that discrimination, harassment, or retaliation has occurred, it will take all reasonable steps within its power to stop such conduct. Students or employees who engage in discrimination, harassment, or retaliation are subject to disciplinary action, up to and including termination or expulsion. Duty to Report. Except for psychologists in the College's Student Health Center, any District employee who knows of or has reason to know of sexual misconduct, dating or domestic violence, and stalking shall promptly inform the Title IX Coordinator. These employees are considered responsible employees under Title IX and are required to disclose all information, including the names of the parties, even where the person has requested that their name remain confidential. Supervisors are mandated to report all incidents of harassment and retaliation that come to their attention.
The Title IX Coordinator will determine whether confidentiality is appropriate given the circumstances of each such incident as the District must then take appropriate steps to eliminate any gender discrimination/harassment/misconduct, prevent its recurrence, and remedy its effects. The District is required by the federal Clery Act to report certain types of crimes (including certain sex offenses) in statistical reports. However, while the District will report the type of incident in the annual crime statistics report known as the Annual Security Report, victim names/identities will not be revealed.
BP 3430 applies to all aspects of the academic environment, including but not limited
to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities and compensation.

## SMOKING AND TOBACCO USE IN DISTRICT <br> FACILITIES AND VEHICLES

Smoking is prohibited in all campus areas including all District owned, rented or leased properties and vehicles, except in designated parking lot areas and within 20 feet of entrances, exits, and operable windows. Smoking is defined as the use of products containing tobacco and/ or nicotine, including but not limited to smokeless tobacco, clove cigarettes, or any other smoking products, and any and all electronic or "e-cigarettes", which are unapproved nicotine delivery devices, unregulated by the FDA.
Public performances in which smoking is an integral and necessary part of the production are excluded from these regulations.
These regulations apply to employees, students, visitors and all other persons who use District owned or rented/leased facilities and vehicles. Failure to comply with these regulations may result in disciplinary action.
It is the responsibility of every District employee to comply with these regulations and report violations to District Safety.
These regulations do not supersede more restrictive policies which may be in force under State and Federal regulations. (AR-3570)

## ADMISSIONS AND REGISTRATION

## ADMISSION ELIGIBILITY

You may attend Santa Ana College if you meet one of the conditions below:

You are a high school graduate
OR
You are a person in possession of a California high school proficiency certificate

OR
You are 18 years of age or older who can profit from instruction OR
You are a high school student qualifying for Career Advanced Placement program.

OR
You are an international student with a valid Visa.

## APPLICATION

New students and students returning after an absence of two consecutive semesters (not including summer) must file an application on-line for admission to the college.
To complete the online application, please log on to www.sac.edu and click on the "Apply to College" link at the top of the page to apply via the OpenCCCApply website. Within 24-72 hours you will receive an email with your WebAdvisor Login which will allow you to go online, change your password, and view your registration date and time. If you are a returning student, your WebAdvisor Login and student ID will remain the same. Application dates:

## Fall semester:

Spring semester:
Summer session:
Spring Intersession:

Beginning April 1
Beginning November 1
Beginning April 1
Beginning November 1

## RESIDENCY

All students are classified as a resident of the State of California or nonresident when applying for admissions.
"Resident students" are those who have resided within California for at least one year prior to the residence determination date and have met the residency standards stipulated in Title 5 of the California Code of Regulations. The "residence determination date" is the day immediately preceding the opening day of instruction each semester or summer session during which the student proposes to attend.
"Nonresident students" are those who have not established California residence status in the state for at least one year prior to the residence determination date or those who hold certain non-immigrant visas which preclude them from establishing residence. Foreign students admitted to the United States under student visas are classified as nonresidents.

1. Persons who are under 18 years of age (minors) establish residence in accordance with above "resident" definition and the following:
a. Married minors may establish their own residence.
b. The residence of the parent with whom an unmarried minor child maintains a place of abode is the residence of the unmarried minor child. When the minor lives with neither parent, residence is that of the parent with whom the minor last resided. The minor may establish residence when both parents are deceased and a legal guardian has not been appointed.
c. The residency of unmarried minors who have a parent living cannot be changed by their own acts, appointment of legal guardians, or relinquishment of a parent's right of control (EC 68062).
2. Persons who are 18 years of age or older (adults) establish residency in accordance with EC 68017 (see above). Adult residency begins after the 18th birthday.
3. A person's residency shall not be derived simply by being married. A man or a woman establishes his or her residency independent of his or her spouse. Many of the objective manifestations may be shared, but each may have some evidence of intent that is not shared.
4. If a student holds an Employment Authorization Card or a VISA including, but not limited to, any one of the following visas: B-1/B-2. C, 0-1/0-2, F-1/F-2, H-2/H-3, J-1/J-2, M-1/M-2, O-2, P-1/P-2/P-3/P-4, Q, TN/TO, the students must present documentation to the Admissions and Records Office for review to determine residency status.
5. Exceptions:

The California Education Code and provisions in state law allow certain non-residents the opportunity to pay instate tuition. Eligibility criteria are noted below.
Students who believe they are eligible for an exemption based on any one of the following criteria should consult the Office of Admissions and Records when they apply:
a. Students who are members of the armed forces of the United States who are stationed in this state on active duty, except those assigned to California for educational purposes.
b. Spouses and dependents (natural or adopted children or stepchildren) of active members of the armed forces.
c. Students who are eligible as covered individuals as defined in the Veterans Access, Choice and Accountability Act of 2014 (VACA Act) who are taking advantage of their Chapter 30 or 33 benefits.
d. Parents who are federal civil service employees and have moved to California as a result of a military realignment action that involves the relocation of at least 100 employees. This exemption also applies to the natural or adopted children or stepchildren of such employees.
e. Students who are under 20 years old and served by the California Foster Care System.
f. Students who have completed at least three years of high school in California and have graduated from a California high school. Students must fill out and submit the "AB 540 Affidavit for Exemption" for consideration.
g. Refugee applicants (Note: A refugee may be entitled to an immediate exemption from the nonresident tuition fee is upon entry to the United States, the refugee first settled in California pursuant to the provisions of Education Code section 68075.6. This exemption is only for the length of time he or she lives in this state up to the minimum time necessary to become a resident (one year and one day).
6. Specific residency problems and questions will be answered by the Admissions and Records Office.

## AB 540

Pursuant to Education Code 68130.5 (AB 540), any student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the University of California, and the California State University (all public colleges and universities in California).

## 1. Requirements:

a. Attended a combination of California high school, adult school, and community college for the equivalent of three (3) years or more
b. Have three (3) or more years of California high school coursework and attended a combination of California elementary, secondary, and high school of three (3) years or more
c. Have graduated or will graduate with a California high school diploma or have the equivalent (i.e. California-issued GED, CHSPE)
d. Have completed or will complete an associate's degree from a California Community College
e. Have completed or will complete the minimum requirements at a California Community College or transfer to the California State University or the University of California
f. In the case of a person without lawful immigration status, the filing of an affidavit with the college stating that the student has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so
g. All students who meet AB540 or AB2000 requirements must file an affidavit with the college. The affidavit is included in the California Non-Resident Tuition Exemption form which is available in the Admissions \& Records Office
h. Students living outside the state and enrolled in distance education are not eligible for the AB540/AB2000 exemption
2. Students who are non-immigrants [for example, those who hold F (student) visas, B (visitor) visas, etc.] are not eligible for this exemption.
3. The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.
4. Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each institution.
5. Non-resident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be "non-residents".
6. As a component of The California Dream Act, AB 131 allows students who meet AB 540 criteria to apply for and receive statefunded financial aid such as community college fee waivers, Cal Grant and Chafee Grant.

## INTERNATIONAL STUDENT ADMISSIONS

A limited number of international students ( $\mathrm{F}-1 \mathrm{Visa}$ ) are eligible for admission to the college each year. International students who plan to attend under a student visa should apply to the International Student Office for forms and instructions. Application deadlines are July 1 for the fall semester, December 1 for the spring semester, and April 1 for the summer session. A $\$ 50$ application fee is required with the application. For more information call 714-564-6047.

## Admission Policy of International Students on F-1 Visa Status:

1. The international student must submit a complete, official academic transcript of all high school and previous college work attempted. Transcripts must be officially translated into English, bear the school seal, and be signed by the registrar or another appropriate official. Applicants are considered for admission only if their course grades are above average ( $\mathrm{C}+$ or higher).
2. International students must have sufficient knowledge of English to enable them to profit from instruction at the college level. Adequacy of English proficiency is determined by a satisfactory score (450+) on the Test of English as a Foreign Language (TOEFL), administered worldwide by the Educational Testing Service, Box 899, Princeton, New Jersey 05840.
3. International students must be at least 18 years of age unless they are graduates of an accredited United States high school.
4. Students on the F-1 Visa must present evidence that they have financial resources to defray costs during the period of attendance at the college Approximate annual costs for a student enrolled in 12 units each semester are: a nonresident tuition fee of $\$ 7,032$; health insurance, $\$ 1,560$; textbooks and supplies, $\$ 800$; living expenses, $\$ 12,000$, enrollment fee $\$ 1,104$, other fees $\$ 223$ for a total of $\$ 22,719$ This figure does not include transportation costs or summer school tuition.
5. International student applicants must be in good physical health as certified by a licensed physician on the form provided by the college. Measles and poliomyelitis immunization must be completed. The physical examination by a physician must include a chest x-ray report and indicate that students have no contagious disease.
6. Proof of health insurance is required prior to registration. The college accepts no responsibility for medical expenses incurred by international students.
7. The colleges in the Rancho Santiago Community College District do not provide housing for their students; however, placement with an American Host Family is available upon request. Many apartment complexes are located near the campus. A listing of apartments will be made available to all new students and assistance with locating housing will be provided.
8. International students are required to enroll in English or English as a Second Language/English for Multi-Lingual students during their first semester.

## INTERNATIONAL TRANSCRIPTS - EVALUATION PRACTICES

Santa Ana College may grant credit for college coursework completed outside of the United States. Students must submit their records to a Santa Ana College recognized evaluating agency, in order to obtain an equivalency/evaluation report (contact the Admissions Office or Counseling Division for listings of evaluating agencies). Once the Admissions Office at Santa Ana College receives the equivalency/evaluation report, an official evaluation will be conducted to determine course applicability.
The following guidelines apply to coursework completed outside of the United States.

- There is no transfer credit limit a student may be granted for coursework completed outside of the United States. However, Santa Ana College may only grant credit for lower division classes.
- College credit may be granted toward Santa Ana College baccalaureate degree, associate degree and certificate programs.
- Coursework may not be used to fulfill the following General Education Requirements: English Composition, American Institutions, Reading, and Oral Communication.
- Courses intended to fulfill major requirements must be submitted to the major department for approval.
- Coursework may not be used to fulfill General Education Certification requirements for CSU-GE or IGETC (with the exception of Area 6Languages Other Than English).
- Santa Ana College may not determine course transferability to other colleges and universities.
- Students who have completed coursework outside of the United States are encouraged to meet with a counselor to determine course and program applicability.


## STUDENT SUCCESS AND SUPPORT PROGRAM

If you are a new student and have never enrolled in college credit classes at SAC or SCC. Submit an application online, sac.edu. Student Success and Support Program information Under the Student Success \& Support
Program (3SP) all new students and returning students (absent more than 3 years) are required to complete the following core services:

1. The Assessment process no longer includes placement testing. Instead a Counselor can make an English and Math placement recommendation with your high school transcripts. For more information visit the sac.edu/assessmentcenter.
2. Attend a new student registration orientation and advisement session. You can schedule a registration orientation appointment by visiting the sac.edu/assessmentcenter.
3. Create an Abbreviated Educational Plan, this will be done during the registration orientation and advisement session.*
*Not completing these core services may result in loss of priority registration.
Students with an AA degree or higher are exempt from 3SP requirements.
You can complete an exemption form in the Counseling Center located in S-112 or call at 714-564-6103.

## ASSEMBLY BILL AB 705

## No More Placement Testing

As a result of Assembly Bill 705, which came into effect January 1st, 2018, community colleges are no longer doing placement testing to place students into English and Math courses. AB 705 is a law that requires California Community Colleges to maximize the probability that a student will enter and complete transfer-level coursework in English and Math within a one year timeframe. This law changes how you are placed in English and Math college courses. California Community Colleges are required to use multiple measures, which includes high school grades, coursework, and grade point average. You are also encouraged to discuss with the Counselor any other educational or work experiences that you have, as well as work history, military training, specialized licenses, and certificates. If you have taken a placement test in the past, it is recommended that you speak to a Counselor.

## Registration Orientations

Registration orientations are held in a small group setting with a Counselor to discuss English and Math placement based on your individual career interest, complete an abbreviated educational plan, register for classes, and get information about financial aid.

Standardized testing is no longer being used to place students into college level English and Math courses. This change is due to the AB 705 law, which requires colleges to use multiple measures that include high school coursework, grade point average, and grades. For more information you can visit sac.edu/assessmentcenter.
Students' who graduated from a U.S. high school and have access to high school transcripts can bring them to the registration orientation to discuss with the Counselor. Student's that do not have access to their high school transcripts or studied in another country should arrive 30 minutes early to complete the "Guided Self-Placement" tool. Students must have submitted a completed application to the college.
To schedule an appointment for a Registration Orientation go to:sac.edu/ assessmentcenter or contact the Assessment Center at (714) 564-6148. Students that cannot attend an in person orientation can do the online orientation through their WebAdvisor.

## Who Should Attend a Registration Orientation?

- If you are a new students to Santa Ana College.
- If you are undecided about what courses to take.
- If you want to better understand AB 705 and the changes with placement into transfer level English and Math courses.


## Is there anything I need to bring to the Orientation?

Yes, you will need to bring a copy of your high school transcript. WHAT if I do not have access to my HS transcript?
You can take the Guided Self-Placement online by going to the Assessment Center webpage
sac.edu/assessmentcenter or you can call the Assessment Center at 714-564-6148, or visit us in Building L, Room L-223.

## What if I studied in another country?

You can take the Guided Self-Placement online by going to the Assessment Center webpage sac.edu/assessmentcenter or you can call the
Assessment Center at 714-564-6148, or visit us in Building L, Room L-223.
Did you grow up speaking a language other than English? Are you an international student?

Consider Santa Ana College's ESL/EMLS classes. If you would like more information about ESL/EMLS courses you can contact the the Assessment Center at (714) 564-6148 or visit us in Building L, Room L-223.You are strongly recommended to meet with a counselor to discuss placement recommendations. Please see the Assessment Center Counselor Drop-In hours at: sac.edu/assessmentcenter. You can also contact the Counseling Division at 714-564-6103 or stop by the Administration Building, Room S-112.

## REGISTRATION

## Continuing Students

A continuing student is a student who has not missed two consecutive full semesters. The student may check online via WebAdvisor for a registration date and time and may register any time thereafter until the Friday before the semester begins. Students are encouraged to see a counselor each semester in order to review their academic progress before completing registration.

## New and Former Students

New or former students who complete an Admission application on-line will receive registration information by email within 1-3 business days. Priority Registration
Santa Ana College will provide priority registration for students who enroll in a community college for the purpose of degree or certificate attainment, transfer to a four year college or university, or career advancement. These enrollment priorities were established Fall Semester, 2013.

- Students who have completed orientation, assessment, and developed student education plans and are eligible as a member of the armed forces or a veteran pursuant to Education Code section 66025.8 or as a foster youth or former foster youth pursuant to Education Code section 66025.9;
- Students who have completed orientation, assessment, and developed student education plans and are eligible and receiving services through Disabled Student Programs and Services or Extended Opportunity Programs and Services;
- CalWORKs students
- Athletes who have completed orientation, assessment, and developed education plans.
- First time students participating in the Early Decision/Early Welcome programs who have completed orientation, assessment, and developed student education plans
- Continuing students, not on academic or progress probation for two consecutive terms as defined in these policies and procedures
- New matriculating students with educational plan
- New non-matriculating students Probationary students (academic and progress) \& students with 100+ degree applicable units
- Career Advanced Placement (CAP) - concurrently enrolled high school students


## Loss of Registration Priority

The state of California has adopted Title 5 Regulation 58108 (j), establishing enrollment priorities for students attending California Community Colleges. The regulation will affect the date/time in which students are allowed to register for classes. This policy was established Fall Semester, 2013.
Continuing students at Santa Ana College will lose their enrollment priority for the following reasons:

1. Student has attempted 12 units and theirRSCCD cumulative GPA has fallen below 2.0 for two consecutive semesters;
2. Student has attempted 12 units and the percentage of all coursework at SAC/SCC has an entry of "W," "l," "NP," and "NC" which reaches or exceeds fifty percent (50\%) § 55031;
IMPORTANT NOTE: Registration priority shall be lost at the first registration opportunity after a student is placed on academic or progress probation or any combination thereof for two consecutive terms.
3. Student has earned 100 or more degree applicable units from Santa Ana and Santiago Canyon Colleges.
Students who have SAC as their home campus can submit a petition for appeal to the Admissions Office at SAC for the following reasons: 1) there were extenuating circumstances (verified cases of accident, illness) and can provide documentation; 2) students with disabilities who applied for but did not receive accommodation in a timely manner; 3) can demonstrate SIGNIFICANT academic improvement in a subsequent term. Students may also regain registration priority by sitting out two consecutive semesters. Students who have earned 100 or more degree applicable units can appeal if they have declared a high unit major and are currently working toward a degree. Forms for these appeals can be obtained in Admissions and Records or downloaded from the college website.

## Late Registration

Instructor signature or add code is required on all adds after the semester begins.

## SCHEDULE OF CLASSES

The Schedule of Classes is prepared each semester and is available online. It includes general information, courses offered, hours, rooms, and instructor names. Classes added to the schedule after publication may be accessed online.

## STUDENT PHOTO IDENTIFICATION CARD

All Santa Ana College students are provided with a photo identification card as part of the college registration and matriculation process. The card will be required for use of the college Library, Health \& Wellness Center, academic support services, and more beginning January 2017. Photo I.D. is located in the Cashier's Office in VL-205B.

## FULL-TIME - PART-TIME DEFINITION

Full-time students (Fall and Spring) $=12$ or more units
Part-time students (Fall and Spring) = Less than 12 units

$$
\text { Full-time students (Summer) }=6 \text { units }
$$

Part-time students (Summer) $=$ Less than 6 units
Students receiving social security benefits or satisfying the requirements of insurance companies must be carrying 12 or more units to be eligible. Veterans Administration eligibility uses the following definition:

Full-time $=12$ or more units
Three-fourth benefits $=9$ through 11 units
One-half benefits $=6$ through 8 units
Any change in veteran status, whether it be increase, decrease, or complete withdrawal, must be brought to the attention of the Veteran's Office immediately.

## CLASSIFICATION OF STUDENTS

Career Advanced Placement: one who has not graduated from high school.
Freshman: one who has completed 0-29 units.
Sophomore: one who has completed 30 or more units.
Graduate: one who has received an associate degree or higher.

## SUMMER SESSION

The colleges offer a four-, six- and eight-week summer program of morning and evening courses. Summer courses can remove high school or college deficiencies and advance the students toward an educational goal.

## WEEKEND COLLEGE

Classes are offered on Friday evenings and Saturdays and Sundays so that students can earn units applicable to the associate degree, acquire occupational skills, earn units for transfer to four-year schools, or gain personal enrichment.

## CAREER ADVANCED PLACEMENT PROGRAM (CAP)

High School Career Advanced Placement Student (CAP) is registering for a college class. This is a limited program geared toward educational enrichment not remediation.

1. Student must obtain signatures of parent and school principal.
2. Student must obtain college approval from the Division Dean or designee. Final approval rests with Santa Ana College. Refer to http://www.sac.edu/Admissions and Records page to locate the appropriate Division and Dean's contact information.
3. A completed 'Consent to Treat a Minor' form is required along with the Career Advanced Placement form. Return both forms to the Admissions Office (S-101). If necessary, the Admissions Office will advise the student to complete the Admissions Application and provide registration instructions.
4. Students who plan to take English or Math courses need to meet with a Counselor to review high school transcripts for appropriate course recommendation. For additional information and to find out about drop-in counseling services, contact the Assessment Center at (714) 564-6148.
5. Students currently enrolled in grades $\mathrm{K}-8$ are required to pay all college fees. The Enrollment Fee will be waived for students currently enrolled in grades 9-12 who are enrolled in 11 units or less. If the student enrolls in 12 units or more during fall and spring semesters, the student will be charged the current enrollment fee for all units. Students must also pay all other college fees.
6. High School students will not be charged enrollment fees if enrolling in 11 units or less. If the student enrolls in 12 units or more during fall and spring semesters, the student will be charged the current enrollment fee for all units. Further, during intersession and summer sessions, if the student enrolls in 6 units or more, the student will be charged for all units enrolled.
7. RSCCD shall charge a tuition fee to nonresident students who hold an F1 or F2 visa. F1/F2 students are not exempt.
8. A completed Consent for Treatment of a Minor form is required to be on file in the Admissions Office.
9. The parent's signature grants permission for their son/daughter to enroll in college courses at Santa Ana College. The parent acknowledges that Santa Ana College is an adult environment and assumes responsibility for their young student's conduct while on campus. Additionally, in compliance with federal privacy law, the parent will need their student's written permission to gain access to any non-directory information.

CAP students will be receiving college credit for this class whether or not the units are used toward high school graduation. This means a college transcript is generated listing the class or classes and the grades earned. This establishes a permanent record with the college. Grades recorded for these classes are permanent and create a college transcript. The transcript information is confidential and is only accessible by the student. All college information is confidential and not accessible to parents or guardians.
CAP students are required to attend class until the end of the semester unless the student decides to drop the class online prior to the deadline identified in the schedule of classes. The drop deadline is set when $75 \%$ of the course has been completed. The student will receive a " $W$ " when the student drops after the first two weeks of a full semester or after the first week of the summer session. Please read class section details listed in Web Advisor (Online Records) for important refund and drop deadlines.
CAP students must attend all classes. Material covered in college courses is at a faster pace than high school classes. Expect to spend twice as much time outside of class as in class completing assignments and homework.
Santa Ana College maintains open campuses. Students function under Standards of Student Conduct (Board Policy 5201), and there is an expectation that adult behavior will be displayed by students on campus. Academic honesty is a requirement, and sanctions are identified in course overviews, which are distributed by faculty on the first day of class. Students are responsible for their own transportation and materials on campus.
CAP students by law do not have priority registration. Under the California Code of Regulations, title 5, section 58108 "a district may establish a priority registration system which would accord adult students higher registration priority.'

## PREREQUISITES, COREQUISITES AND RECOMMENDED PREPARATION FOR COURSES

The colleges of the Rancho Santiago Community College District have adopted a policy on course prerequisites, corequisites, and advisories in order to provide for the establishing, reviewing, and challenging of prerequisites, corequisites on recommended preparation, and certain limitations on enrollment in a manner consistent with law and good practice. The policy, which is specified for implementation as an administrative regulation, is established pursuant to regulations contained in Article 2.5 (commencing with Section 55200) of Sub Chapter 1 of Chapter 6 of Title 5 of the California Code of Regulations. The RSCCD Board of Trustees recognizes that if these prerequisites, corequisites, and limitations are established unnecessarily or inappropriately, they constitute unjustifiable obstacles to student access and success and, therefore, the Board adopts this policy which calls for caution and careful scrutiny in establishing them. Nonetheless, the board also recognizes that it is as important to have prerequisites in place where they are a vital factor in maintaining academic standards and in assuring the health and safety of students as it is to avoid establishing prerequisites where they are not needed. For these reasons, the Board has sought to establish a policy that fosters the appropriate balance between these two concerns.

## IMPORTANT DEFINITIONS

If a student should see the words Prerequisite or Corequisite in the catalog, it is important to understand the definitions of these terms. Note that prerequisites and corequisites can be challenged. See Prerequisite Challenge Policy, for more information.
Prerequisite indicates a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. A prerequisite represents a set of skills or a body of knowledge that a student must possess prior to enrollment and without which the student is highly unlikely to succeed in the course or program. Students will not be permitted to enroll in such courses and programs without the appropriate prerequisite.

Corequisite indicates a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. A corequisite represents a set of skills or a body of knowledge that a student must acquire through concurrent enrollment in another course and without which the student is highly unlikely to succeed. Students must concurrently enroll in the corequisite course.
Recommended Preparation indicates that while a course is not required prior to enrollment, it is highly advised in order to strengthen the likelihood of success in subsequent courses.

## PREREQUISITE CHALLENGE POLICY AND PROCEDURES COURSE PREREQUISITE POLICY

Prerequisite means the preparation or previous course work considered necessary for success in the course. The College requires students to complete prerequisites as pre-enrollment preparation. Prerequisites which are listed in the College Catalog include:

1. Courses for which specific prerequisites have been established;
2. Sequential course work in a degree-applicable program, and;
3. Courses in which an equivalent prerequisite exists at a four-year transfer college or university.
Questions about prerequisites are best resolved with a counselor prior to the first day of class.

## PREREQUISITE CHALLENGE PROCESS

A prerequisite challenge requires written documentation, explanation of alternative course work, background or abilities which adequately prepare the student for the course. A Prerequisite Challenge Form can be obtained from the appropriate instructional office. Prerequisites may be challenged for one or more of the following reasons:

1. The college has not developed the prerequisite according to its established procedures or has not developed the prerequisite in accord with existing statutes.
2. The prerequisite is discriminatory or is being applied in a discriminatory fashion.
3. The college has not made the prerequisite course reasonably available.
4. The student has documented knowledge and abilities equivalent to those specified in the prerequisite course.
The challenge will be reviewed by a committee consisting of the dean, or designee, department chair, or designee, and one department or division representative or designee.
If space is available in a course when a student files a challenge to the prerequisite or corequisite, the district shall reserve a seat for the student and resolve the challenge in a timely manner. If no space is available in the course when a challenge is filed, the challenge shall be resolved prior to the beginning or registration for the next term and, if the challenge is upheld, the student shall be permitted to enroll if space is available when the student registers for that subsequent term.
NOTE: Students who are challenging a course which is a requirement for a degree or certificate may wish to use the Credit by Examination process to receive credit for the challenged course.

Specific regulations and procedures relating to
course prerequisites, corequisites, and advisories are on file in the office of the Vice President of Academic Affairs at Santa Ana College.

## MULTIPLE AND OVERLAPPING ENROLLMENTS (BP4226)

1. Students may only enroll in two or more sections of the same credit course during the same term if the length of the course provides that the student is not enrolled in more than one section at any given time.
2. Students may only enroll in two or more courses where the meeting times overlap under the conditions specified in Title 5 Section 55007.

## FEES, TUITION, AND EXPENSES

1. All students are required to pay enrollment fees of $\$ 46$ per unit.
2. A health fee of $\$ 19$ per semester ( $\$ 16$ for summer and $\$ 18$ for intersession) is charged to all students whether or not they choose to use health services.
Health Fee Exemptions (Education Code 76355): (1) Any student who depends exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization, provided that the student presents documentary evidence of an affiliation with such a bona fide religious sect, denomination, or organization.(2) Any student enrolled in an approved Apprenticeship Program. A request for an exemption may be filed at the Admissions and Records Office.
3. A parking permit is required each semester for students parking on campus. It may be purchased at registration via WebAdvisor. A College Student Life and Leadership fee of $\$ 10$ is payable at registration for classes. This fee is optional. Students who do not wish to pay this fee may request a prompt refund by calling (714) 5646430 or by visiting the Cashier's Office, VL-205B. Refunds must be requested before your drop for non-payment date.
4. Representation fee of $\$ 2$. This fee is mandatory.
5. A transportation fee of $\$ 6.75$ for full time students (12+units) and $\$ 5.75$ for part time students (.5-11 units) is charged to all students whether or not they choose to use the transportation discount service (OCTA ride program).
6. Student ID cards are FREE of charge and available at the Campus Cashiers Office.
Non-resident Tuition
Non-resident Tuition: \$300 per unit in addition to the per enrollment fee for out of state residents and for students who are a citizen of a foreign country. Refer residency questions to the Admissions Office.
Visa or MasterCard, American Express and Discover are accepted for all fees.
All tuition, fees, and expenses are subject to change with new state legislation.

## Textbooks and Supplies

Textbooks, supplies, and athletic equipment must be purchased by the student. Special fees required for certain courses are indicated in the class schedule.
Fees and tuition are subject to change by the state legislature, Community College Board of Governors, or District Board of Trustees.

## DROP FOR NON-PAYMENT

Drop for Non-payment Policy: Enrollment fees must be paid in full within3 days of registration (including weekends and holidays) or unpaid classes may be dropped and released to other students. The day you register is counted as day 1.
In addition to the 3-day non-payment drop policy, there is a final outstanding balance drop date. All fees must be paid in full by the Friday before the start of the semester. No balance will be carried over into the start of the semester. It is the student's responsibility to drop by the refund deadline to avoid any fees for late adds.

## REFUND OF TUITION AND ENROLLMENT FEES

Students are eligible for full refunds of fees provided they have officially dropped from classes prior to the refund deadline or their classes have been canceled by the college. There is no refund for classes added after the refund deadline date. Please refer to section information via WebAdvisor for refund deadline.
Students who withdraw from class(es) through the first two weeks of instruction or $10 \%$ of the class may request a $100 \%$ refund. Students withdrawing after the second week of instruction are not eligible for a refund. (See current semester schedule.)
Refunds are based upon the date the student withdraws from the course online. No refund will be processed until assurance has been given that any check in payment for tuition has been cleared.
Enrollment Fee refunds are granted in accordance with established provisions of the community college education code. Contact the Cashier's Office or refer to the current class schedule for details of the refund policy and procedures.
There is no refund for variable units not completed.

## WITHHOLDING OF STUDENT RECORDS

Students or former students who have failed to pay a proper financial obligation shall have grades, transcripts, diplomas, and registration privileges withheld.

## SOLOMON AMENDMENT FOR MILITARY RECRUITERS

The Solomon Amendment is a federal law that allows personally identifiable student information to be released to recruiters that would have been denied them under FERPA. This law mandates that institutions receiving federal financial aid must fulfill military recruitment requests for access to campus and lists of students. If Santa Ana College fails to comply with these requests from military recruiters, the college will lose federal financial aid funding. Santa Ana College releases only directory information to military recruiters.

## OPEN EDUCATIONAL RESOURCES (OER)

Open Educational Resources (OER) refers to textbooks or online materials that are in the public domain or have a Creative Commons license. Classes listed with an OER symbol use free course materials unless noted in the course schedule comments. A course using Lumen Learning OER will charge a material fee for the online resource.

## ZERO TEXTBOOK COST (ZTC)

Zero Textbook Cost (ZTC) refers to courses that eliminate conventional textbook costs by using alternative instructional materials and methodologies, including freely usable Open Educational Resources. Classes listed with a ZTC symbol use free course materials.

## FINANCIAL AID

Financial Aid is intended to help students who might not otherwise be able to attend school. Although the primary responsibility for meeting college costs rests with the student and his or her family, it is recognized that many families have limited resources and are unable to meet the cost of a college education. Federal and State financial aid programs have been established to provide assistance for students with documented financial need.
The application process for financial aid begins with the completion of the Free Application for Federal Student Aid (FAFSA), which is available in October for the following fall semester. AB540 Students and DACA students should complete the California Dream act instead of the FAFSA. In order to qualify for financial aid, a student must be enrolled in an eligible program of study leading to completion of an AA/AS degree, transfer requirements or a certificate program; maintain satisfactory academic progress; for most programs, have demonstrated financial need; be a U.S. citizen or eligible non-citizen; certify compliance with selective service registration requirements; not be in default on any loan or owe a refund on any grant made under any Title IV program; have a high school diploma or GED.
For additional information stop by the Financial Aid Office at Santa Ana College, call 714-564-6242 or visit our web page at sac.edu/StudentServices/FinancialAid.

## Withdrawals and Repayment of Financial Aid Funds

Federal aid recipients who withdraw or are dropped from all classes by the instructor are subject to regulations regarding the Return of Title IV funds. Students who withdraw or are dropped from all classes prior to completing more than $60 \%$ of the enrollment period are subject to these rules. See the Financial Aid Office for this 60\% date. Based on the date of the complete withdrawal or drop, the Financial Aid Office will determine the amount, if any, of "unearned" federal financial aid received by the student. If the student received more financial aid than the amount entitled to, the student will be billed for the overpayment.
To avoid repayment, financial aid recipients are cautioned to:

1. avoid total withdrawal from all classes,
2. successfully complete at least one class during the semester,
3. repay any "unearned" financial aid as soon as possible to regain eligibility for financial aid.

## Federal PELL Grant

This is a grant and does not have to be repaid. PELL is a federally funded program designed to be the foundation of financial aid for undergraduates who demonstrate need. The amount of the PELL Grant is based on the cost of attendance, the estimated family contribution (EFC), and the student's enrollment status at the time of payment. Award amounts vary from $\$ 600$ to $\$ 6,095$ for the academic year.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

FSEOG is another federally funded nonrepayable grant that is available to undergraduate students who demonstrate financial need. Priority in awarding FSEOG funds must be given to PELL Grant recipients with an EFC of $\$ 0$. The award amount at Santa Ana College is $\$ 400$ per academic year.

## Federal Work-Study (FWS)

This federally funded program provides employment opportunities to students with financial need. Students awarded FWS receive an allocation of funds earned through part-time jobs on campus. FWS is also a learning opportunity through on-the-job training. The maximum award amount at Santa Ana College is $\$ 4,000$.

## Priority Deadline for FSEOG and FWS Programs

These programs have limited funds and are generally awarded only to those eligible students who meet the Priority Deadline, which is usually during July each year.

## DIRECT LOAN PROGRAMS

## Stafford Loan (Subsidized)

The federal government pays the interest on this need-based loan while the student is enrolled at least half-time (6 units) and during the six month grace period after graduation, withdrawal or enrollment below half-time status. Money is borrowed directly from the federal government. The maximum loan is $\$ 3,500$ a year for students with fewer than 30 units. Students who have completed 30 units or more are eligible to borrow up to $\$ 4,500$. Students enrolled only in preparatory coursework are eligible to borrow up to $\$ 2,625$.

## Stafford Loan (Unsubsidized)

The Unsubsidized Stafford Loan is available to students who do not have demonstrated need. The total of a subsidized and unsubsidized Stafford Loan may not exceed the loan limits above. There is no interest subsidy on this loan, and interest begins to accrue when the loan is disbursed.

## Chafee Grant

This grant program is available to former foster youth. Awards are \$5,000 per year. Apply using the FAFSA and the separate Chafee Grant application at
https://www.chafee.csac.ca.gov/StudentApplication.aspx.

## CALIFORNIA STATE PROGRAMS

## California College Promise Grant (CCPG)

The CCPG (Previously known as the Board of Governor's Fee Waiver or "BOGW") is a state program for California residents and AB 540 students which waives the enrollment fees for qualified students at community colleges. There are three ways to qualify for a CCPG: The student demonstrates financial need according to the federal methodology based on completion of the Free Application for Federal Student Aid (FAFSA) or the California Dream Act Application; OR
The student or his/her family is receiving CalWORKs, formerly TANF/ AFDC, or SSI (Supplemental Security Income), or General Assistance/ General Relief, or the student is a disabled veteran or a dependent of a deceased or disabled veteran as certified by the California Department of Veterans Affairs.

OR
The student meets specific income standards based on family size. Pursuant to Title 5, section 58621, students with two consecutive semesters (fall/spring semesters) of academic or progress probation will lose eligibility for the CCPG fee waiver. Foster youth under the age of 25 years old are exempt from this regulation. Definitions of academic and progress probation can be found of page 60 of this catalog.
A student may appeal the loss of the CCPG fee waiver if the student has been unable to meet academic and progress requirements due to one or more of the following reasons:

1. Verified cases of accidents, illnesses, or other circumstances beyond the student's control.
2. Student with disabilities who applied for but did not receive accommodation in a timely manner
3. Significant academic improvement
4. Changes to the student's economic situation
5. The student was unable to obtain essential support services
6. Special consideration of factors for CalWorks, EOPS, DSPS, and Veteran students.
Appeal forms are available in the Financial Aid and Admissions \& Records offices.

## FINANCIAL AID (Continued)

## Cal Grants

To qualify for a Cal Grant a student must be a U.S. citizen, a permanent resident or an eligible non-citizen who is a California resident, or be registered as an AB540 student with Admissions and Records. The student must be attending an eligible college located in California and be making satisfactory academic progress. For all Cal Grants, apply between October 1 and March 2 each year using the FAFSA or California Dream Act Application, and GPA verification form.

## Cal Grant A

Cal Grant A assists low and middle income students with tuition and fee costs at four-year institutions. Eligibility is based on academic achievement and financial need.
If a student qualifies for a Cal Grant A and plans to attend a public community college, the Student Aid Commission will put the tuition/ fee award on reserve until the student transfers to a four-year college, provided that the student continues to qualify financially.

## Cal Grant B

Cal Grant B provides money for books and supplies, housing costs and transportation. Awards range up to $\$ 1,670$. Eligibility is based on demonstration of substantial financial need.

## Cal Grant C

Cal Grant C assists vocational students with tuition and training costs. Awards range up to $\$ 547$ for related training costs such as special clothing, tools, equipment, books and supplies, and transportation. Recipients must be enrolled in a vocational program at a community college, independent college of vocational school, in a program of study from four months to two years in length. Three-year hospital based nursing students are also eligible for this program.
The Cal Grant C program is intended to provide training in areas of manpower need.

## DEGREES, CERTIFICATES AND TRANSFER PLANNING

## ASSOCIATE DEGREES

The associate degree is a certification of the student's satisfactory completion of a program of study with a specific major or area of specialization. The associate degree is normally completed in two years and may be compared with the baccalaureate degree which is normally completed in four years.
Associate degrees are commonly conferred by community colleges. They are usually of two types, the associate in arts and the associate in science. The distinction between the associate in arts and the associate in science degrees lies in the majors. If the major is in the fields of engineering, physical or biological science, or occupational curricula, the degree conferred is usually the associate in science. Otherwise the associate in arts degree is conferred.
Ordinarily associate degrees have one of two major purposes. Either the program of study prepares the individual for transfer to a four-year college or university, or the program of study is intended to prepare the student for immediate employment.
The requirements for the associate degree include the specific courses in the major and what is called a general education or breadth requirement. The specific details concerning both the major and the general education requirements are described in Associate Degree Requirements on page 27.

## ASSOCIATE DEGREES FOR TRANSFER

Santa Ana College offers Associate Degrees for Transfer (AA-T or AS-T) in addition to associate degrees in Art and Science (A.A. or A.S.). The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to the California State University (CSU) system for any community college student who completes an Associate Degree for Transfer or "ADT". See page 24 for requirements.

## CERTIFICATE OF ACHIEVEMENT PROGRAMS

A Certificate of Achievement ( 18 or more units or state approved under 18 units) is a verification of achievement in a particular academic or occupational area, and it will be included on the official transcript. Certificate programs normally include only those courses which have a direct bearing upon specialized occupational competency since the certificate has the sole objective of immediate employment in a specialized area. For this reason there is no general education requirement in a certificate program. Santa Ana College certificate of achievement programs are described in the catalog section on College Credit Instructional Programs. To qualify for a certificate, a candidate must meet the following requirements:

1. Courses: Courses are designated for the specific certificate.
2. Grades: At least a C grade in each course required for the certificate, unless otherwise specified. Credit by Examination may also be used to gain credit for required courses.
3. Pass/No Pass: A pass/no pass course is acceptable toward the certificate if it is required for the certificate and (a) offered on a pass/ no pass basis only or (b) if the pass/no pass is earned on the basis of credit by examination.
4. Residency: Twelve units completed at Santa Ana College. (At least six of the units must be in courses required for the certificate.)
5. Petition: Petition for certificate filed by the student with the Office of Admissions and Records at Santa Ana College.

## CERTIFICATE OF PROFICIENCY PROGRAMS

A Certificate of Proficiency is under 18 units and/or is not a state approved program. A certificate is verification of completion in a particular subject matter. A certificate will NOT be included on the official transcript. Certificate programs include only those courses which focus on vocational skills. The certificate has the sole objective of employment in a specialized area, and for this reason there are no general education requirements in a certificate program. Santa Ana College certificate programs are described in the catalog section on College Credit Instructional Programs. At least fifty percent of certificate of proficiency course requirements must be completed at Santa Ana College.

## DISTANCE EDUCATION

Distance education courses are Santa Ana College credit courses that give students the opportunity to complete most of their coursework outside of the classroom, through the Internet. The courses are academically equivalent to on-campus courses and support our district mission to provide quality educational programs and services that address the needs of our diverse students and communities.
Online courses require students to have computer and Internet access with an individual email account. Students may also use computers in some campus facilities. The majority of the coursework is done online; however, some classes may require proctored testing on-campus.
Hybrid (blended) courses combine on-campus instruction with online learning. Classes may meet at least once during the semester. Details of scheduled course instruction are available in the schedule of classes, WebAdvisor, and at the Distance Education website, sac.edu/disted.
The Online Degree Pathway Program is a program offered through Distance Education which allows students to learn and study collaboratively in a student cohort that takes prescribed coursework in an accelerated 8-week course structure. There are currently three online pathways:

- Associate in Science in Business Administration for Transfer (AS-T in Business Administration); this degree is for transfer to CSU and can be completed in 2 years
- Associate in Arts, in Liberal Arts Degree, 2 year completion
- Associate in Arts in Psychology for Transfer (A.A.-T in Psychology); this degree is for transfer to CSU and can be completed in 2 years
- Business Administration Major Preparation for CSU, 1 year completion For Online Degree Pathway information, please visit our website: sac.edu/onlinepathway, call (714) 564-6725, or email us at sac_disted@sac.edu.


In addition to traditional associate degrees, California Community Colleges offer Associate Degrees for Transfer (ADT) to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California community college students who are awarded an AA-T or A.S.-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.
Students who have been awarded an AA-T or A.S.-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.
Santa Ana College offers numerous AA-T and A.S.-T degrees. To find out which CSU campuses accept each degree, please meet with a SAC counselor. You can also find this information at:
www.adegreewithaguarantee.com. An AA-T or A.S.-T degree may not be the best option for students intending to transfer to a particular CSU campus, or to a university or college that is not part of the CSU system. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

## Requirements

Student completion requirements for the associate degree for transfer:

1. 60 semester or 90 quarter CSU transferable units. At least 12 of the units must be earned at Santa Ana College.
2. The California State University General Education-Breadth pattern (CSU GE Breadth page 30); OR the Intersegmental General Education Transfer Curriculum (IGETC page 32) pattern.
Note: The ADT can be awarded to students completing the UC version of IGETC, but completion of this pattern will not satisfy CSU admission requirements.
Students pursuing an ADT in Chemistry or Biology, must complete CSU GE for STEM or IGETC for STEM as specified.
CSU GE Breadth for STEM for students earning an A.S.-T in Biology only
Complete the following CSU-GE courses before transfer:

- All courses in Areas A, B, and E; and
- One course in Area C1 Arts and one course in Area C2 Humanities; and
- Two courses in Area D from two different disciplines. Complete the following courses after transfer:
- One remaining lower-division GE course in Area C*; and
- One remaining lower-division GE course in Area D*.
* These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer.
CSU GE Breadth for STEM completion does not qualify students for the CSU-GE Certificate of Achievement.


## IGETC for STEM for students earning an A.S.-T in Biology or Chemistry only

Complete the following IGETC courses before transfer:

- All courses in Areas 1 (except 1C for UC-bound students), 2, and 5; and
- One course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines.
Complete the following courses after transfer:
- One remaining lower-division GE course in Area 3;*
- One remaining lower-division GE course in Area 4;* and
- One course in Area 6 for UC-bound students who have not satisfied it through proficiency.*
* These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer

IGETC for STEM completion does not qualify students for the IGETC Certificate of Achievement.
3. a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district (see Instructional Programs portion of the catalog).
4. obtainment of a minimum grade point average (GPA) of 2.0. (Some majors may require a higher GPA)
5. earn a grade of $C$ or better ( $C$ minus is not acceptable) or Pass in all courses required for the major or area of emphasis.
Santa Ana College currently offers the following Associate in Arts and Associate in Science for Transfer degrees:

- Administration of Justice
- Anthropology
- Art History
- Biology
- Business Administration
- Chemistry
- Communication Studies
- Computer Science
- Early Childhood Education
- Economics
- Elementary Teacher Education
- English
- Film, Television and Electronic Media
- Geography
- Geology

See the Instructional Programs Section of this catalog for major requirements.

## Course Substitutions and Reciprocity, Policy and Procedures

Students who have completed courses at another California community college, a regionally accredited institution and/or completed an external exam such as AP, CLEP, or IB may apply the coursework or exam results toward AA-T/A.S.-T major requirements as follows:

1. A course with a C-ID designation which is completed at another California community college will be substituted for a SAC course that meets an Associate Degree for Transfer (ADT) major requirement designated with the same C-ID number. SAC departmental approval is not required.
2. A course without a C-ID designation which is completed at a regionally accredited institution, other than a California community college, will be reviewed by SAC discipline faculty. Course-to-course substitution will be granted based on discipline faculty determination of comparability to a SAC course with the approved C-ID designation for the given ADT. Course-to-course substitution will be granted in accordance with the state-wide C-ID descriptor when the SAC course does not have an approved C-ID designation, but a statewide C-ID descriptor exists. When no such descriptor exists, course substitution will be based on discipline faculty determination of comparability to a SAC course included on the ADT.
3. Students who have completed an external examination such as AP, CLEP, and IB are granted course credit toward ADT major requirements as listed in the SAC catalog. (Students should be aware that AP credit may be awarded/counted differently by the transfer institution.)
4. A course completed at another California community college that is approved as part of an associate degree for transfer will be applied to the corresponding Santa Ana College Associate Degree for Transfer (ADT) in the corresponding SAC ADT area. Courses completed at other California community colleges must be part of the ADT at the time the student completed the course. Courses completed at other CCCs prior to ADT approval will be "grandfathered".

## CERTIFICATE AND ASSOCIATE DEGREE PROGRAMS AT SANTA ANA COLLEGE

For each of the Programs of Study identified below, Santa Ana College currently offers the number of degrees and certificates as noted. For further information regarding the specific type of degree or certificate, please refer to the "Instructional Programs" section of this catalog.

BS = Bachelor in Science Degree
AA = Associate in Arts Degree
AA-T = Associate in Arts for Transfer
AS = Associate in Science Degree
AS -T = Associate in Science for Transfer
CA = Certificate of Achievement
CP = Certificate of Proficiency

| Program of Study | ¢ | $\varangle$ | 「 | \% | 「 | S | O |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting |  |  |  | 1 |  | 6 | 4 |
| American Sign Language |  |  |  |  |  | 1 |  |
| Anthropology |  | 1 | 1 |  |  |  |  |
| Art |  | 3 | 2 |  |  | 5 | 1 |
| Automotive Technology |  |  |  | 1 |  | 6 | 5 |
| Biology |  |  |  | 1 | 1 |  |  |
| Biotechnology |  |  |  | 1 |  | 3 | 1 |
| Black Studies |  | 1 |  |  |  |  |  |
| Business |  |  |  | 1 | 1 |  |  |
| Business Applications |  | 3 |  | 1 |  | 3 | 6 |
| Chemistry |  |  |  | 1 | 1 |  |  |
| Chicano Studies |  | 1 |  |  |  |  |  |
| Child Development |  | 3 |  |  | 1 | 4 | 3 |
| Communication Studies |  | 1 | 1 |  |  |  |  |
| Communications \& Media Studies |  | 2 | 1 |  |  | 1 |  |
| Community Social Services |  | 1 |  |  |  |  |  |
| Computer Information Systems |  |  |  | 1 |  | 1 | 6 |
| Computer Science |  |  |  | 1 | 1 | 1 | 1 |
| Criminal Justice |  |  |  | 1 | 1 | 1 | 1 |
| Dance |  | 1 |  |  |  | 1 |  |
| Diesel Technology |  |  |  | 2 |  | 2 | 6 |
| Earth Science |  | 1 |  |  |  |  |  |
| Economics |  | 1 | 1 |  |  |  |  |
| Education |  | 1 | 1 |  |  |  | 2 |
| Engineering |  |  |  | 6 |  | 6 | 8 |
| English |  | 1 | 1 |  |  |  |  |
| Entrepreneurship |  | 1 |  |  |  | 1 | 1 |
| Ethnic Studies |  | 1 |  |  |  |  |  |
| Fashion Design Merchandising |  | 3 |  |  |  | 4 | 5 |
| Fire Technology |  |  |  | 4 |  | 4 | 1 |
| Geography |  | 1 | 1 |  |  |  |  |
| Geology |  |  |  | 1 | 1 |  |  |
| History |  | 1 | 1 |  |  |  |  |


| Program of Study | ¢ | ¢ | $\stackrel{+}{4}$ | ¢ | $\stackrel{-}{\text { ¢ }}$ | S | U |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| International Business |  | 1 |  |  |  | 1 | 7 |
| Kinesiology |  | 1 | 1 |  |  | 1 | 1 |
| Law |  |  |  |  |  | 3 |  |
| Liberal Arts |  | 6 |  |  |  |  |  |
| Library Technology |  | 1 |  |  |  | 1 |  |
| Management |  | 2 |  |  |  | 2 | 3 |
| Manufacturing Technology |  |  |  | 5 |  | 7 | 1 |
| Marketing |  | 1 |  |  |  |  | 1 |
| Mathematics |  |  |  | 1 | 1 |  |  |
| Medical Assistant |  |  |  | 1 |  | 1 |  |
| Modern Languages |  | 1 | 1 |  |  |  |  |
| Music |  | 1 | 1 |  |  | 1 |  |
| Nursing |  |  |  | 2 |  |  |  |
| Nutrition and Food |  | 1 |  |  | 1 | 2 |  |
| Occupational Studies | 1 |  |  |  |  |  |  |
| Occupational Therapy Assistant |  |  |  | 1 |  |  |  |
| Paralegal |  | 1 |  |  |  | 1 |  |
| Pharmacy Technology |  |  |  | 1 |  | 2 |  |
| Philosophy |  | 1 | 1 |  |  |  |  |
| Photography |  | 1 |  |  |  | 1 |  |
| Physics |  |  |  | 1 | 1 |  |  |
| Political Science |  | 1 | 1 |  |  |  |  |
| Psychology |  | 1 | 1 |  |  |  |  |
| Science |  |  |  | 1 |  |  |  |
| Social Science |  | 1 |  |  |  |  |  |
| Sociology |  | 1 | 1 |  |  |  |  |
| Speech-Language Pathology Assistant |  |  |  | 1 |  |  |  |
| Television/Video Communications |  | 1 |  |  | 1 | 3 | 1 |
| Theatre Arts |  | 2 | 1 |  |  | 2 | 1 |
| Welding Technology |  |  |  | 1 |  | 3 | 2 |
| Women's Studies |  | 1 |  |  |  |  |  |

## THE ASSOCIATE DEGREE

## GENERAL EDUCATION PHILOSOPHY

General Education requirements at Santa Ana College reflect the conviction that those who receive degrees must possess in common certain basic principles, concepts, and methodologies, both unique to and shared by various disciplines. Recognizing the need for students to embrace and adapt to increasingly and rapidly changing local, national and global conditions, the college seeks to ensure that students develop the necessary skills, knowledge, and curiosity to better themselves and their communities. The subject matter of General Education courses is designed to be general, broad and introductory rather than specialized, narrow, or advanced. General Education courses form a pattern of learning experiences designed to provide educational opportunities that lead to the following learning outcomes for students:

1. The ability to comprehend and communicate ideas logically, creatively, correctly, and effectively in speaking and writing.
2. Skills in creative and critical thinking, including analysis, synthesis, evaluation, problem-solving, decision-making, and quantitative reasoning.
3. The skills necessary to identify informational needs; to seek, to access, to evaluate and to apply information effectively, using print materials and technology creatively, effectively and responsibly.
4. An understanding of the complexities presented by the cultural, social, and environmental diversity of the world.
5. Responsibility for ethical and active participation in a diverse society.
6. The basic skills necessary for lifelong learning, fitness, creative expression, aesthetic appreciation, personal growth, interpersonal skills, and development of intellectual curiosity.
7. Acquisition of the knowledge and skills necessary in chosen disciplines and careers.
NOTE: See Plan A, page 28 for specific course requirements.

## GENERAL EDUCATION CATEGORIES

## A. Natural Sciences

Courses in the natural sciences examine the physical universe, its life forms, and its natural phenomena. They assist in developing an appreciation and understanding of the scientific method and encourage an understanding of the relationships between science and other human activities. This category includes introductory or integrative courses in astronomy, biology, chemistry, general physical science, geology, physics, physical geography, physical anthropology, and other scientific disciplines.
B. Social and Behavioral Sciences

Courses in the social and behavioral sciences focus on people as members of society. They assist in developing an awareness of the methods of inquiry used by the social and behavioral sciences. Critical thinking is stimulated about the ways people act and have acted in response to their societies, and appreciation is developed of how societies and social groups operate. This category includes introductory or integrative survey courses in cultural anthropology, economics, history, political science, psychology, sociology, cultural geography, and related disciplines.

## C. Humanities

Courses in humanities study the cultural activities and artistic expressions of human beings. They assist in developing an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation, and in developing aesthetic understanding and an ability to make value judgments. This category includes introductory or integrative courses in the arts, foreign languages, literature, philosophy and religion.
D. Cultural Breadth

Courses meeting the cultural breadth requirement represent both global and national perspectives and recognize the value of systemic historical and cross-cultural examinations of race, ethnicity, gender, and global issues.

## 1. Ethnic Studies/Women's Studies

Courses meeting the Ethnic Studies/Women's Studies requirement focus on the cultural perspectives of the African American, the Asian American, the Chicano/Latino, and the Native American and women in the United States. They assist students to deal constructively with issues of difficult differences and to develop respect for and become aware of the views, interactions, and contributions of these ethnic groups and women to U.S. society and culture. This category is interdisciplinary and includes introductory courses that incorporate the voices of these historically excluded groups.
2. International Perspective

Courses in International Perspective include an emphasis on global perspectives in a cultural context. All courses need to address not just specific aspects of culture but also a component addressing the basic concepts of culture including how culture influences environment, behavior, structure, and function of society. These courses also include a multi-country perspective.
E. Language and Rationality

Courses in language and rationality develop the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation of communication in whatever symbol system the student uses.
F. Lifelong Understanding and Self-Development

The courses in this category are designed to equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities. In a social context, students will benefit from study about themselves and how they function at different stages of life. Instruction is intended to include consideration of such matters as human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying. Physical activity courses could be included, provided that they include some components of the above listed topics.

NOTE: See page 24 for requirements for Associate Degrees for Transfer (AA-T and AS-T).

## I. Unit and Residency Requirements

60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at the college. At least 6 of those units must be in courses required for the major unless students are earning an Associate Degree for Transfer.

## II. General Education Requirements

24 semester units of general education which include one course or more as indicated in group requirements A, B, C, D, E, and F. See Plan A, page 28 for specific course requirements.
Non degree applicable courses may not be used for graduation requirements.
Courses from the major may be used to satisfy areas A-F.
NOTE: The requirements in parts II, IV, and V also may be met by CSU general education certification*, IGETC certification, or by submitting a transcript showing completion of a bachelor's degree from a regionally accredited institution. The requirements in parts II, IV, and $V$ may also be met by submitting a transcript showing completion of an Associate of Arts or Associate of Science degree from a regionally accredited California institution within a ten-year period of finishing major requirements (III) at the college.

## III. Major Requirements

Each degree and certificate program specifies courses required for the major (a minimum of 18 units). Students must complete these courses with a grade of $C$ or better. See Instructional Programs Section. Courses in the student's major may not be taken under the Pass/No Pass policy except for major courses for Associate Degrees for Transfer courses for which Pass/No Pass is the only grading option, and units earned through credit by examination or assessment.

* If Business 130 is used to meet CSU-GE Area B4-Mathematics/ Quantitative Reasoning, then the associate degree math proficiency may not be met. Students must meet one of the math proficiency requirements in section IV below.


## IV. Required Proficiencies

Note: The proficiencies and requirements listed in IV. Required Proficiencies and V. Oral Communication Requirement may also be used to meet General Education Requirements in groups A through F where appropriate. Courses taken to meet proficiencies must be completed with a grade of $C$ or better.
A. Reading

1. Satisfactory score on the SAC/SCC Reading Placement Test at the time of initial placement testing, OR
2. Satisfactory score on a Reading Department Test, OR
3. Successful completion of any Reading course at the 100 level or above, OR
4. A "C" grade, or better in English 102/102H, English 103/103H or Philosophy 110/110H.
B. Mathematics
5. Completion of Mathematics 083/084 or any other Mathematics course of 3 or more units, numbered above the level of 083/084, or Psychology 210, OR
6. Recommended placement into Math 140, Math 150, Math 162, Math 180, or Math 219, and without the recommendation of taking a course that provides additional support, based on the Santa Ana College Mathematics Department multiple measures placement criteria; OR
7. A score of 3 or better on the following AP exams: Statistics, Calculus AB, Calculus BC, Computer Science Principles (Note: Meets Area B4 on CSU-GE plan).

## V. Oral Communication Requirement

Completion of 3 units with a grade of "C" or better from the following: Communication Studies 101 or 101H (Interpersonal Communication); Communication Studies 102 (Public Speaking);
Communication Studies 140 (Argumentation and Debate);
Communication Studies 145 (Group Dynamics);
Communication Studies 152 (Oral Interpretation).

## Petition for Graduation and Catalog Rights:

Petitions for graduation should be filed in the Office of Admissions and Records one semester before the student expects to graduate. Students who maintain continuous enrollment in at least one regular semester or session of a catalog year (fall, intersession, spring, or summer) at Santa Ana College or Santiago Canyon College may elect to meet the associate degree or certificate requirements in the SAC Catalog in effect at the time o first enrollment, or may choose the catalog requirements from any one year of subsequent continuous enrollment. A student who has an interruption of attendance must use the catalog at the time of readmission or one of subsequent continuous enrollment. Commencement exercises are held once a year at the end of the spring semester for those students who complete the requirements for graduation during the year or the summer session.
NOTE: Official Transcripts from all colleges attended must be on file in the Admissions and Records office.

## GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE

## PLAN A: 2019-2020

NOTE: This plan does not apply to Associate Degrees for Transfer (AA-T and A.S.-T).

NOTE: See page 27 for specific requirements for the following:
IV. A. Reading Proficiency
B. Mathematics Proficiency
V. Oral Communication Requirement

Courses taken to meet these proficiencies/requirement must be completed with a grade of " C " or better.

Note: A single course may be used to meet only one category requirement (A-F) in Section II. However, a course may be used to meet both a required proficiency ( I ) or requirement ( V ), as well as one of the categories of General Education Courses on Plan A (II). Courses which meet the requirements for Part II of Plan A at Santiago Canyon College will automatically meet the identical requirements for Part II of Plan A at Santa Ana College.
II. Required General Education Courses
A. Natural Sciences (minimum 3 semester units)

Anthropology 101, 101L
Astronomy 109, 110 or $110 \mathrm{H}, 140$
Biology 109 or 109H/109L, 111, 115, 149, 177, 190, 190L, 200, 211, 239, 259
Chemistry 109, 119, 209, 210, 219 or 219 H
Earth Science 110 or $110 \mathrm{H}, 115,150$ or 150 H
Environmental Studies 140, 200, 259
Geography 101, 101L, 130
Geology 101, 101L, 140, 150 or 150H, 201
Physical Science 117, 118
Physics 109, 210, 217, 279
Psychology 200
B. Social and Behavioral Sciences (minimum 6 semester units)

1. American Institutions (minimum 3 semester units)

History 118,120 or $120 \mathrm{H}, 121$ or $121 \mathrm{H}, 122$
Political Science 101 or 101 H
2. Social Science Elective (minimum 3 units)

Anthropology 100 or 100 H
Child Development 107, 110
Criminal Justice 101 or 101H
Economics 120, 121
Geography 100 or $100 \mathrm{H}, 102$ or $102 \mathrm{H}, 140,155$
History 101 or $101 \mathrm{H}, 102$ or 102 H
Law 100
Political Science 101 or 101 H
Psychology 100 or 100 H
Sociology 100 or 100 H
C. Humanities (minimum 3 semester units)

American Sign Language 110, 111, 116, 210
Anthropology 104 or 104H
Art 100 or $100 \mathrm{H}, 101,102,105,107,110$
Communications and Media Studies 103, 105 or 105H, 111
Dance 100 or $100 \mathrm{H}, 105$

English 104 or 104H
Foreign Language:
Chinese 101, 102
French 101, 102, 201 or $201 \mathrm{H}, 202$ or 202 H
Italian 120, 121
Japanese 101, 102
Spanish 101 or $101 \mathrm{H}, 102$ or 102H, 195 A, 195B, 201 or 201H, 202 or 202H
Vietnamese 101, 102
Interdisciplinary Studies 121, 200
Kinesiology, Professional 170
Literature:
Communications \& Media Studies 110
English 102 or 102H, 231, 232, 233ABC, 241, 242, 270, 271, 272
Music 101 or $101 \mathrm{H}, 102$ or $102 \mathrm{H}, 104,105,110,111$
Philosophy 106 or $106 \mathrm{H}, 108,112,118$
Television/Video Communications 101, 103, 104
Theatre Arts 100, 105, 120, 123
D. Cultural Breadth (Three semester units required from D1 or D2)

D1. Ethnic Studies/Women's Studies
American Sign Language 116
Anthropology 104 or 104H, 125
Art 103, 104, 106
Asian American Studies 101
Black Studies 101
Chicano Studies 101
Child Development 221
Communication Studies 103 or 103H, 206 or 206 H
English 104 or 104H, 245, 246, 278
Ethnic Studies 101 or $101 \mathrm{H}, 102$ or 102 H
History 123, 124 or $124 \mathrm{H}, 125,127,146,150,151,153,163$, 181
Kinesiology, Health Education 102
Music 103
Nutrition and Food 118
Political Science 235
Psychology 170
Women's Studies 101, 102

D2. International Perspective
Anthropology 100 or 100 H
Business 106
Criminal Justice 209
Dance 105
English 271, 272
Geography 100 or $100 \mathrm{H}, 102$
Interdisciplinary Studies 117H
Kinesiology, Professional 150
Music 102 or 102H
Philosophy 112
Theatre Arts 105
E. Language and Rationality (minimum 6 semester units)

1. English Composition (minimum 3 semester units)

Courses fulfilling the written composition requirement include both expository and argumentative writing. The English composition requirement may be met by completing English 101 or 101 H with a grade of "C" or better.
2. Communication and Analytical Thinking (minimum 3 semester units)
Includes mathematics, logic, statistics, computer languages and programming and related disciplines.
Business 130
Communication Studies 102, 140, 145
Computer Science 100, 105
Counseling 144
English 102 or $102 \mathrm{H}, 103$ or 103 H
Mathematics $083,084,105,140,141,145,150,162,170,180$ or 180H, 185, 204, 219 or 219H, 221, 280, 287
Philosophy 110 or $110 \mathrm{H}, 111$
Psychology 210
Reading 101, 101X, 102, 150
F. Lifelong Understanding and Self-Development (minimum 3 semester units)
Note: Take one course from each group. No more than one semester unit may be counted from F2.
Three semester units for Health Education and one semester unit for Kinesiology may be granted on the basis of military service. See page 54 for additional information.

1. Completion of one of the following:

Child Development 107
Counseling 100, 116, 120, 124, 125, 128
Entrepreneurship 100
Fashion Design Merchandising 103
Interdisciplinary Studies 155
Kinesiology, Health Education 101, 102, 103, 104, 108
Kinesiology, Professional 125, 160
Library and Information Studies 100
Mathematics 030
Nutrition and Food 115 or 115H
Philosophy 111
Psychology 140, 180, 230
Sociology 112
Study Skills 109
2. Completion of one of the following:

Dance 102, 201A, 201B, 206A, 206B, 219A, 219B
Kinesiology, Activities 107A, 107B, 107C, 123, 140A, 150A, 155A, 160A, 169A, 169B, 170A, 200A, 200B, 200C, 211A, 211B, 220A, 220B, 220C, 226A, 230A, 260A, 260B, 260C, 265A, 265B, 265C, 270A, 290A, 290B
Kinesiology, Adapted Activities 201A, 202A, 202B, 205A, 208A, 208B, 211A, 211B
Kinesiology, Aerobic Fitness 140A, 143A, 144A, 146A, 146B, 150A, 156A, 156B, 157A
Kinesiology, Aquatics 201A, 201B
Kinesiology, Fitness 112A, 112B, 112C, 114A, 114B, 115A, 115B, 115C, 147A, 147B
Kinesiology, Intercollegiate Athletics $125,128,133,171,201$,
202, 204, 206, 209, 210, 211, 212, 213, 216, 217, 218, 219,
220, 221, 223, 227, 230, 231, 232, 235, 240, 261, 262, 270,
271, 281, 291, 293
Kinesiology, Professional 155, 165, 175, 195, 200, 275
This requirement (F) is met for Fire Technology (as long as Fire Technology 121 and 121 L are taken as part of the program), Nursing, and Occupational Therapy Assistant by completion of the major.

## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION BREADTH (CSU GE)

## PLAN B: 2019-2020

NOTE: These requirements apply to all students. Students planning to graduate from one of the 23 campuses of the California State University must complete 48 semester units in general education breadth courses. A student may complete 39-40 units of general education at Santa Ana College prior to transfer. Nine semester units of general education coursework must be completed at the upper division level after transfer.-40

## CERTIFICATION OF GENERAL EDUCATION

1. Santa Ana College is authorized to certify a maximum of 39-40 general education units.
2. CSU-GE Certification indicates that a transfer student has met CSU lower division GE requirements. Students may earn full or subject area certification.
3. Pass/No Pass grades are accepted for certification in all areas; however, they are not recommended for transfer credit in basic skill areas. (A. English language, Communication and Critical Thinking, A1, A2, and A3; and B4. Mathematics/Quantative Reasoning.) In addition, letter grades may be recommended or required for specific courses in a given major. Each CSU campus may also limit the total number of units graded credit.
4. A single course may not meet more than one general education requirement.
5. Requests for certification should be made to the Office of Admissions and Records during the semester prior to the last term of attendance. Please consult the class schedule or the Counseling Department for deadline information.
6. Certification of coursework from other colleges will be granted to students whose last community college of attendance prior to transfer is Santa Ana.
7. Courses taken at other California Community Colleges will be applied to the subject areas in which they were listed by the institution where the course was completed.
8. Courses taken at other regionally accredited private/out of state institutions (which do not maintain a CSU certification list) will be placed in the subject areas for which Santa Ana College has equivalent courses. In some cases non-equivalent courses may also be considered. Consult a counselor for additional information. Courses completed at foreign institutions are not acceptable for certification.
9. Students earning an AS-T in Biology must complete CSU-GE Breadth for STEM. See "Associate Degrees for Transfer" on page 24 for additional information.
IMPORTANT NOTE: The list of certifiable courses will be subject to change year by year, but students are assured that courses taken to meet general education-breadth requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved beginning Fall 2019 and are valid through Summer 2020.

## TRANSFER CREDIT

Students may transfer up to 70 semester units to the CSU system. Sixty transferable units are needed for junior standing.
All courses used for CSU transfer credit must be numbered 100 or above in the Santa Ana College catalog.

[^0]
## A1: Oral Communication

Communication Studies 101 or $101 \mathrm{H}, 102,103$ or $103 \mathrm{H}, 140,145$

## A2: Written Communication

English 101 or 101 H

## A3: Critical Thinking

Communication Studies 140
Counseling 144
English 102 or 102H (102 and 102H not accepted in A3 if completed prior to Fall 2011), 103 or 103 H
Philosophy 110 or $110 \mathrm{H}, 111$
Reading 150
B. Scientific Inquiry and Quantitative Reasoning
(minimum 9 semester/12 quarter units)
The 9 units selected from this area must include at least one course each from B1, B2, and B4. The 9 units must also include a corresponding lab component. (Lab classes are in bold.) Courses in B4 must be completed with a grade of "C" or better.
B1: Physical Science
Astronomy 109, 110 or 110 H
Chemistry 109, 115, 119, 209, 210, 219 or 219H, 229
Earth Science 110 or $110 \mathrm{H}, \mathbf{1 1 5}, 150$ or 150 H
Environmental Studies 140
Geography 101, 130
Geology 101, 140, 150 or 150H, 201
Physical Science 115, 117
Physics 109, 210, 211, 217, 227, 237, 279, 289
B2: Life Science
Anthropology 101
Biology 109 or 109H, 111, 115, 139, 149, 177, 190, 211, 212, 214,
229, 239, 249, 259
Environmental Studies 259
Psychology 200 (200 not accepted in B2 if completed prior to Fall 2017)

B3: Laboratory Activity
Anthropology 101L
Astronomy 140
Biology 109L, 111, 115, 139, 149, 190L, 211, 212, 214, 229, 239,
249, 259
Chemistry 109, 115, 119, 209, 210, 219 or 219H, 229
Earth Science 115
Environmental Studies 259
Geography 101L
Geology 101L, 201
Physics 109, 210, 211, 217, 227, 237, 279, 289
Physical Science 115, 118

## B4: Mathematics/Quantitative Reasoning

Courses must be completed with a grade of "C" or better.
Business 130
Mathematics $105,140,141,145,150,162,170,180$ or $180 \mathrm{H}, 185$,
204, 219 or $219 \mathrm{H}, 221,280,287$
Psychology 210

## C. Arts and Humanities

(minimum 9 semester/12 quarter units)
This area must include one course from C1 and one course from C2.
C1: Arts: Art, Cinema, Dance, Music, Theatre
Art 100 or $100 \mathrm{H}, 101,102,103,104,105,106,107108$
Communications \& Media Studies 103
Dance 100 or $100 \mathrm{H}, 102,105$
English 233A, 233B, 233C
Interdisciplinary Studies 121
Music 101 or $101 \mathrm{H}, 102$ or $102 \mathrm{H}, 103,104,105,110,111$
Photography 150
Television/Video Communications 103, 104
Theatre Arts 100, 105, 120, 123
C2: Humanities: Literature, Philosophy, Languages Other Than English
American Sign Language 110, 111, 116, 210
Chinese 101, 102
English 102 or 102H, 220, 231, 232, 233A, 233B, 233C, 241, 242, 243,
245, 246, 270, 271, 272, 278
French 101, 102, 201 or $201 \mathrm{H}, 202$ or 202 H
History 101 or $101 \mathrm{H}, 102$ or $102 \mathrm{H}, 150,151,153,163$
Interdisciplinary Studies 200
Italian 120, 121
Japanese 101, 102
Kinesiology, Professional 170
Philosophy 106 or $106 \mathrm{H}, 108,112,118$
Spanish 101 or $101 \mathrm{H}, 102$ or 102H, 195A, 195B, 201 or $201 \mathrm{H}, 202$ or 202 H
Vietnamese 101, 102

## D. Social Sciences

(minimum 9 semester/12 quarter units)
The 9 units selected from this area must include courses from at least 2 different disciplines.
Anthropology 100 or $100 \mathrm{H}, 103,104$ or $104 \mathrm{H}, 105,125$
Asian American Studies 101
Biology 200
Black Studies 101
Chicano Studies 101
Child Development 107, 110
Communication Studies 103 or $103 \mathrm{H}, 206$ or 206 H
Communications \& Media Studies 105 or 105H, 111
Computer Science 100
Counseling 150
Criminal Justice 101 or 101 H
Economics 120, 121
English 104 or 104 H, 245, 278

Environmental Studies 200
Ethnic Studies 101 or $101 \mathrm{H}, 102$ or 102 H
Geography 100 or $100 \mathrm{H}, 102,140$
History 101 or $101 \mathrm{H}, 102$ or $102 \mathrm{H}, 105,118,120$ or $120 \mathrm{H}, 121$ or $121 \mathrm{H}, 123,124$ or $124 \mathrm{H}, 125,127,133,146,150,151,153,163$, 181
Interdisciplinary Studies 117H, 155
Kinesiology, Professional 150
Law 100
Political Science 101 or $101 \mathrm{H}, 200$ or $200 \mathrm{H}, 201,220,235$
Psychology 100 or 100H, 140, 157, 170, 180, 200, 219, 230, 240, 250
Sociology 100 or $100 \mathrm{H}, 112,140$ or $140 \mathrm{H}, 240$
Women's Studies 101, 102
NOTE: The CSU graduation requirement in UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS may be met by completing Political Science 101 or 101 H and one U.S. History course from the following:
History 118,120 or $120 \mathrm{H}, 121$ or $121 \mathrm{H}, 123,124$ or $124 \mathrm{H}, 127,146$.
These courses (in bold in area D above) may also be used to meet 6 of the 9 Area $D$ unit requirements.

## E. Lifelong Learning and Self-Development

(minimum 3 semester/4 quarter units)
Three units should be selected from below with no more than one unit from E2. Three units of credit are allowed in E for former military personnel with a DD-214.
E1:
Child Development 107, 229
Communication Studies 104
Counseling 100, 116, 120, 124, 125, 128
Interdisciplinary Studies 155
Kinesiology, Health Education 101, 102, 103, 104
Kinesiology, Professional 125
Nutrition and Food 115 or 115 H
Psychology 140, 157, 230
Sociology 112
Study Skills 109
E2:
Kinesiology, Activities 107A, 107B, 107C, 123, 140A, 150A,
155A, 160A, 169A, 169B, 170A, 200A, 200B, 200C, 211A, 211B,
220A, 220B, 220C, 226A, 230A, 260A, 260B, 260C, 265A, 265B,
265C, 270A, 290A, 290B
Kinesiology, Adapted Activities 201A, 202A, 202B,
205A, 208A, 208B, 211A, 211B
Kinesiology, Aerobic Fitness 140A, 143A, 144A, 146A,
146B, 150A, 156A, 156B, 157A
Kinesiology, Aquatics 201A, 201B
Kinesiology, Fitness 112A, 112B, 112C, 114A, 114B, 115A, 115B, 115C, 147A, 147B
Kinesiology, Intercollegiate Athletics 125, 128, 133, 171, 201, 202, 204
206, 209, 210, 211, 212, 213, 216, 217, 218, 219, 220, 221, 223, 227. 235, 240, 261, 262, 270, 271, 281, 291, 293

## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

## PLAN C: 2019-2020

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from Santa Ana College to a campus in either the CALIFORNIA STATE UNIVERSITY or the UNIVERSITY OF CALIFORNIA system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements.

1. It is generally recommended that students complete all the listed requirements for IGETC prior to transferring. Students may obtain partial certification, however, by completing all but 1-2 courses. Consult a counselor for additional information.
2. Complete all courses used for IGETC certification with a minimum grade of $C$ (C minus is not acceptable.) $A$ "pass" is acceptable providing it is equivalent to a grade of $C$ or higher. The catalog must reflect this policy.
3. Request certification from the last California community college attended prior to transfer to CSU or UC. Requests should be made to the Office of Admissions and Records during the semester prior to the last term of attendance. Please consult the class schedule or a counselor for deadline information.
4. Prior to requesting certification, have all official transcripts on file from every high school and college attended.
5. Courses taken at other California community colleges will be applied to the subject areas in which they are listed by the institution where the work was completed.
6. Courses taken at other regionally accredited private/out of state institutions (which do not maintain an IGETC certification list) will be placed in the subject areas for which Santa Ana College has equivalent courses. Equivalency is determined by Santa Ana College faculty. Petitions are available from the Counseling Division and must be accompanied by the appropriate documentation. In some cases non-equivalent courses may also be considered. Consult a counselor for additional information.
7. Courses completed at foreign institutions (without US regional accreditation) are not acceptable except for certification of competence in a language other than English.
8. Students earning an AS-T in Biology or Chemistry must complete IGETC for STEM. See "Associate Degrees for Transfer" on page 28 for additional information.
IMPORTANT NOTE: The list of certifiable courses will be subject to change year by year, but students are assured that courses taken to meet IGETC requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved beginning Fall 2019 and are valid through Summer 2020. TRANSFER CREDIT
Students may transfer up to 70 semester units to the CSU system. Sixty transferable units are needed for junior standing.
All courses used for CSU transfer credit must be numbered 100 or above in the Santa Ana College catalog.

## AREA 1 - ENGLISH COMMUNICATION

C.S.U.: 3 courses required, one from each group.
U.C.: 2 courses required, one each from Group A and B.

## Group A: English Composition

1 course, minimum 3 semester/4-5 quarter units.
English 101** or $101 \mathrm{H}^{* *}$
Group B: Critical Thinking-English Composition
1 course, 3 semester/4-5 quarter units.
English 102** or $102 \mathrm{H}^{* *}$ (102 and 102H not accepted in 1 B if
completed prior to Fall 2011)
English 103** or $103 \mathrm{H}^{* *}$
Philosophy $110^{* *}$ or $110 \mathrm{H}^{* *}$
Group C: Oral Communication (CSU ONLY)
1 course, 3 semester/4-5 quarter units.
Communication Studies $102,103^{* *}$ or $103 \mathrm{H}^{* *}, 140,145$
AREA 2A - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING
1 course, 3 semester/4- 5 quarter units.
Math $105,140^{* *}, 141,145,150^{* *}, 170^{* *}, 180^{* *}$ or $180 H^{* *}, 185,219^{* *}$
or 219H**, 221, 280, 287; Psychology 210
AREA 3 - ARTS AND HUMANITIES
3 courses, 9 semester/12-15 quarter units, with at least one course from Group A and one course from Group B.
Group A: Arts (minimum 1 course)
Art $100^{* *}$ or $100 H^{* *}, 101,102,103,104,105,106,107,108$
Communications \& Media Studies 103
Dance 100** or $100 H^{* *}, 102,105$
Interdisciplinary Studies 121
Music $101^{* *}$ or $101 \mathrm{H}^{* *}, 102^{\star *}$ or $102 \mathrm{H}^{* *}, 103,104,105,111$
Photography 150
Television/Video Communications 103, 104
Theatre Arts 100, 105, 120
Group B: Humanities (minimum 1 course)
American Sign Language 111, 116, 210
Chinese 102
English $102^{* *}$ or $102 \mathrm{H}^{* *}, 220,231,232,233 \mathrm{~A}$ or 233 B or 233 C ,
241, 242, 243, 245, 246, 271, 272, 278
French $102,201^{* *}$ or $201 \mathrm{H}^{* *}, 202^{* *}$ or $202 \mathrm{H}^{* *}$
History $101^{* *}$ or $101 \mathrm{H}^{* *}, 102^{* *}$ or $102 \mathrm{H}^{* *}, 150,151,153,163^{*}$
Interdisciplinary Studies 200
Italian 121
Japanese 102
Philosophy 106** or $106 \mathrm{H}^{\star *}, 108,112,118$
Spanish $102^{* *}$ or $102 \mathrm{H}^{* *}, 195 \mathrm{~A}, 195 \mathrm{~B}, 201^{* *}$ or $201 \mathrm{H}^{* *}, 202^{* *}$ or 202H**
Vietnamese 102

AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES
3 courses, 9 semester/12-15 quarter units from at least 2 disciplines or an interdisciplinary sequence.
Anthropology $100^{* *}$ or $100 H^{* *}, 103,104^{* *}$ or $104 H^{* *}, 105,125$
Asian American Studies 101
Biology 200
Black Studies 101
Chicano Studies 101
Child Development 107**
Communication Studies 206** or 206H**
Communications \& Media Studies 105** or 105H**, 111
Criminal Justice 101 or 101H
Economics 120, 121
English $104^{* *}$ or $104 \mathrm{H}^{\star *}$
Environmental Studies 200
Ethnic Studies $101^{* *}$ or $101 \mathrm{H}^{* *}, 102^{* *}$ or $102 \mathrm{H}^{* *}$
Geography $100^{* *}$ or $100 \mathrm{H}^{* *}, 102^{* *}, 140$
History $101^{* *}, 101 \mathrm{H}^{* *}, 102^{* *}, 102 \mathrm{H}^{* *}, 105,118,120^{* *}$ or $120 \mathrm{H}^{\star *}$, $121^{* *}$ or $121 \mathrm{H}^{* *}, 123,124^{* *}$ or $124 \mathrm{H}^{* *}, 125,127,133,146,163^{*}$, 181
Interdisciplinary Studies 117H, 155
Political Science $101^{* *}$ or $101 \mathrm{H}^{* *}, 200{ }^{* *}$ or $200 \mathrm{H}^{* *}, 201,220,235$
Psychology $100^{* *}$ or $100 H^{* *}, 140,157^{* *}, 170,180,200,219,230$, 240, 250
Sociology $100^{* *}$ or $100 H^{* *}, 140^{* *}$ or $140 H^{* *}, 240$
Women's Studies 101, 102

## AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES

At least 2 courses, 7-9 semester/9-12 quarter units with one Physical Science course and one Biological Science course; at least one must include a corresponding laboratory (Group C)
Group A: Physical Science (1 course)
Astronomy 109, 110** or $110 \mathrm{H}^{* *}$
Chemistry 109**, 115, 119**, 209**,210, 219** or 219H**, 229
Earth Science $110^{* *}$ or $110 H^{* *}, 115^{* *}, 150^{* *}$ or $150 H^{* *}$
Environmental Studies 140
Geography 101**, 130
Geology 101**, 140, 150** or 150H**, 201
Physical Science 115, 117**
Physics 109**, 210**, 211**, 217**, 227**, 237**, 279**, 289**
Group B: Biological Science (1 course)
Anthropology 101
Biology 109** or 109H**, 111, 115, 139**, 149 (Fall 2017 or later completion), 177, 190, 211**, 212, 214, 229**, 239, 249, 259
Environmental Studies 259
Psychology 200 (Fall 2017 or later completion)
Group C: Laboratory Activity
Anthropology 101L
Astronomy 140
Biology 109L, 111, 115, 139**, 149 (Fall 2017 or later completion), 190L, 211**, 212, 214, 229**, 239, 249, 259
Chemistry 109**, 115, 119**, 209**, 210, 219** or 219H**, 229
Earth Science 115**
Environmental Studies 259
Geography 101L
Geology 101L, 201
Physical Science 115, 118**
Physics 109**, 210**, 211**, 217**, 227**, 237**, 279**, 289**

AREA 6A - LANGUAGE OTHER THAN ENGLISH (U.C. ONLY)
Satisfactory completion of two years of high school coursework in one language other than English with grades of "C" or better***;

## OR

Completion of one of the following: American Sign Language 110, Chinese 101, French 101, Italian 120, Japanese 101, Spanish 101** or 101H**, or Vietnamese 101;

## OR

Satisfactory completion, with "C" grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English;

OR
Satisfactory score in examinations of languages other than English as follows:
3 or higher on College Board Advanced Placement Examination, 5 or higher on International Baccalaureate Higher Level Examination; SAT II: Subject Tests (see counselor for required scores); A, B, or C on "0" Level exam; 5, 6, 7 or $A, B$, or $C$ on " $A$ " Level exam;

OR
Satisfactory completion of an achievement test administered by a college in language other than English equivalent to two years of high school language. If an achievement test is not available, a SAC faculty member may verify competency.

## AMERICAN INSTITUTIONS REQUIREMENT

(Not part of IGETC. May be completed prior to transfer.)
CSU has an American Institutions graduation requirement that is separate from IGETC. Courses used to meet the CSU requirement can usually also be used in Area 3 or 4. (This is at the discretion of each CSU campus.) To meet the CSU requirement, students should take Political Science $101^{* *}$ or $101 \mathrm{H}^{* *}$ AND one of the following courses: History 118, 120**, 120 ${ }^{* * *}, 121^{* *}, 121 \mathrm{H}^{* *}, 123,124^{* *}, 124 \mathrm{H}^{* *}, 127$, 146.

UC requires the completion of a college course or courses with a grade of " C " or better OR a one-year course in high school in U.S. History or a half-year course in U.S. History and a half-year course in American Government with grades of "C" or better (UCLA requires grades of " $B$ "). UCSB requires the completion of a college course. If you are using college coursework to satisfy this requirement, check the appropriate UC catalog to determine which course(s) to take.

* Courses designated with an asterisk may be counted in one area only.
** Indicates that transfer credit may be limited by either UC or CSU or both. Please see page 45 for additional information. High School transcript must be on file in the admissions office. Please consult with a counselor for additional information.


## ADVANCED PLACEMENT POLICIES

Per the following chart students at Santa Ana College may be awarded units of credit for Advanced Placement exams passed with a score of 3, 4 , or 5 . Although credit awarded through advanced placement may be used to satisfy Santa Ana College graduation requirements, it cannot be used to satisfy the twelve unit residency requirement. Students who have earned credit from an AP exam should not take a comparable college course since credit will not be granted for both. Students should submit official copies of Advanced Placement Examination test scores to the Admissions and Records office for evaluation. Students are strongly advised to check with a SAC counselor and/or the Admissions Office of their transfer campus to determine how the AP exam will be used to meet requirements at their transfer institution as policies may differ from SAC's.

| Advanced Placement Exam | SAC Course(s)/ Units Awarded (can also be used on Plan A) | CSU-GE (Plan B) Certification Area/ Semester Units Awarded1 | CSU Minimum Semester Units Granted ${ }^{2}$ | IGETC (Plan C)\| Certification Area/ Semester Units Awarded ${ }^{3}$ | UC Minimum <br> Semester Units Granted ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Art History | $\begin{gathered} \text { ART } 101 \text { and } 102 \\ 6 \text { units } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Area } \mathrm{C} 1 \text { or } \mathrm{C}^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 6 units | $\begin{gathered} \text { Area } 3 \mathrm{~A} \text { or } 3 \mathrm{~B}^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| Studio Art: Drawing | ART 130 3 units | N/A | 3 units | N/A | 5.3 units ( 5.3 units maximum combined credit for all three Studio Art exams) |
| Studio Art: 2-D Design | ART 110 3 units | N/A | 3 units | N/A | 5.3 units ( 5.3 units maximum combined credit for all three Studio Art exams) |
| Studio Art: 3-D Design | ART 111 <br> 3 units | N/A | 3 units | N/A | 5.3 units ( 5.3 units maximum combined credit for all three Studio Art exams) |
| Biology | $\begin{gathered} \text { BIOL } 109 \\ 3 \text { units } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Area B2 and B3 } \\ 4 \text { units } \\ \hline \end{gathered}$ | 6 units | $\begin{gathered} \text { Area } 5 B \text { and } 5 \mathrm{C} \\ 4 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| Calculus AB | MATH 180 4 units | Area B4 3 units | 3 units <br> (only one Calculus or Computer Science exam may be applied toward CSU degree) | Area 2A 3 units | 2.6 units (5.3 units maximum combined credit for both Calculus exams) |
| Calculus BC | MATH 180 and 185 8 units | Area B4 3 units | 6 units (only one Calculus or Computer Science exam may be applied toward CSU degree) | Area 2A 3 units | 5.3 units (5.3 units maximum combined credit for both Calculus exams) |
| Calculus BC/AB Subscore | MATH 180 <br> 4 units | Area B4 3 units | 3 units <br> (only one Calculus or Computer Science exam may be applied toward CSU degree) | Area 2A <br> 3 units | 2.6 units (5.3 units maximum combined credit for both Calculus exams) |
| Chemistry | CHEM 219 <br> 5 units | $\qquad$ | 6 units | $\begin{aligned} & \text { Area } 5 \mathrm{~A} \text { and } 5 \mathrm{C} \\ & 4 \text { units } \end{aligned}$ | 5.3 units |
| Chinese Language and Culture | Plan A <br> Area C <br> 3 units | Area C2 <br> 3 units | 6 units | Area 3B and 6A 3 units | 5.3 units |
| Computer Science A | CMPR 121 <br> 3 units (with SAC CMPR department approval) | N/A | 3 units (only one Computer Science or Calculus exam may be applied toward a CSU degree) | N/A | 5.3 units (Student entering UC fall 2018) |
| Computer Science AB | CMPR 121 and 131 6 units (with SAC CMPR department approval) | N/A | 6 units (only one Computer Science or Calculus exam may be applied toward a CSU degree) | N/A | N/A |
| Computer Science <br> Principles | N/A | Area B4 3 units | 6 units | N/A | 5.3 units |
| Economics: <br> Macroeconomics | ECON 120 <br> 3 units | Area D <br> 3 units | 3 units | Area 4 3 units | 2.6 units |


| Advanced Placement Exam | SAC Course(s)/ <br> Units Awarded (can also be used on Plan A) | CSU-GE (Plan B) <br> Certification Area/ Semester Units Awarded1 | CSU Minimum Semester Units Granted ${ }^{2}$ | IGETC (Plan C)\| <br> Certification Area/ <br> Semester Units Awarded ${ }^{3}$ | UC Minimum Semester Units Granted ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Economics: Microeconomics | $\begin{gathered} \hline \text { ECON } 121 \\ 3 \text { units } \\ \hline \end{gathered}$ | Area D <br> 3 units | 3 units | Area 4 3 units | 2.6 units |
| English: Language and Composition | ENGL 101 <br> 4 units | Area A2 <br> 3 units | 6 units | Area 1A 3 units | 5.3 units <br> ( 5.3 units maximum combined credit for both English exams) |
| English: Literature and Composition | $\begin{gathered} \text { ENGL } 101 \\ 4 \text { units } \end{gathered}$ | Area A2 and C2 6 units | 6 units | Area 1 A or $3 \mathrm{~B}^{5}$ 3 units | 5.3 units <br> ( 5.3 units maximum combined credit for both English exams) |
| Environmental Science | BIOL 200 or <br> ENVR 200 3 units | Area B1 and B3 4 units (B1 and B3, or B2 and B3 if test taken prior to $\mathrm{F}^{\prime} 09$ ) | 4 units | Area 5A and 5C 3 units | 2.6 units |
| French Language and Culture | FREN 101 and 102 10 units | Area C2, 3 units (6 units if passed prior to F'09) | 6 units | Area 3B and 6A 3 units | 5.3 units |
| French Literature | Plan A , Area C 3 units | Area C2, 3 units (Must be passed prior to F'09) | 6 units | Area 3B and 6A 3 units | 5.3 units |
| German Language and Culture | Plan A, Area C 3 units | Area C2, 3 units <br> (6 units if passed prior to $\left.F^{\prime} 09\right)$ | 6 units | Area 3B and 6A 3 units | 5.3 units |
| Geography: Human | $\begin{gathered} \text { GEOG } 102 \\ 3 \text { units } \\ \hline \end{gathered}$ | Area D 3 units | 3 units | Area 4 3 units | 2.6 units |
| Government and Politics: Comparative | POLT 201 3 units (also meets Plan A, Area B2) | Area D 3 units | 3 units | Area 4 3 units | 2.6 units |
| Government and Politics: United States | POLT 101 3 units | Area D <br> 3 units and completion of the US Const. and Govt. portion of the US Hist. Const. and Am. Ideals requirement ${ }^{7}$ (US-2) | 3 units | Area 4 <br> 3 units and completion of the US Const. and Govt. portion of the CSU US Hist. Const. and Am. Ideals requirement ${ }^{7}$ (US-2) | 2.6 units |
| History: European | $\begin{gathered} \text { HIST } 102 \\ 3 \text { units } \end{gathered}$ | $\begin{gathered} \text { Area C2 or D5 } \\ 3 \text { units } \\ \hline \end{gathered}$ | 6 units | $\begin{gathered} \text { Area 3B or } 4^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| History: United States | $\begin{aligned} & \text { HIST } \frac{120 \text { and } 121}{6 \text { units }} \end{aligned}$ | Area C2 or $\mathrm{D}^{5}$ <br> 3 units and completion of the US Hist. portion of the US Hist. Const. and Am. Ideals requirement ${ }^{7}$ (US-1) | 6 units | Area 3B or $4^{5}$ <br> 3 units and completion of the US Hist. portion of the CSU US Hist. Const. and Am. Ideals requirement ${ }^{7}$ (US-1) | 5.3 units |
| History: World | $\begin{aligned} & \text { HIST } 101 \text { and } 102 \\ & 6 \text { units } \end{aligned}$ | $\begin{gathered} \text { Area C2 or D5 } \\ 3 \text { units } \end{gathered}$ | 3 units | $\begin{gathered} \text { Area } 3 B \text { or } 4^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| Italian Language and Culture | Plan A, Area C 3 units | Area C2 3 units | 6 units | $\begin{gathered} \text { Area } 3 B \text { and } 6 A \\ 3 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| Japanese Language and Culture | Plan A, Area C 3 units | Area C2 3 units | 6 units | $\begin{gathered} \text { Area } 3 B \text { and } 6 A \\ 3 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| Latin Literature or Latin: Vergil | Plan A, Area C 3 units | Area C2 3 units | 6 units $^{6}$ <br> (3 units for Latin: Vergil if passed prior to F'12) | Area 3B and 6A 3 units | 2.6 units |
| Latin | Plan A, Area C 3 units | Area C2 3 units | 6 units | $\begin{gathered} \text { Area } 3 B \text { and } 6 A \\ 3 \text { units } \end{gathered}$ | 5.3 units (if passed May ' 13 or later) |
| Music Theory | $\begin{aligned} & \text { MUS } 111 \text { and } 112 \\ & 8 \text { units } \end{aligned}$ | Area C1 3 units (Must be passed prior to F'09) | 6 units (Must be passed prior to F '09) | N/A | 5.3 units |


| Advanced Placement Exam | SAC Course(s)/ <br> Units Awarded (can also be used on Plan A) | CSU-GE (Plan B) Certification Area/ Semester Units Awarded1 | CSU Minimum <br> Semester Units Granted ${ }^{2}$ | IGETC (Plan C)\| <br> Certification Area/Semester Units Awarded ${ }^{3}$ | UC Minimum Semester Units Granted ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Physics B (available prior to Fall '15) | PHYS 279 and 289 8 units | Area B1 and B3 4 units ${ }^{8}$ <br> (prior to F '13) <br> (6 units if passed prior to F '09) | 6 units | Area 5A and 5C 4 units | 5.3 units <br> (5.3 units maximum combined credit for all Physics exams) |
| Physics 1 | Plan A, Area A 4 units | Area B1 and B3 4 units $^{8}$ | 4 units | Area 5A and 5C 4 units | 5.3 units (5.3 units maximum combined credit for all Physics exams) |
| Physics 2 | Plan A, Area A 4 units | Area B1 and B3 4 units $^{8}$ | 4 units | Area 5A and 5C 4 units | 5.3 units <br> (5.3 units maximum combined credit for all Physics exams) |
| Physics C (Electricity and Magnetism) | PHYS 227 4 units (also meets Plan A, area A) | Area B1 and B3 4 units $^{8}$ | 4 units | Area 5A and 5C 3 units | 2.6 units (5.3 units maximum combined credit for all Physics exams) |
| Physics C (Mechanics) | $\begin{gathered} \text { PHYS } 217 \\ 4 \text { units } \end{gathered}$ | Area B1 and B3 4 units $^{8}$ | 4 units | Area 5A and 5C 3 units | 2.6 units ( 5.3 units maximum combined credit for all Physics exams) |
| Psychology | $\begin{aligned} & \text { PSYCH } 100 \\ & 3 \text { units } \end{aligned}$ | Area D 3 units | 3 units | Area 4 3 units | 2.6 units |
| Seminar | N/A | N/A | 3 units | N/A | N/A |
| Spanish Language and Culture | SPAN 101 and 102 10 units | Area C2, 3 units (6 units if passed prior to Sp '14) | 6 units | Area 3B and 6A 3 units | 5.3 units |
| Spanish Literature and Culture | Plan A <br> Area C <br> 3 units | Area C2, 3 units (6 units if passed prior to Sp '13) | 6 units | Area 3B and 6A 3 units | 5.3 units |
| Statistics | MATH 219 4 units | Area B4 <br> 3 units | 3 units | Area 2A 3 units | 2.6 units |

${ }^{1}$ All CSU campuses will accept toward fulfillment of the minimum units of the designated general education breadth area if the examination is included in full or subject area certification; individual CSU campuses may choose to accept more units than those specified towards completion of general education breadth requirements.
${ }^{2}$ This column reflects the number of units each campus system-wide will minimally grant for each exam. These units count toward eligibility for admission. (Not all of these units may apply toward certification of the corresponding GE-Bredth area.) Some CSU campuses may award more than the minimum units listed in this column. That information can be found in each CSU catalog.
${ }^{3}$ Each AP exam may be applied to one IGETC area as satisfying only one course requirement, with the exception of Language Other Than English. Exams may be used regardless of when the exam was taken.
${ }^{4}$ This column reflects the number of units each campus system-wide will grant for each exam. These units count toward eligibility for admission.
${ }^{5}$ AP exam may be used in either area regardless of where the SAC discipline is located.
${ }^{6}$ Latin Literature 6 units if passed prior to F '09. Latin: Vergil 3 units if passed prior to F '12.
${ }^{7}$ This examination only partially fulfills the CSU US History, Constitution, and American Ideals graduation requirement but can be used toward the requirement. (Please note that no AP exam fulfills the California State and Local Government portion, US-3.) See a counselor for more information.
${ }^{8}$ If a student passes more than one AP exam in Physics, only six units of credit may be applied to the baccalaureate, and only four units of credit may be applied to certification of CSU GE.

## THE COLLEGE-LEVEL EXAMINATION (CLEP) POLICIES

Santa Ana College will grant credit to currently enrolled studens for CLEP examinations passed with a score of 50 or higher (level II languages require a higher score). Although credit awarded through CLEP may be used to satisfy Santa Ana College graduation requirements, it cannot be used to satisfy the twelve-unit residency requirement. Students who have earned credit from a CLEP exam should not take a comparable college course since credit will not be granted for both. Credit for some exams may be applied toward general education requirements for plans A and B per the following chart; however, credit may not be applied toward plan C. UC does not grant credit for CLEP examinations at this time. Use of exams for SAC prerequisite clearance and major requirements is granted according to the determination of the appropriate SAC area dean in consultation with the department. Students should see a counselor for more information and submit official copies of CLEP test scores to the SAC Admissions and Records Office. Students are strongly advised to check with a SAC counselor or their transfer campus to determine how CLEP exams will be used to meet requirements at their transfer institution as policies may differ from SAC's.

| College-Level Examination Program Exam | SAC GE (Plan A) Area/Units | Total SAC <br> Associate Degree Semester Units Granted | CSU-GE (Plan B) Certification Area/ Semester Units ${ }^{1}$ | CSU Minimum Semester Units Granted ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| BUSINESS |  |  |  |  |
| Financial Accounting | N/A | 3 units | N/A | 3 units |
| Information Systems and Computer Applications | N/A | 3 units | N/A | 3 units |
| Introductory Business Law | N/A | 3 units | N/A | 3 units |
| Principles of Accounting | N/A | 3 units | N/A | 3 units |
| Principles of Management | N/A | 3 units | N/A | 3 units |
| Principles of Marketing | N/A | 3 units | N/A | 3 units |
| COMPOSITION AND LITERATURE |  |  |  |  |
| American Literature | Area C 3 units | 3 units | Area C2 3 units | 3 units |
| Analyzing and Interpreting Literature | Area C 3 units | 3 units | Area C2 3 units | 3 units |
| College Composition | N/A | 0 units | N/A | 0 units |
| College Composition - Modular | N/A | 0 units | N/A | 0 units |
| English Composition (no Essay) | N/A | 0 units | N/A | 0 units |
| English Composition (with Essay) | N/A | 0 units | N/A | 0 units |
| English Literature | Area C 3 units | 3 units | Area C2 3 units (must be passed prior to F'11) | 3 units (must be passed prior to F '11) |
| Freshman College Composition | N/A | 0 units | N/A | 0 units |
| Humanities | Area C 3 units | 3 units | Area C2 3 units | 3 units |
| FOREIGN LANGUAGES |  |  |  |  |
| French Level I | N/A | 6 units $^{3}$ | N/A ${ }^{3}$ | 6 units |
| French Level II | Area C 3 units (Required Score of 59) | ```9 units }\mp@subsup{}{}{3 (12 units if passed prior to F '15) (Required Score of 59)``` | Area $\mathrm{C}^{3} 3$ units (Required Score of 59) | ```9 units (Required Score of 59) (12 units if passed prior to \(\mathrm{F}^{\prime} 15\) )``` |
| German Level I | N/A | 6 units $^{3}$ | N/A ${ }^{3}$ | 6 units |
| German Level II | Area C 3 units (Required Score of 60) | ```9 units}\mp@subsup{}{}{3 (12 units if passed prior to F '15) (Required Score of 60)``` | Area C2 ${ }^{3} 3$ units (Required Score of 60) | 9 units (Required Score of 60) (12 units if passed prior to $\mathrm{F}^{\prime} 15$ ) |
| Spanish Level I | N/A | 6 units $^{3}$ | N/A ${ }^{3}$ | 6 units |
| Spanish Level II | Area C 3 units (Required Score of 63) | ```9 units }\mp@subsup{}{}{3 (12 units if passed prior to F '15) (Required Score of 63)``` | Area C2 3 units (Required Score of 63) | ```9 units (Required Score of 63) (12 units if passed prior to F'15)``` |
| HISTORY AND SOCIAL SCIENCES |  |  |  |  |
| American Government | Area B1 or B2 3 units | 3 units | Area D <br> 3 units | 3 units |
| History, United States I | Area B1 3 units | 3 units | $\begin{aligned} & \text { Area D and US-15 } \\ & 3 \text { units } \\ & \hline \end{aligned}$ | 3 units |
| History, United States II | Area B1 <br> 3 units | 3 units | $\begin{gathered} \text { Area D and US- } 1^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 3 units |
| Human Growth and Development | Area B2 <br> 3 units | 3 units | Area E1 3 units | 3 units |

## THE COLLEGE-LEVEL EXAMINATION (CLEP) POLICIES (Continued)

| College-Level Examination Program Exam | SAC GE (Plan A) Area/Units | Total SAC Associate Degree Semester Units Granted | CSU-GE (Plan B) <br> Certification Area/ Semester Units ${ }^{1}$ | CSU Minimum Semester Units Granted ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| Introduction to Educational Psychology | N/A | 3 units | N/A | 3 units |
| Introductory Psychology | Area B2 3 units | 3 units | Area D 3 units | 3 units |
| Introductory Sociology | Area B2 3 units | 3 units | Area D 3 units | 3 units |
| Principles of Macroeconomics | Area B2 3 units | 3 units | Area D 3 units | 3 units |
| Principles of Microeconomics | Area B2 3 units | 3 units | Area D 3 units | 3 units |
| Social Sciences and History | N/A | 0 units | N/A | 0 units |
| Western Civilization I | Area B2 3 units | 3 units | Area C2 or D4 $3 \text { units }$ | 3 units |
| Western Civilization II | Area B2 3 units | 3 units | Area D 3 units | 3 units |
| SCIENCE AND MATHEMATICS |  |  |  |  |
| Biology | Area A 3 units | 3 units | Area B2 3 units | 3 units |
| Calculus | Area E2 3 units | 3 units $^{6}$ | Area B4 3 units | 3 units |
| Chemistry | Area A 3 units | 3 units | Area B1 3 units | 3 units |
| College Algebra | Area E2 ${ }^{6} 3$ units | 3 units $^{6}$ | Area B4 3 units | 3 units |
| College Algebra - Trigonometry | Area E2 ${ }^{6} 3$ units | 3 units $^{6}$ | Area B4 3 units | 3 units |
| College Mathematics | N/A | 0 units | N/A | 0 units |
| Natural Sciences | Area A 3 units | 3 units | Area $B^{1}$ or $B^{2}$ 3 units | 3 units |
| Pre-Calculus | Area E2 3 units | 3 units $^{6}$ | Area B4 3 units | 3 units |
| Trigonometry | Area E2 3 units | 3 units $^{6}$ | Area B4 3 units (must be passed prior to F '06) | 3 units (must be passed prior to F '06) |

${ }^{1}$ All CSU campuses will accept the minimum units toward fulfillment of the designated general education breadth area if the examination is included in full or toward fulfillment subject area certification; individual CSU campuses may choose to accept more units than those specified towards completion of general education breadth requirements.
${ }^{2}$ This column reflects the number of units each campus system-wide will minimally grant for each exam. These units count toward eligibility for admission. Some CSU campuses may award more than the minimum units listed in this column. That information can be found in each CSU catalog.
${ }^{3}$ If a student passes more than one CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the associate degree or to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of credit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Plan A, Area C and Plan B, Area C2, as noted.
${ }^{4}$ CLEP exam may be used in either area regardless of where CLEP discipline is located.
${ }^{5}$ This examination only partially fulfills the CSU US History, Constitution, and American Ideals graduation requirement but can be used toward the requirement. (Please note that no CLEP exam fulfills the California State and Local Government portion, US-3.) See a counselor for more information.
${ }^{6}$ Also fulfills Santa Ana College Math Proficiency.

## INTERNATIONAL BACCALAUREATE (IB) POLICIES

Per the following chart students at Santa Ana College may be awarded units of credit for International Baccalaureate Exams passed with a score of 5 or higher, unless otherwise noted. Although credit awarded through IB may be used to satisfy Santa Ana College graduation requirements, it cannot be used to satisfy the twelve-unit residency requirement. Students who have earned credit from an IB exam should not take a comparable college course since credit will not be granted for both. Students should submit official copies of International Baccalaureate Examination test scores to the Admissions and Records office. Students are strongly advised to check with a SAC counselor and/or the Admissions Office of their transfer campus to determine how the IB exam will be used to meet requirements at their transfer institution as policies may differ from SAC.

| International Baccalaureate Exam | SAC GE (Plan A) Area/ Units Awarded | CSU-GE (Plan B) Certification Area/ Semester Units Awarded ${ }^{1}$ | CSU Minimum Semester Units Granted ${ }^{2}$ | IGETC (Plan C) Certification Area/ Semester Units Awarded ${ }^{3}$ | UC Minimum Semester Units Granted ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Biology HL | Area A 3 units | Area B2 3 units | 6 units | Area 5B (without lab) 3 units | 5.3 units |
| Chemistry HL | Area A 3 units | Area B1 3 units | 6 units | Area 5A (without lab) 3 units | 5.3 units |
| Economics HL | Area B2 3 units | Area D 3 units | 6 units | Area 43 units | 5.3 units |
| Geography HL | Area B2 3 units | Area D 3 units | 6 units | Area 43 units | 5.3 units |
| History (any region) HL | Area B2 3 units | $\begin{gathered} \text { Area C2 or } D^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 6 units | $\begin{gathered} \text { Area 3B or } 4^{5} \\ 3 \text { units } \\ \hline \end{gathered}$ | 5.3 units |
| Language A1 (any language) $\mathrm{HL}^{7}$ (prior to Fall '13) | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B 3 units | 5.3 units |
| Language A 1 (any language, except English) HL ${ }^{7}$ (prior to Fall '13) | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B and 6A 3 units | 5.3 units |
| Language A2 (any language) $\mathrm{HL}^{7}$ <br> (prior to Fall '13) | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B 3 units | 5.3 units |
| Language A2 (any language, except English) HL ${ }^{7}$ (prior to Fall '13) | Area C3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B and 6A 3 units | 5.3 units |
| Language A (any language) Literature HL | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B 3 units | 5.3 units |
| Language A <br> (any language) <br> Language and Literature HL | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B 3 units | 5.3 units |
| Language $A$ (any language, except English) Literature HL | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B and 6A 3 units | 5.3 units |
| Language A <br> (any language, except <br> English) <br> Language and Literature HL | Area C 3 units | Area C2 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3B and 6A 3 units | 5.3 units |
| Language $B$ (any language) $\mathrm{HL}^{7}$ | Area C 3 units | N/A | 6 units ${ }^{6}$ | Area 6A 3 units | 5.3 units |
| Mathematics HL | Area E2 ${ }^{8} 3$ units | Area B4 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 2A 3 units | 5.3 units |
| Physics HL | Area A 3 units | Area B1 3 units | 6 units | Area 5A (without lab) 3 units | 5.3 units |
| Psychology HL | Area B2 3 units | Area D 3 units | 3 units | Area 43 units | 5.3 units |
| Theatre HL | Area C 3 units | Area C1 3 units ${ }^{6}$ | 6 units $^{6}$ | Area 3A 3 units | 5.3 units |

${ }^{1}$ All CSU campuses will accept the minimum units toward fulfillment of the designated General Education-Breadth area if the examination is included in full or subject area certification; individual CSU campuses may choose to accept more units than those specified towards completion of general education breadth requirements.
${ }^{2}$ This column reflects the number of units each campus system-wide will minimally grant for each exam. These units count toward eligibility for admission. Some CSU campuses may award more than the minimum units listed in this column. That information can be found in each CSU catalog.
${ }^{3}$ Each IB exam may be applied to one IGETC area as satisfying only one course requirement, with the exception of Language Other Than English. Exams may be used regardless of when the exam was taken.
${ }^{4}$ This column reflects the minimum number of units each campus system-wide will grant for each exam. These units count toward eligibility for admission.
${ }^{5}$ IB exam may be used in either area regardless of where the SAC discipline is located.
${ }^{6}$ Score of 4 or higher required for CSU Credit.
${ }^{7}$ The IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.
${ }^{8}$ Also fulfills Math Proficiency.

## TRANSFER TO OTHER COLLEGES

This section of the catalog is designed to help students plan an academic program for transfer to a four-year college or university. It includes information about the transfer process and requirements. Universities often make changes to their requirements. Information listed in this section was up-to-date at the time of publication; however, changes may have occurred after publication. Current transfer information is available online and in the University Transfer Center and the Counseling Center at Santa Ana College.
There are four segments of higher education in California. They are:
a) the University of California (UC) system with 10 campuses;
b) the California State University (CSU) system with 23 campuses;
c) independent colleges and universities; and
d) California Community Colleges with 114 campuses.

Santa Ana College provides the freshman and sophomore years of a four-year college or university program. SAC students can complete most or all of their lower division general education and major requirements before transferring. Students who are planning to transfer should meet with a counselor in the Counseling Center or in the University Transfer Center to develop a Student Educational Plan to insure a smooth transition to the transfer institution of their choice. Note: Transfer students may also want to complete an associate degree or an Associate Degree for Transfer. While not always a requirement for transfer, the associate degree or Associate Degree for Transfer is generally recommended, and proper planning should enable students to satisfy both requirements for graduation from SAC and for transfer.

## UNIVERSITY TRANSFER CENTER

The University Transfer Center (UTC), which is located in S-110 at Santa Ana College, provides information and assistance to students who are preparing to transfer. University representatives are available in the UTC to meet with students individually and provide information about their programs and requirements. The Center maintains a resource library and other information about transfer programs. College Fairs are held each semester with representatives from California colleges and universities providing information to potential students. Transfer application workshops are offered during priority filing periods. In addition, organized tours to various university campuses are available through the UTC. For more information call 714-564-6165

## TRANSFERABILITY OF COURSES

Students can transfer a maximum of 70 units to a UC or CSU campus. Many courses offered by Santa Ana College will transfer to meet general education and/or major requirements. However, some courses may transfer only as electives units.
All courses numbered 100 or above will transfer to CALIFORNIA STATE UNIVERSITY. These are also indicated in the catalog by a "CSU" at the end of the course description.
Courses which are transferable to the UNIVERSITY OF CALIFORNIA are designated on the UC Transferable Course Agreement and are also indicated in the catalog by a "UC" at the end of the course description. Some of the courses that are transferable to the University of California have credit limitations. Check the UC Transferable Course Agreement on page 45 or at www.assist.org to determine these limitations.
INDEPENDENT AND OUT-OF-STATE COLLEGES AND UNIVERSITIES usually accept most courses that are transferable to the University of California and many of the courses acceptable at California State University campuses.

## COURSE REQUIREMENTS FOR TRANSFER STUDENTS

A student can transfer from Santa Ana College as a junior without loss of time or credits by completing the following:

1. Lower Division Major Requirements

Most university majors require the completion of one or more lower division courses as preparation for the upper division. Santa Ana College offers courses to meet the lower division requirements for most transfer majors. See page 44 for additional information.
2. General Education Requirements These are the courses required of everyone to obtain a degree regardless of major. Courses in writing, critical thinking, mathematics, sciences, arts and humanities, and the social sciences are included in general education.
3. Electives

These are courses of choice taken in addition to courses for the major and general education requirements.

## HONORS PROGRAM TRANSFER AGREEMENTS

Santa Ana College Honors Program students may opt to enter into honors transfer agreements with those participating four-year colleges and universities. Each agreement is specific to the four-year institutions but all offer, at least, "priority consideration for admission." While Santa Ana College continues to add to the honors transfer agreement list, SAC currently has agreements with:

California State University, Fullerton Honors Program
California State University, San Diego Weber Honors Program
University of California, Irvine
University of California, Los Angeles
University of California, Riverside Honors Program
University of California, San Francisco
Azusa Pacific Honors Program
Chapman University
Concordia University
Gonzaga University
La Sierra University Honors Program
Loyola Marymount University
Mills College
Occidental College
Pacific University in Oregon
Pitzer College
Pomona College
Scripps at Claremont
Smith College
Trinity College
Tufts University
University of La Verne
Whitman College in Washington
Whittier College
New transfer agreements are added every year. For details regarding specific agreements, students may contact the Honors Coordinator at Santa Ana College, Kathy Patterson, 714-564-6528 or refer to the honorstransfercouncil.org website.

The California State University has 23 campuses located throughout the state. While each campus within the system has its own unique geographic and curricular character, all campuses offer undergraduate and graduate instruction for professional and occupational goals as well as a broad liberal education. The CSU offers more than 1,500 bachelor's and master's degrees in some 200 subject areas. Campuses are Bakersfield, Channel Islands, Chico, Dominguez Hills, East Bay, Fresno, Fullerton, Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona (Cal Poly), Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo (Cal Poly), San Marcos, Sonoma, Stanislaus, and California Maritime. To obtain a bachelor's degree from the CSU system, a student must usually complete a minimum of 120 or more semester units. A maximum of 70 units of CSU transferable credit will be accepted for courses completed at a community college. Community college coursework completed above the 70 units may be used to meet general education, elective units, or major preparation requirements even if the units will not count toward the baccalaureate degree.
The key to a successful transfer is early planning to ensure that students complete courses that meet the admission, general education, and lower division major preparation requirements.

## CALIFORNIA STATE UNIVERSITY - ADMISSION REQUIREMENTS FOR TRANSFER

## I. Lower Division Transfer

An applicant who completes fewer than 60 semester ( 90 quarter) units of college credit is considered a lower-division transfer student. Having fewer than 60 semester ( 90 quarter) units at the point of transfer may affect eligibility for registration priority at CSU campuses and may affect the student's financial aid status.
California resident transfer applicants with fewer than 60 semester or 90 quarter units must:

- have a cumulative grade point average of 2.0 (C) or better in all transferable units attempted;
- have completed, with a grade of C - or better, a course in written communication and a course in mathematics or quantitative reasoning at a level satisfying CSU General Breadth Area A2 and B4 requirements respectively;
- be in good standing at the last institution attended; and
- meet any one of the following eligibility standards:

1. Transfer Based on Current Admission Criteria

The applicant meets the freshman admission requirements in effect for the term for which the application is being filed; - OR -
2. Transfer Based on High School Eligibility

The applicant was eligible as a freshman at the time of high school graduation and has been in continuous attendance in an accredited college since high school graduation; - OR -
3. Transfer Based on Making Up Missing Subjects The applicant had a qualifiable eligibility index at the time of high school graduation (combination of GPA and test scores if needed), has made up any missing college preparatory subject requirements with a grade of C - or better, and has been in continuous attendance in an accredited college since high school graduation. One baccalaureate level course of at least 3 semester (4 quarter) units is usually considered equivalent to one year of high school study.
Note: Due to enrollment pressures, most CSU campuses do not admit lower division transfers so that more upper division transfers may be accommodated.

## II. Upper Division Transfer

To qualify for admission as an upper division transfer, applicants must complete 60 or more semester ( 90 or more quarter) transferable units and have met the following requirements:

- The applicant must complete at least 30 semester ( 45 quarter) units of general education courses. You may visit www.assist.org for a full listing of courses at each CCC that meet CSU general education requirements.
- The applicant must complete transferable courses (CSU GE category A) with grades of C - or better in written communication, oral communication and critical thinking.
- The applicant must complete one transferable course (CSU GE category B4) with a grade or C- or better in mathematics or quantitative reasoning.
- The applicant must have achieved a cumulative grade point average of 2.0 or better in all transferable college units attempted.
- The applicant is expected to be in good standing at the last college or university attended (i.e. eligible to re-enroll at that college or university).
Note: Campuses and/or programs and class levels that are designated as being impacted have additional admission criteria. For example, a 2.0 GPA may not be high enough for campuses and majors in high demand. See www.calstate.edu (search for impaction) for additional information on impacted programs.
The CSU gives priority admission consideration to California Community College (CCC) students who meet the CSU upper-division transfer admission requirements. However the highest admission priority is given to students who have earned an Associate Degree for Transfer (ADT)


## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS

To earn a bachelor's degree from the California State University, each student must complete a program of general education. Santa Ana College offers two general education programs that will enable students to meet the lower division general education requirements for all CSU campuses prior to transfer. Students can complete either the CSU General Education Breadth Requirements (see page 30 of the catalog for GE Plan B) or the Intersegmental General Education Transfer Curriculum (see page 32 of the catalog for GE Plan C). Students can also meet the general education requirements of a specific CSU campus. A few majors, such as Nursing, Engineering, Science, and other technical majors recommend students complete very specific course-work to meet general education. Consult a counselor for additional information.

## CERTIFICATION OF GENERAL EDUCATION FOR TRANSFER TO CSU

See certification information on page 42.

## ASSOCIATE DEGREE FOR TRANSFER: A PATHWAY TO THE CSU DEGREE

The Student Transfer Achievement Reform Act (SB1440) established an Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T). The AA-T or AS-T degrees are designed to provide a clear pathway to the California State University (CSU) degree major. Please see page 24 for additional information about these degrees.

## UNIVERSITY OF CALIFORNIA

The University of California has ten campuses located throughout the state. Each campus within the system has its own unique geographic and academic character. The University offers bachelor's, master's and doctoral degrees in a variety of subject areas. Campuses of the University are located in Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco (Schools of Medicine, Dentistry and Pharmacy), Santa Barbara and Santa Cruz.

To obtain a baccalaureate degree from the UC system, a student must complete a minimum of 120 semester units ( 180 quarter units). A maximum of 70 units of transferable credit will be accepted for courses completed at a community college. The key to a successful transfer is early planning to ensure that students complete courses that meet the admission, general education, and lower division major preparation requirements.

## UNIVERSITY OF CALIFORNIA - ADMISSION REQUIREMENTS FOR TRANSFER

## I. Lower Division Transfer

While all UC campuses welcome a large pool of junior-level transfers, most admit only a limited number (if any) of lower division transfers. However, it can happen. Here's how:
If a student was eligible for admission to the University when he or she graduated from high school - meaning the student satisfied the Subject, Scholarship and Examination Requirements, the student is eligible for transfer if he or she has a 2.0 GPA ( 2.8 for non residents) in UC transferable college coursework.
If a student met the Scholarship Requirement in high school but did not satisfy the Subject Requirement, the student must take transferable college courses in the missing subjects, earn a C or better in each required course and maintain an overall 2.0 GPA (2.8 for non residents) in all transferable coursework to be eligible to transfer.

## II. Upper Division Transfer

The majority of transfer students come to the University at the junior level from California Community Colleges. To be eligible for admission as a junior transfer student, a student must fulfill both of the following criteria:

1. Complete 60 semester ( 90 quarter) units of $U C$ transferable college credit with a GPA of at least 2.4 ( 2.8 for nonresidents). No more than 14 semester (21 quarter) units may be taken Pass/Not Pass.
2. Be in good academic standing (2.0 GPA or better) at the last institution of attendance and at any previous UC campus where the student was enrolled in a regular term (e.g., fall, winter, spring).
3. Complete the following seven course pattern, earning a grade of C or better (or Pass) in each course:

- Two UC transferable college courses (3 semester or 4-5 quarter units each) in English composition;
- One UC transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning;
- Four UC transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences. If a student satisfies the Intersegmental General Education Transfer Curriculum (IGETC) prior to transferring, he or she may satisfy part 3 of the transfer eligibility requirements.
Keep in mind that meeting these requirements does not guarantee admission to the campus or major of your choice. Often, admission to UC campuses or programs is extremely competitive and requires students to satisfy more demanding standards.


## UNIVERSITY OF CALIFORNIA GENERAL EDUCATION REQUIREMENTS

To earn a bachelor's degree from the University of California, each student must complete a program of general education. To meet the general education requirements of the University, students can complete either the Intersegmental General Education Transfer Curriculum (see page 32) of the catalog for GE Plan C or individual campus general education requirements. Santa Ana College generally recommends that students follow the IGETC rather than the individual campus requirements as this will provide more flexibility when applying to transfer. However, IGETC should generally not be used for the following: The colleges of Engineering, Chemistry, and the Haas School of Business at UCB; any student preparing for a bachelor of science or high unit major at UCD; the School of Engineering and Applied Science at UCLA; the school of Engineering and the School of Natural Sciences at UCM; the Marlan and Rosemary Bourns College of Engineering (in some cases) and the College of Natural and Agricultural Sciences at UCR; Revelle College may require coursework after enrollment at UCSD; students in the College of Engineering may want to choose IGETC courses that also satisfy the college depth requirement at UCSB; Majors in the physical or biological sciences or any major in the Jack Baskin School of Engineering at UCSC. Students who began at a UC campus and who intend to transfer back to the same campus cannot use IGETC. UC campuses do allow students who began at another UC campus to use IGETC. Students in the above categories should follow the GE requirements of the UC campus they are transferring to. Consult a counselor for additional information.

## CERTIFICATION OF GENERAL EDUCATION FOR TRANSFER TO UC OR CSU

Upon a student's request Santa Ana College will verify the completion of lower division general education requirements for transfer to the University of California (IGETC, Plan C), or the California State University (either CSU GE Breadth or IGETC, Plan B or Plan C). IGETC for STEM or CSUGE for STEM is required for students earning an associate degree for transfer in Biology or Chemistry. Students who transfer without certification will be required to meet the general education requirements of the specific UC or CSU campus to which they are transferring. Meeting these requirements usually necessitates taking additional courses.
Students who have taken courses at other colleges can have these courses used in the certification process. Santa Ana College will certify (guarantee) courses taken at other California community colleges in the IGETC or CSU GE Breadth areas designated by the offering college. Courses taken at regionally accredited California four-year colleges or out-of-state two-year or four-year colleges will be certified for IGETC or CSU GE Breadth if they are equivalent to courses on the Santa Ana College IGETC or CSU GE Breadth list respectively. In some cases non-equivalent courses may also be considered. Consult a SAC counselor for additional information. Courses from foreign institutions (without U.S. regional accreditation) cannot be used in either the CSU GE Breadth or IGETC certification process. Students should request IGETC certification from the last California Community College they attend prior to transfer to UC or CSU.
CSU GE Breadth Certification of course work from other colleges will only be granted to students whose last community college of attendance prior to transfer is Santa Ana.
Certification petition forms are available in the SAC Counseling Center.

## ASSOCIATE DEGREE FOR TRANSFER AND THE UNIVERSITY OF CALIFORNIA

If you're working toward an AA-T or AS-T (also known as an ADT), you should choose courses that align with the requirements at the UC campuses you're interested in. Treat the ADT as your early roadmap to UC. You can use www.assist.org or UC major preparation paths (www. admission.universityofcalifornia.edu/transfer/preparation-paths/) to guide you in choosing the right courses. Although earning an ADT does not guarantee admission to UC, some campuses consider it in the comprehensive review process.

## INDEPENDENT AND OUT-OF-STATE COLLEGES AND UNIVERSITIES

In addition to state-supported colleges and universities in California, there are many independent institutions in the state. There are also many colleges, both private and public, located throughout the United States to which Santa Ana College students can transfer. Each of these institutions has its own unique requirements for admission. In order to determine eligibility, students should consult with the college of their choice along with a Santa Ana College counselor.
California's independent colleges and universities provide many options at the undergraduate, graduate, and professional levels for students planning to continue their education beyond the community college.
Financial aid may be a primary factor in making it possible for a student to attend an independent college or university. There are many forms of financial assistance available, such as federal, state, institutional, and private aid. Students should apply for scholarships, grants, loans, and work-study awards from all possible sources. The Free Application for Federal Student Aid (FAFSA) and the California Dream Act Application may be submitted in October for the following academic year. Filing instructions and deadlines are indicated on the web sites www.fafsa.ed.gov and https://dream.csac.ca.gov respectively. Further details and assistance are available in the Financial Aid Office.
California's private, non-profit, WASC-accredited colleges and universities include:

- American Jewish University
- Antioch University Los Angeles
- ArtCenter College of Design
- Azusa Pacific University
- Biola University
- Brandman University
- California Baptist University
- California College of the Arts
- California Institute of the Arts
- California Institute of Integral Studies
- California Institute of Technology
- California Lutheran University
- Chapman University
- Charles R. Drew University
- Claremont McKenna College
- Columbia College Hollywood
- Concordia University Irvine
- Dominican University of California
- Fresno Pacific University
- Golden Gate University
- Harvey Mudd College
- Holy Names University
- Hope International University
- Humphreys College
- International Technological University
- John Paul the Great Catholic University
- John F. Kennedy University
- Laguna College of Art and Design
- La Sierra University
- Loma Linda University
- Los Angeles Pacific University
- Loyola Marymount University
- Marymount California University
- The Master's University
- Menlo College
- Mills College
- Mount St. Mary's University
- National University
- Notre Dame de Namur University
- Occidental College
- Otis College of Art and design
- Pacific Oaks College
- Pacific Union College
- Palo Alto University
- Pepperdine University
- Pitzer College
- Point Loma Nazarene University
- Pomona College
- Providence Christian College
- Saint Mary's College of California
- Samuel Merritt University
- San Diego Christian College
- San Francisco Art Institute
- San Francisco Conservatory of Music
- Santa Clara University
- Saybrook University
- Scripps College
- Simpson University
- Soka University
- Southern California Institute of Architecture
- Southern California University of Health Sciences
- Stanford University
- Thomas Aquinas College
- Touro University of California
- University of La Verne
- University of the Pacific
- University of Redlands
- University of Saint Katherine
- University of San Diego
- University of San Francisco
- University of Southern California
- University of the West
- Vanguard University
- Western University of Health Sciences
- Westmont College
- Whittier College
- William Jessup University
- Woodbury University
- Zaytuna College


## GENERAL EDUCATION REQUIREMENTS FOR INDEPENDENT AND OUT-OF-STATE COLLEGES AND UNIVERSITIES

Santa Ana College has articulated general education requirements with a number of independent institutions such as Chapman University, Loma Linda University, the University of Southern California, and Pepperdine University. In addition, some independent and out-of-state colleges and universities will accept full IGETC and/ or CSU GE breadth certification in lieu of their own lower division general education requirements. Students transferring to independent or out-of-state institutions should meet with a counselor in order to determine appropriate general education requirements. Information can also be found on the Santa Ana College Counseling Division website, under "Articulation."

## BEGIN A TRANSFER MAJOR AT SANTA ANA COLLEGE

In order to earn a bachelor's degree, students need to select a subject area in which to specialize. This subject area is called a major. Almost every major requires that certain courses be completed during the freshman and/or sophomore years of college. These are called lower division major requirements. Many of these can be completed at SAC prior to transferring. (The highly specific courses in the major are called upper division requirements, and these are completed after transfer.) In developing a program for transfer, first consideration in most cases should be given to completing the courses required in the transfer major or as preparation for the major. Note that these requirements
may differ from major requirements for the associate degree. Below is a partial listing of majors one might choose to begin at SAC. Visit the Transfer or Counseling Centers or make an appointment with a counselor to discuss which courses should be completed at SAC to begin preparation in the chosen transfer major. In addition, www. assist.org lists required courses for many UC and CSU majors. Links to many private college and university major requirements can be foud on the SAC counseling department website under articulation. Other resources include UC Transfer Preparation Paths, and Associate Degrees for Transfer.

| Anthropology | Computer Information Systems | Modern Languages |
| :---: | :---: | :---: |
| Art/Art History/Studio Arts | Computer Science | Music/Musicology |
| Astronomy | Criminal Justice | Nursing |
| Behavioral Sciences | Dance | Nutrition and Food |
| Biology/Biochemistry | Earth Science | Occupational Therapy* |
| Black Studies | Ecology | Oceanography* |
| Botany | Economics | Philosophy |
| Business Administration | Electrical Engineering | Physical Education/Exercise Science |
| (The following may be emphases under | Engineering | Physical Therapy* |
| Business Administration or may be separate majors) | Engineering Technology | Physics |
| Accounting | English | Political Science |
| Business Applications | Ethnic Studies | Pre-Chiropractic |
| Business Economics | Fashion Design Merchandising | Pre-Dentistry* |
| Finance | Film Studies | Pre-Law* |
| Human Resources | Fire Protection Administration and | Pre-Medicine* |
| International | Technology | Pre-Optometry* |
| Management | Geography | Pre-Pharmacy* |
| Management/Computer Information | Geology | Pre-Veterinary Medicine* |
| Systems | Graphic Design | Psychology |
| Management Science | Health Science | Public Administration |
| Marketing | History | Radio/Television/Film |
| Chemical Engineering | Hotel/Restaurant Management | Religious Studies |
| Chemistry | Humanities | Social Ecology |
| Chicano Studies | Industrial Engineering | Social Work |
| Child Development and Education Studies | International Business | Sociology |
| Civil Engineering | International Studies | Spanish |
| Communication Studies | Kinesiology | Teaching** |
| Communications \& Media Studies | Liberal Studies | Theater Arts/Drama |
| Communicative Disorders | Linguistics | Urban Studies |
| Community Social Services | Mathematics | Women's Studies |
| Comparative Literature | Mechanical Engineering | Zoology |
| Computer Engineering | Meteorology |  |

* These are primarily graduate programs for which undergraduate majors can vary. Students should see a counselor to determine what undergraduate major might be appropriate.
** Undergraduate majors for those planning to teach K-12 can vary widely depending upon the subject and grade level to be taught. Students should see a counselor to determine what undergraduate major might be appropriate.

The above list is a sampling and does not represent all transfer majors at all colleges/universities.

## UNIVERSITY OF CALIFORNIA（UC）TRANSFER COURSE AGREEMENT 2019－2020

This agreement lists courses transferable for unit credit at all UC
campuses．This list is valid for courses completed during Fall 2019，
Spring 2020 and Summer 2020．Additional courses for 2019－2020
may be approved after the publication date for this catalog．
ACCOUNTING
101， 102
AMERICAN SIGN LANGUAGE
＊110＋， $111^{+}, 116^{+}, 210$
＊Corresponds to two years of high school study
ANTHROPOLOGY
100，100H，101，101L，103，104，104H，105，108， 125
ART
$100,100 \mathrm{H}, 101,102,103,104,105,106,107 \pm, 108,109$ ，110，111，121Aㅇ．
121 B ，122 $, 129 \diamond, 130,131,132 \mathrm{~A}, 132 \mathrm{~B}, 140 \mathrm{~A}, 140 \mathrm{~B}, 141,143,150$ ，
$151,152,153,154^{\dagger}, 155,156,157,158,159 A, 159 B, 162 \diamond, 166 A$ ，166B ，

197C ，230，231，232，233，240，241，242，243，251，252，291凶， 292 －
ASIAN AMERICAN STUDIES
101
ASTRONOMY
109，110，110H， 140

## BIOLOGY

＊109，＊109H，109L，111\％，115＾，129，＊＊139 149 ，149，177，190®，190L®，200，
＊＊＊211，212，214，＊＊229，239，249，259，＊＊＊290ø
＊No credit for 109 or 109 H if taken after 211
＊＊ 139 and 229 combined：maximum credit，one course
＊＊＊No credit for 211 if taken after 290
BLACK STUDIES
101
BUSINESS
100，＊101，＊105，130＊，＊＊150
＊Maximum credit，one course
＊＊No credit for Business 150 if taken after Computer Science 105

## CHEMISTRY

＊109，115＊，＊119，＊209，210＾，219，219H，229，249， 259
＊109，119，and 209 combined，maximum credit，one course
No credit for 109，119，or 209 if taken after 219 or 219 H
CHICANO STUDIES
101
CHILD DEVELOPMENT
＊107，110，116A $\stackrel{\text { ® }}{ }$ ，120A凶，221®
＊ 107 and PSYC 157 combined：maximum credit，one course

## CHINESE

＊101， 102
＊Corresponds to two years of high school study
COMMUNICATION STUDIES
101，101H，102，103，103H，140，145，152，158\＃，206，206H
COMMUNICATIONS AND MEDIA STUDIES
103\＆， 105 （formerly TELV），105H（formerly TELV），110ф，111＾
COMPUTER SCIENCE
$100,105,112,120^{\dagger}, 121,129,131,140 \diamond, 205,213$
COUNSELING－courses completed prior to Fall 2016
107\＃，116 人，128，＋144
＋Philosophy 111 and Counseling 144 combined：maximum credit，one course．

COUNSELING－courses completed Fall 2016 or later
＊100，＊103，＊104，＊106，＊107，＊110，＊116，＊124，128，＋144
＊100，103，104，106，107，110，116，and 124 combined maximum credit 3 units．
＋Philosophy 111 and Counseling 144 combined：maximum credit，one course．
CRIMINAL JUSTICE
101，101H3，103，103H？109，109H
DANCE
100，100H，102，105，106A，106B，107，108A，108B，～109A，～109B\％， $109 \mathrm{C} \%, 110,111,112,113 \mathrm{~A}, 113 \mathrm{~B}, 117,118,119 \mathrm{~A}, 119 \mathrm{~B}, 120 \mathrm{~A} \odot$ ，
$120 \mathrm{~B} \odot, \sim 122,123,124,130,140,201 \mathrm{~A}, 201 \mathrm{~B}, 202 \mathrm{~A}, 202 \mathrm{~B}, 204 \mathrm{~A}, 204 \mathrm{~B}$,
204C ，204D $3,205,205 \mathrm{~B}$ ，205C ，205D $, ~ 206 \mathrm{~A}, 206 \mathrm{~B}, 209,210,213$ ，
214，219A，219B，220，221，232，240A，240B，240C ，240D ，250A\％，
250B\％，251\％，260\％，261\％，262\％，263\％，～270，290\％，291，296，297， ～298
～any or all of these PE Activity courses combined，maximum credit 4 units
EARTH SCIENCE
＊ 110 ，${ }^{* 110 H}$ ，＊＊115 ${ }^{*}, 150,150 \mathrm{H}$
＊ 110 combined with 110 H ，Geography 101 or Geology 101，maximum credit， one course
＊＊No credit for 115 if taken after 110，Geography 101 or Geology 101
ECONOMICS
120， 121
EDUCATION
100 （formerly 101＾）， 210
ENGINEERING
100A（formerly 148），118，119 ，122，124，125，165¢，183，195ヶ，228，235，
240†，250，250L， 281
ENGLISH
101，101H，102，102H，103，103H，104，104H， 213 （formerly 211），220，231，
232，233A， $233 \mathrm{~B}, 233 \mathrm{C}, 241,242,243$ ，245，246，2709，271，272， 278
ENGLISH FOR MULTILINGUAL STUDENTS
＊110，＊112
＊Any or all of these courses combined，maximum credit， 8 units
ENVIRONMENTAL STUDIES
140，200， 259
ETHNIC STUDIES
101，101H，102，102H
FASHION DESIGN MERCHANDISING
104， 136 －
FRENCH
＊101，102，201，201H，202，202H，211＾， 214
＊Corresponds to two years of high school study

## GEOGRAPHY

$100,100 \mathrm{H}, * 101,101 \mathrm{~L}, 102,130 \diamond, 140 \diamond, 155 \diamond$
＊101 combined with Earth Science 110，110H，Geology 101，maximum credit， one course
GEOLOGY
＊101，101L，140，150，150H， 201
＊ 101 combined with Earth Science 110，110H，Geography 101，maximum credit，one course
HISTORY
101，101H，102，102H，105，118，120，120H，121，121H，123，124，124H，125， 127，133，146，150，151，153，163 人， 181
INTERDISCIPLINARY STUDIES
117H，121ф，155， 200

## UC credit not granted for the course taken prior these dates：

| ＋ | \＃ | $\wedge$ | $\ddagger$ | ＊ | 人 | $\dagger$ | ¢ | $\star$ | $\emptyset$ | \％ | $\uparrow$ | $\bullet$ | $\diamond$ | $\pm$ | \％ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Muli | $\begin{gathered} \text { Fall } \\ 2002 \end{gathered}$ | $\begin{aligned} & \text { Fall } \\ & 2003 \end{aligned}$ | $\begin{gathered} \text { Fall } \\ 2006 \end{gathered}$ | $\begin{array}{r} \text { Fall } \\ 2007 \\ \hline \end{array}$ | $\begin{aligned} & \text { Fall } \\ & 2008 \end{aligned}$ | $\begin{gathered} \text { Fall } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2010 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2011 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2012 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2013 \end{gathered}$ | $\begin{array}{r} \text { Fall } \\ 2014 \\ \hline \end{array}$ | $\begin{array}{r} \text { Fall } \\ 2015 \\ \hline \end{array}$ | $\begin{gathered} \text { Fall } \\ 2016 \\ \hline \end{gathered}$ | $\begin{array}{r} \text { Fall } \\ 2017 \\ \hline \end{array}$ | $\begin{array}{r} \text { Fall } \\ 2018 \\ \hline \end{array}$ |

Note：Duplicate credit will not be awarded for both the honors and regular versions of a course．Credit will only be awarded to the first course completed with a grade of＂C＂or better．

## UNIVERSITY OF CALIFORNIA (UC) TRANSFER COURSE AGREEMENT 2019-2020 (Continued)

## ITALIAN

*120, 121 ${ }^{*}$

* Corresponds to two years of high school study

JAPANESE
*101, 102

* Corresponds to two years of high school study

KINESIOLOGY
KNAC ~107A, ~107B $\pm, \sim 107 \mathrm{C}, \sim 123, \sim 140 \mathrm{~A}, \sim 150 \mathrm{~A}, \sim 155 \mathrm{~A}, \sim 160 \mathrm{~A}$,
$\sim 169 \mathrm{~A}, \sim 169 \mathrm{~B} \pm, \sim 170 \mathrm{~A}, \sim 200 \mathrm{~A}, \sim 200 \mathrm{~B}, \sim 200 \mathrm{C}, \sim 211 \mathrm{~A}, \sim 211 \mathrm{~B}, \sim 220 \mathrm{~A}$,
$\sim 220 \mathrm{~B}, \sim 220 \mathrm{C}, \sim 226 \mathrm{~A}, \sim 260 \mathrm{~A}, \sim 260 \mathrm{~B}, \sim 260 \mathrm{C}, \sim 265 \mathrm{~A}, \sim 265 \mathrm{~B}, \sim 265 \mathrm{C}$,
~270A $+\sim 290 \mathrm{~A}, \sim 290 \mathrm{~B}$;
KNAD ~201A, ~202A, ~202B, ~205A, ~208A, ~208B, ~211A, ~211B;
KNAF ~140A, 143A, 144A, ~146A, ~146B, ~150A, ~156A, ~156B,
~157A ;
KNAQ ~201A, ~201B, 204;
KNFI $\sim 101 \mathrm{~A}, \sim 101 \mathrm{~B}, \sim 101 \mathrm{C}, \sim 112 \mathrm{~A} \uparrow, \sim 112 \mathrm{~B} \uparrow, \sim 112 \mathrm{C} \uparrow, \sim 114 \mathrm{~A}, \sim 114 \mathrm{~B}$,
~115A, ~115B, ~115C, ~147A, ~147B;
KNHE **101, **102, **103,**104, ***105, ***106 $\pm$, ***107;
KNIA ~125, ~128, ~133, ~134, ~171, ~201, ~202, ~204, ~206, ~209, ~210,
~211, ~212, ~213, ~214, ~216, ~217, ~218, ~219, ~220, ~221, ~223, ~227,
$\sim 230 \pm, \sim 231, \sim 232, \sim 235, \sim 240, \sim 261, \sim 262, \sim 270, \sim 271, \sim 281, \sim 291,293 \pm ;$
KNPR 101Ф, +155, +165, +175, +200, 201 + , 203\%, 207\%, 217士;
KNSM 101
~any or all of these PE Activity courses combined, maximum credit 4 units
+any or all of these courses combined, maximum credit 8 units
**101, 102, and 104 combined, maximum credit, one course
***105, 106 and 107 combined, maximum credit, one course
LAW
105 $\pm$
LIBRARY TECHNOLOGY
*102
*102 and Library and Information Studies 100 combined, maximum credit, one course
LIBRARY AND INFORMATION STUDIES
*100
*100 and Library Technology 102 combined, maximum credit, one course

## MATHEMATICS

$105, ~ * 140,145, ~ * * 150, ~ * 170, ~ * * 180, ~ * * 180 H, 185,204,219,219 H, 280,287 \dagger$
*140 and 170 combined, maximum credit, 5 semester/7.5 quarter units
**150, 180, and 180 H combined, maximum credit, one course

## MUSIC

$101,101 \mathrm{H}, 102,102 \mathrm{H}, 103,104$ A, $105 \pm, 109 \diamond, 110,111,112$, *113A, *113B,
114A, 114B, 115A, 115B, 115C, 115D, 121, 122, 123, 124, 135, 136, 137,
$140,141,145 \star, 148 \%, 152 \pm, 161,162,163,164 \mathrm{~A}, 164 \mathrm{~B}, 168,169,170,171$,
173\#, 175, 176, 178, 180A, 180B\%, 181, 185, 186, 187, 188, 189, 211, 213,
214, 215A, 216, 217, 241, 268\%, 269士, 271ф

* No credit for 113AB if taken after 114AB

NUTRITION AND FOOD
$115,115 \mathrm{H}, 118 \stackrel{\diamond}{ }$
PHILOSOPHY
106, 106H, 108, 110, 110H, *111, 112, 118,*144

* 111 and Counseling 144 combined, maximum credit, one course

PHOTOGRAPHY
150, 180
PHYSICAL SCIENCE
115, *117, *118

* No credit for 117,118 if taken after a college course in Chemistry or Physics

UC credit not granted for the course taken prior these dates:

| + |  | $\wedge$ | $\ddagger$ | * | A | $\dagger$ | $\Phi$ | * | $\emptyset$ | \% |  | $\bullet$ | $\stackrel{\rightharpoonup}{*}$ | $\pm$ | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Fall } \\ 2001 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2002 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2003 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2006 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2007 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2008 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2009 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2010 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2011 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2012 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2013 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2014 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2015 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2016 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2017 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2018 \\ \hline \end{gathered}$ |

Note: Duplicate credit will not be awarded for both the honors and regular versions of a course. Credit will only be awarded to the first course completed with a grade of "C" or better.

## GRADUATION REQUIREMENTS FOR A BACCALAUREATE DEGREEE

Graduation requirements for a Baccalaureate Degree are prescribed by the California Community Colleges Board of Governors, Accrediting Commission for Community and Junior Colleges, Title 5, and the Rancho Santiago Community College District Board of Trustees. Specifications are based upon recommendations by the Academic Senate of California Community Colleges. A Baccalaureate Degree may be earned upon satisfactory completion of all of the following:

## A. Total Unit Degree Requirement

Complete a combination of lower-division and upper-division coursework totaling a minimum of 120 semester units to include the following:
a. A minimum of twenty-four (24) units of lower-division-major courses
Lower-division courses acceptable toward a baccalaureate degree are designated as CSU or UC transferable or determined to be at the baccalaureate level.
Lower-division courses from other U.S. regionally accredited institutions will be reviewed by a Career Education counselor and graduation specialist to determine baccalaureate credit based on course description, comparable content, appropriate prerequisites, or C -ID number.
All lower-division requirements must be met before the baccalaureate degree is granted.
International courses will be evaluated for baccalaureate major requirements only when course descriptions are submitted in English, along with a transcript evaluated by an approved foreign transcript service.
b. A minimum of forty (40) units of upper-division-major courses Rancho Santiago Community College District courses designated as upper-division are applicable only to a baccalaureate degree and may not be used to satisfy associate degree requirements. Upper-division courses from other U.S. regionally accredited institutions will NOT be accepted for upper-division major, general education, or elective baccalaureate degree credit.
B. General Education Requirements

All students are required to complete General Education. Students may choose to complete:
a. California State University (CSU) GE Breadth (Plan B)
or
b. Intersegmental General Education Transfer Curriculum (IGETC) (Plan C) (either CSU or UC Version) and
c. A minimum of nine (9) units of upper-division general education coursework
Previously completed lower-division general education courses will be evaluated according to the CSU-GE or IGETC certification guidelines.
Students enrolled in the baccalaureate program who have not completed the CSU-GE or IGETC pattern must complete any remaining CSU-GE or IGETC Areas.

## C. Residence Requirement

At least 24 units of upper division coursework must be completed at Santa Ana College
D. MajorRequirement

All students must take required major courses as specified by the major department and earn a grade of "C" or better in each course. Students should review specific major admissions requirements and prerequisites in the program descriptions area of the catalog for more detail.

## Bachelor of Science Occupational Studies Degree <br> Program code: sac.os.bs

The baccalaureate degree in Occupational Studies will create a more highly skilled occupational therapy assistant (OTA) who is better able to understand and utilize research-based evidence for best practice and take on a leadership role. As an additional benefit it will prepare an OTA for entry into an Occupational Therapy (OT) Master's degree program. The upper division course work will provide more in-depth training in specific areas of OT practice, including neurologic rehabilitation, musculoskeletal rehabilitation, pediatrics, geriatrics, and key practice areas identified by the American Occupational Therapy Association. These courses, together with a capstone project will also provide increased opportunities for critical analysis, research methods, and clinical reasoning. To complete the Bachelor of Science in Occupational Studies, students must complete: (1) complete all upper division course requirements with a grade of "C" or better; (2) complete 37 units of IGETC lower division general education coursework or 39 units of CSU GE Breadth lower division general education coursework.

## Learning Outcome(s):

- Demonstrate advanced mastery of OTA clinical skills, including clinical reasoning, that follow the guidelines established in the Frameworks for Occupational Therapy Practice.
- Relate theory and research to clinical practice areas.
- Ability to provide OTA services that meets the community needs of diverse populations demonstrating sensitivity and empathy.
- Prepared for participation in advocacy for clients in clinical and community settings.


## Prerequisite:

Associate Degree from an ACOTE and regionally accredited OTA program and OTA Certification/License

## Required lower division courses specific to the BS Degree

| Core Course | Units |  |
| :--- | :--- | ---: |
| PSYC 210 | Statistics for the Behavioral Sciences | 4 |
| SOC 100 | Introduction to Sociology | 3 |
| PHIL 108 | Ethics | 4 |
| PHYS 109 | Survey of General Physics |  |
| Required upper division major courses |  |  |
| OS 301 | Therapeutic Approaches to the Older Adult | 3 |
| OS 304 | Movement Theory \& Analysis | 3 |
| OS 305 | Advanced Pediatric Practice for the <br> Occupational Therapy Assistant (OTA) | 3 |
| OS 310 | Community-Based Occupational Therapy <br> Practice | 3 |
| OS 312 | Advanced Practice Areas in Occupational <br> Therapy (OT) | 3 |
| OS 325 | Applying Research to Occupational Therapy <br> Intervention | 3 |
| OS 402 | Neurological Principles in Human Performance | 4 |
| OS 403 | Leadership for the Occupational Therapy <br> Assistant (OTA) | 2 |
| OS 410 | Healthcare Systems | 3 |
| OS 412 | Capstone Seminar <br> Required <br> upper division general education courses |  |
| MATH 319 Quantitative Research Methods for Healthcare <br> Professionals | 4 |  |
| CMST 307 | Health Communication |  |
| SOC 401 | The Sociology of Health, Illiness, and Healing | Total Units |

## COMMUNICATION STUDIES

## Communication Studies 307*

Health Communication
Unit(s): $3.0 \quad$ Class Hours: 54 Lecture total.
Prerequisite: Limitation on Enrollment: Student must be admitted to the Occupational Studies program. Communication Studies 101 or Communication Studies 101H or Communication Studies 102 or Communication Studies 103 or Communication Studies 103 H or Communication Studies 145; with a minimum grade of $C$.
Course is designed to advance knowledge of health communication theory, research and practice while providing solid foundation for understanding importance, value and impact of health communication upon patients, families, caregivers and healthcare team-members. CSU

## MATHEMATICS

## Mathematics 319*

## Quantitative Research Methods for Healthcare <br> Professionals

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program Mathematics 219 or Mathematics 219 H or Psychology 210 with a minimum grade of C.
This course will develop skills and tools for understanding and performing quantitative research in healthcare sciences. The focus of the course will be on statistical research methods prevalent in healthcare sciences: including principles of experimental design, appropriate sampling, and running quantitative tests to determine the validity of claims. CSU

## SOCIOLOGY

## Sociology 401*

## The Sociology of Health, Illness, and Healing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program Sociology 100 or Sociology 100H with a minimum grade of C .
This course analyzes the social contexts of health, illness, and organized medical care. It examines empirical research and theory of the changing concepts of health, illness and medical practice in their socio-historical contexts. Topics will include: social epidemiology, the biomedical and social construction of health/illness, the experience of illness, the historical transformation of the health professions and the health work force, disparities in health care, medical technology, global comparisons of health care and health care reform. CSU

## OCCUPATIONAL STUDIES

## Occupational Studies 301*

Therapeutic Approaches to the Older Adult
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will build upon the developmental concepts of aging to examine quality of life in older adulthood. The focus of this course will be on evaluating older adults from an occupational perspective and analyzing the skills needed to maintain independence and to successfully participate in meaningful activities throughout the older years. CSU

## Occupational Studies 304*

## Movement Theory \& Analysis

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
Movement is a significant aspect of occupational performance. This course will focus on current theories of motor control and motor learning with an emphasis of how these theories can be applied to provide evidence-based practice to those with motor dysfunction. CSU

## Occupational Studies 305*

## Advanced Pediatric Practice for the Occupational Therapy Assistant (OTA)

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will build upon developmental concepts related to pediatric Occupational Therapy (OT) practice. The focus of this course will be to look at specific settings related to pediatric occupational therapy practice. It will focus on evaluating the pediatric client related to acute hospital care and school based intervention. CSU
Occupational Studies 310*

## Community-Based Occupational Therapy Practice

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will focus on the practice of Occupational Therapy (OT) in community-based settings. This will include an in-depth analysis of both the history and growth of OT practice in the community. Students will analyze the role of OT in community settings with a variety of populations. CSU

## Occupational Studies 312*

## Advanced Practice Areas in Occupational Therapy (OT)

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will provide a study of the advanced practice areas in occupational therapy. Advance practice areas in occupational therapy include: physical agent modalities (PAMs), hand therapy and feeding and swallowing. This class will focus on the theory and application of PAMs for the use in occupational therapy; the fundamentals of hand therapy including treatment guidelines in occupational therapy; and feeding and swallowing issues with the occupational therapy client. CSU
Occupational Studies 325*

## Applying Research to Occupational Therapy Intervention

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will provide an in-depth study of utilizing evidence to develop effective treatment plans in Occupational Therapy. The focus will be on critically evaluating available research to develop best practice in intervention. CSU

## Occupational Studies 402*

## Neurological Principles in Human Performance

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will provide an in-depth study of the neurologic principles used in rehabilitation practice. This will focus on understanding the structures and function of the central and peripheral nervous systems and to the sequelae of injury to these systems. There will be an emphasis on cognitive, visual, and perceptual problems in adults with acquired brain injury. CSU
Occupational Studies 403*
Leadership for the Occupational Therapy Assistant (OTA)
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will explore leadership roles that are avaBeltran ilable to the OTA and the skills that are needed to assume them. The focus will be on leadership, advocacy, marketing, quality improvement, supervision, and scholarship. Students will also explore volunteerism and active participation in professional organizations. CSU
Occupational Studies 410*

## Healthcare Systems

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will cover the various healthcare systems that influence the practice of occupational therapy. Topics will include economics, types of insurance, healthcare policies, ongoing healthcare reform, and the role of technology. As a part of this course students will complete an independent, in-depth, study of one of the key practice areas in OT as identified by the American Occupational Therapy Association (AOTA). CSU
Occupational Studies 412*

## Capstone Seminar

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This Capstone Seminar is designed to demonstrate the student's accumulated training through the development of a project that reflects theory, advanced knowledge of practice, and innovation. The theme of each project will be facilitating engagement in occupation with the use of a therapeutic product. Each student will complete a project that is individually mentored and demonstrates an increased level of self-direction. Grade: Pass/No Pass Only. CSU

## STUDENT RESOURCES

## ACADEMIC COMPUTING CENTER

The Santa Ana College Academic Computing Center (ACC) is located at Santa Ana College in room A-106.
The ACC serves students currently registered at the college who are doing college related projects. These projects can be completed by accessing an ample variety of application software. The software packages run on IBM compatible computers or Macintosh computers.

## ASSESSMENT CENTER

The Assessment Center is located on the second floor of the Santa Ana College library, room 223. We provide the following services:

- English, Reading, English for Multilingual Students, and Math Placement Recommendations using multiple measures
- Registration Orientations
- Drop-in counseling services (i.e. abbreviated plans, waivers, high school presentations, etc.)Placement and Career Exploration Presentations to local high schools
- Proctor make-up testing for all SAC classes
- Proctor online and hybrid course testing
- Test accommodation services for students with disabilities
- Facilitate career assessments (i.e. Super Strong \& MBTI)
- Placement for Chemistry

For more information about our services, you can call 714-564-6148 or go to our webpage sac.edu/assessmentcenter.

## BOOKSTORE

The Bookstore at Santa Ana College provides a complete selection of books, supplies, and specialty items.

## CALWORKS

The California Work Opportunity and Responsibility to Kids (CalWORKs) program is funded by the state to work with students who are approved by County Social Services to complete an educational program that helps them transition from public assistance to employment and economic self-sufficiency. SAC's CalWORKs program offers the following types of assistance to eligible students: help with application and matriculation steps; academic, career and personal counseling; individualized student educational plans; priority registration; verification of monthly activity reports to Social Services; educational supplies; work-study placement (when available); workshops and networking activities; and referrals to other campus resources and opportunities. For more info, visit: sac.edu/CalWORKS, drop by VL-110 (The Village), or call 714-564-6232.

## CAREER DEVELOPMENT/CAREER EDUCATION STUDENT SUCCESS CENTER

The Career Development/Career Education Student Success Center is a one-stop office which provides students with academic counseling, support and resources to guide them to program completion, and preparation for employment.
Career services include access to resources on careers and training programs, pre-internships and volunteer service learning opportunities, as well as employment preparation workshops and job placement services. Individuals and classes are welcome to utilize the Center to explore career information.

## COLLEGE ADVANCEMENT/FOUNDATION

The Santa Ana College Foundation is a 501 (c) 3 non-profit organization serves a diverse college community and was created to expand and develop resources for Santa Ana College students and programs. The Foundation Board of Directors represents a broadbased group of community volunteers, corporate partners, and alumni. The Santa Ana College Foundation leads and supports fundraising activities, campaigns, and initiatives that ensure educational
opportunities are possible for all students. It assists in direct philanthropy on multiple fronts. This includes large-scale campaigns, scholarships, local and national grants, program support, which includes our Associate Groups. To this end, the college foundation solicits the support of the community and donors by receiving taxdeductible donations of cash gifts, bequests, trusts, endowments, corporate grants, life insurance benefits, and personal or real property. If you are interested in more information about the Foundation and how to participate in supporting our many programs, please contact the Foundation Office directly by calling 714-564-6091 or visit our website at www.sac.edu/foundation.

## COMMUNITY SERVICES

Community Services offers a full spectrum of low cost, fee-based educational opportunities that include professional growth, personal enrichment, and recreational activities.
A variety of classes and seminars are available including animal care, arts and crafts, business and careers, computers, home and garden, language, dance, health and fitness, money matters, personal enrichment, and real estate. Also available are "College For Kids" programs, special interest classes, on-line classes, and travel tours. For additional information call the Community Services Program at 714-564-6594 or visit us at www.sac.edu/cms.

## CONTINUING EDUCATION PROGRAM

Continuing Education is responsible for providing noncredit college courses and programs to the students of the district. Beyond providing the means for an adult to take classes for a high school diploma, Continuing Education delivers pre-collegiate education in the areas of basic academic skills and English as a Second Language. It also serves the needs of groups such as the disabled and parents with special needs. A full range of personal, career and academic counseling services is available to students enrolled in continuing education classes located at a number of educational centers throughout the district. Courses are offered mornings, afternoons, evenings, and weekends to allow accessibility to match varying student needs. Specific information regarding admission and registration policies, services available and description of the courses offered can be found in the Continuing Education section of this catalog.

## COUNSELING SERVICES

The Counseling Center offers academic advising and personal counseling at SAC, offering individual and group academic advisement, education plan development, career planning, orientation services, personal counseling and several Counseling courses that support students' personal and academic development in the achievement of their educational goals. Counseling Services are provided at these educational sites: Santa Ana College, Centennial Education Center, and Remington Education Center. Counseling is also provided through a variety of specialized academic support programs, housed both within the Counseling Division, and outside of it. Please refer to the Student Services page of our website for a complete listing of SAC student support programs at www.sac.edu/StudentServices.

## Centers and Programs within the Counseling Division

Students interested in transfer to a university, specific career paths such as education, science and engineering, or certificates in career education can access counseling through specific programs in these areas. For a complete listing of centers and programs, visit our Counseling page at www.sac.edu/StudentServices/Counseling.

## Orientations and Workshops

Counseling can be accessed through a variety of service modalities. New student and career specific orientations are available to help students learn college procedures and requirements and gain information on career and transfer pathways. In an effort to support student success, workshops are offered in educational planning, how to transfer to a university, and strategies for students who
are experiencing academic challenges. Counseling courses are an additional way to access services.

## Counseling Center

Counselors are available to meet with students for drop-in times to answer brief questions and individual appointments for in-depth career, academic or personal counseling. Counseling questions can also be asked via our on-line counseling service (www.sac.edu/ rsccdasp/online_counseling/index.asp). The Counseling Center can be reached at 714-564-6103.

## Child Development Centers

Rancho Santiago Community College District maintains six child development centers to serve students' needs for childcare and/or train students seeking a career in Human Development. Students' children between the ages of 6 months and five years are eligible to attend the educational environment provided. Fees are based on a sliding scale according to the parents' income. Students eligible for the CalWORKs program can receive child care services both on and off campus.
Contact individual centers for hours of operation and information.
Centennial Center ( $21 / 2-5$ years old)
2900 W. Edinger, Santa Ana, 714-564-5090
Santa Ana College Infant/Toddler/Preschool Center
(6 months-5 years old)
1720 W. 17th St., Santa Ana, 714-564-6894

## Santa Ana College Child Development Center East Campus

(2.9 to 5 years old)

1510 N. Parton St., Santa Ana, 714-564-6952

## DISABILITY SERVICES

The Disabled Students Program and Services (DSPS) office provides accommodations to support students in pursuit of a community college education. Students with disabilities should have the following levels of independence:

- The ability to navigate campus facilities independently or with the assistance of a personal care attendant (to be provided by the student);
- The ability to take care of his/her personal needs independently or with assistance of a personal attendant (to be provided by the student); and
- Stable level of health/wellness in order to benefit from, and fully participate in, a full term's work.
New students must complete a DSPS application and meet with a DSPS Faculty to discuss their accommodation needs. Verification of disability from a qualified professional must be provided to the DSPS office to qualify for any of the following supportive services:
- Use of special equipment (e.g., assistive technology)
- Alternate media production
- On-campus mobility assistance
- Priority registration
- Sign Language Interpreting
- Real-time captioning/CART services
- Test proctor accommodations
- Note taking services
- Case management
- Preferential seating
- Liaison/Referral with community agencies

Staff are available to help students navigate architectural barriers on campus, as needed. Please contact our office or Campus Safety for on-campus transportation assistance. For additional information, call us at 714-564-6295, visit our website at http://sac.edu/ StudentServices/DSPS, or drop by SAC VL-204.

## ENGLISH LANGUAGE ACADEMY

The English Language Academy (ELA), as part of the International Student Program office, offers a number of quality programs targeted to meet various language-training needs. Every course is designed to help students improve their English proficiency quickly so they can participate more effectively in various academic, professional, and social environments. For more information, call 714-564-6047.

## EXTENDED OPPORTUNITY PROGRAMS AND SERVICES (E.O.P.S.)

The Extended Opportunity Programs and Services program is funded by the state to work with eligible students whose educational and socioeconomic backgrounds might limit their access to higher education or hinder their ability to be academically successful in their college-level studies. Eligible students are provided "over and above" services to help ensure their timely academic progress and completion, including assistance with application and matriculation steps; academic, career and personal counseling; individualized student educational plans; priority registration, book services; help with financial aid, scholarship and transfer applications; programdedicated tutors and resource center; referrals to other campus resources and opportunities; and as budget permits, school supplies and subsidized program fees.
An ancillary program called CARE offers additional support and benefits to EOPS-eligible students who are single parents with at least one child under age 18.
For more info, visit sac.edu/EOPS, drop by VL-110 (The Village), or call 714-564-6232.

## HEALTH AND WELLNESS CENTER

The Health and Wellness Center personnel promotes the physical and emotional health for every student so they can succeed in school and life. Quality clinical services, innovative health, wellness promotion activities, and outside referrals to low-cost providers in the area are provided in a caring, confidential, cost-effective, and convenient manner.

## Eligibility

Full-time and part-time students currently enrolled in SAC credit classes are eligible for services.
Cost
Students pay a health fee every term to have access to the Health and Wellness Center; therefore, most services are provided at no cost to the student. A nominal fee may be charged for certain laboratory tests, prescriptive medications, and some medical procedures.

## Services

Physical health and wellness services are provided by registered nurses and a physician and Mental Health and Wellness Services are provided by licensed psychologists and therapists in the center by appointment or on a walk-in basis during service hours for the following:

- Blood pressure checks
- Crisis services are available on a walk in basis
- Diagnosis and treatment of acute short-term illnesses
- Family planning: information, pap tests, birth control, condoms, and pregnancy tests
- First aid
- Free health literature
- Laboratory testing
- Personal counseling
- Referrals to physicians and other health agencies
- Screening and treatment for sexually transmitted infections
- T.B. risk assessment or skin test
- Vaccinations


## Treatment of a Minor

Any student under the age of 18 is required to have a parental consent form signed prior to receiving treatment, except in emergencies or cases exempted by state law. The student's parent must sign permission for treatment at time of service.

## Accident Insurance

Accident insurance is included in the student health fee and provides on-campus accident coverage while attending college or collegesponsored activities. It is recommended that each student carry voluntary insurance coverage for off-campus emergencies and illnesses. For additional information visit https://www.sac.edu/ StudentServices/HealthCenter/, SAC VL-211 or call 714-564-6216.

## HIGH SCHOOL AND COMMUNITY OUTREACH

The High School and Community Outreach department serves as an integral part of the campus and community. Outreach staff provide detailed information regarding the quality programs that are offered to prospective students. Parents, students, and community agencies are connected to campus life via the efforts of Outreach personnel. Special arrangements can be made for campus tours, presentations, and special meetings to discuss interests about college life and academic departments. For more information, call 714-564-6141 at Santa Ana College.

## HONORS AND AWARDS

Phi Theta Kappa. Phi Theta Kappa is an international honors society that recognizes academic excellence and achievement of students enrolled in two-year colleges. The society offers a myriad of opportunities for scholarship, intellectual enrichment, personal development, and academic recognition.
The Alpha Beta Chapter of Phi Theta Kappa was organized at Santa Ana College in 1929.
Membership in Phi Theta Kappa is extended each semester by the local chapter to students who have completed a minimum of 12 degree units with a minimum grade point average of 3.5 . Members receive special recognition when they graduate.
Alpha Gamma Sigma. Alpha Gamma Sigma is the statewide California Community College Honor Society. Santa Ana College has one of the oldest chapters in the state, organized in 1922. This is the Omicron chapter. To be eligible for initial membership a student must attain a 3.0 GPA in 12 or more units of work in the semester prior to membership. Credit/no credit units are not considered in the twelveunit requirement. A student who has completed 60 or more units with an overall GPA of 3.5 or better or who has been a continuing or initial member for 2 semesters and has a GPA of 3.25 or better may become a permanent member of Alpha Gamma Sigma upon application and verification of eligibility by the chapter advisor. Permanent members are announced each year in May at the Scholarship and Awards Program.
Delta Psi Omega. Delta Psi Omega is the National Theatre Honor Society open to students active in the SAC Theatre Programs with a minimum GPA of 3.0 and 12 units of theatre classwork.
Lambda Epsilon Chi (LEX) is a national academic honor society for paralegal students. Sponsored by the American Association for Paralegal Education (AAPE), the society offers students national scholarship opportunities, participation in regional, state and local conferences, and networking opportunities with other legal professionals.
Candidates for membership in Lambda Epsilon Chi must be in good academic standing at Santa Ana College and have completed at least two-thirds of their paralegal coursework. Candidates also must have a cumulative GPA of 3.5 or higher in their paralegal coursework.
Psi Beta. Psi Beta is the National Honor Society for Psychology at Community and Junior Colleges. Santa Ana College has held a Psi Beta chapter since 2001. To be eligible for initial membership a student must 1) attain a 3.25 GPA in 12 or more units of work in the
semester prior to membership and 2) have completed at least one psychology course with a B or better. Members are eligible for national scholarships and academic competitions. Members are inducted every semester and receive special recognition at the commencement ceremony.
Sigma Chi Eta - Sigma Chi Eta is the National Honor Society for Communication Studies, and Santa Ana College hosts the Alpha Tau chapter. Students must have an overall GPA of 3.0 with a 3.25 GPA in at least 9 units of Communication Studies courses. Students receive special recognition at the commencement ceremony.
Sigma Kappa Delta. Sigma Kappa Delta is the National Honor Society for English at Community and Junior Colleges. Santa Ana College chartered the lota Zeta chapter in 2017. To be eligible, a student must 1) attain a 3.0 or higher cumulative GPA in 12 or more units of college coursework, 2) have completed at least one nondevelopmental English course with a grade of B or better, and 3) have no grades below a B in English courses. Members are eligible for national scholarships and academic competitions. Members are inducted every semester and receive special recognition at the commencement ceremony.

## INSTRUCTIONAL LOCATIONS

The district's major instructional locations are at Santa Ana College, Santiago Canyon College, Orange Center, and the Centennial Education Center. In addition to these major instructional sites, the district offers classes at over 100 convenient off-campus locations in the community.

## INTERCOLLEGIATE ATHLETICS

Santa Ana College offers a winning tradition with an established national reputation, outstanding teaching and coaching, and an excellent system of assistance in transferring students to four-year colleges and universities with athletic scholarships. The college offers a full range of intercollegiate athletic competition in the sports of football, basketball, baseball, cross country, track, swimming, water polo, volleyball, sand volleyball, soccer, softball, and wrestling. All prospective student-athletes with questions about eligibility for intercollegiate athletics are encouraged to contact the Kinesiology, Health and Athletics Division at 714-564-6900.

## LEARNING CENTER

The Learning Center is located in Dunlap Hall (rooms D-310 and D-307) at Santa Ana College. The Center offers a wide selection of resources providing students with skills and strategies to promote their academic success. Services include supplemental learning assistance (DLAs), tutoring, computer-aided instruction, and workshops. Academic support is free for all Santa Ana and Centennial Education Center students. Tutors are available for a variety of subjects including English, writing, English for the Multilingual Student (EMLS), reading, foreign languages, communication studies, accounting, math, and courses in the sciences, social sciences and Career and Technical Education. The Learning Center is staffed with instructors, trained tutors, and learning assistants. For further information, please call 714-564-6542.

## LIBRARY SERVICES

The Nealley Library of Santa Ana College, one of two libraries in the District, is centrally located on the first floor of the $L$ building. The library supplies the resources, services and facilities that support student learning and the mission of the College.
The Library's collection is composed of books, periodical subscriptions, close-captioned videos and DVDs, CDs, microforms and a variety of periodical databases providing students and staff with 24/7 remote access to over 20,000 full-text periodicals and 24,000 e-books. To borrow library materials students and staff must show a picture ID.

The Library's Reserve collection of more than 2,700 items provides students with library-use access to many textbooks and other course-related material.
Students and staff may use either of the two District libraries and may request inter-campus delivery of circulating books.
The Internet is available to all patrons at all public access workstations. Currently enrolled students can conduct library research using library wireless laptops or their own laptops using Wi-Fi access.
Free library instruction is available for students. Check the library website: sac.edu/library, or call 714-564-6700 for general library information, or 714-564-6708 for the current library instruction schedule.

## MATH CENTER

The Math Center is a resource center that provides individual and group assistance in mathematics. The Math Center also facilitates Directed Learning Activities. Faculty instructors, instructional assistants, and student tutors are available to assist students with challenging topics, answer questions, encourage understanding, and provide support for all math students. Students also have access to textbooks, graphing calculators, instructional videos, and computer programs. It is located in the Library building, room L-204. For further information, please call 714-564-6678 or go to sac.edu/MathCenter.

## MESA

MESA (Math, Engineering, and Science Achievement) is an academic program designed to support educationally and economically disadvantaged transfer students preparing for professions in the Science, Technology, Engineering and Math (STEM) fields. Services include tutoring, advisement, academic success workshops, scholarships, internships, and connection to professionals.

## PROMISE CENTER

This program offers a specialized transfer orientation, transfer resources and services to recent SAUSD graduates, (2011 to date) and provides transfer guarantee admission to UCI with a 3.0 GPA or CSUF with a 2.8 GPA .

## PUBLIC AFFAIRS

Information and publicity regarding Santa Ana College programs and activities are disseminated to the news media and community through the SAC Office of Public Affairs/Governmental Relations, located on the second floor of the " S " Building.

## PUENTE

The Puente Program provides English and Counseling instruction (English 101 \& English 102 ), academic counseling, a variety of out of class activities, and mentoring to assist and prepare students for transfer.

## SCHOLARSHIPS

Scholarships are a critical component to student success. Many alum, community patrons and organizations establish scholarship awards as a means of expressing confidence in Santa Ana College and its students. These awards range in amounts from $\$ 1,000$ to $\$ 10,000$. Eligibility varies according to the individual scholarship. There are scholarships available for students taking classes at Santa Ana College, those transferring to four-year colleges, and those entering college for the first time upon graduation from high school. Listings and requirements for the various scholarships can be found online at www.sac.edu/scholarship. On-line applications must be submitted for screening in February, and student recipients will be recognized at an annual award ceremony in May. For more information and assistance, please contact the Scholarship Program at 714-564-6478 or visit the office located in Building "S", Room 201.

## STUDENT ACTIVITIES

Student Activities are planned with sufficient variety and frequency to provide an opportunity for all students to participate. For additional information please call 714-564-6214.

## STUDENT LIFE AT SANTA ANA COLLEGE

## Campus Information

The Student Handbook is an official student guide which provides a reference on how to take full advantage of the college and its services and also answers questions students may have about student life. Handbooks are available online only at sac.edu under the Student Life page.
el Don - The campus newspaper, prepared by journalism students, is distributed to various locations on and off the campus.

## Associated Student Government (ASG)

ASG encourages all qualified students to serve in a variety of elected and appointed student government positions and provides student representation for the entire district. Interested students should contact their representatives in the student government office for more information at 714-564-6208.

## Student Life

The ASG, Inter-Club Council (ICC), and Student Life Offices sponsor a variety of educational and social programs, campus activities and services to encourage student leadership and create a vibrant student life environment on campus. The ASG provides multicultural events, health awareness events, holiday and themed events, panel discussions, and services for the community. The Inter-Club Council sponsors special events designed for club involvement. The Student Activities Office, in addition to coordinating events, provides information regarding student life, clubs, and organizations. There are an assortment of opportunities, services, discounts, programs and contests. For more information regarding Student Activities, Student Government and Inter-Club Council, contact the Coordinator of Student Activities at Santa Ana College at 714-564-6214.
Clubs, Organizations, and Inter-Club Council (ICC)
Numerous student interest groups are active throughout the year. Representatives from each club participate in the Inter-Club Council (ICC), a coordinating body functioning to promote participation in student life. Call 714-564-6214.

## STUDENT PLACEMENT

The Student Placement Office assists currently enrolled students in obtaining student assistant/work study employment on-campus and at approved community locations. Students are encouraged to take advantage of this excellent opportunity to gain work skills while attending Santa Ana College.

## TEACHER ED

The Center for Teacher Education is dedicated to providing a variety of outreach, retention, and transfer activities for future teachers.

## U-LINK

This program is open to all students, particularly students in the Santa Ana Unified School District. U-Link is a transfer program that has a guaranteed admission from SAC to UCI.

## UNIVERSITY TRANSFER CENTER

The University Transfer Center provides information and assistance to students who are preparing to transfer to four-year colleges and universities. Representatives from universities are available to meet with students individually and provide information about programs, requirements and procedures. The Center also maintains a complete resource library containing college catalogs. In addition, the Center sponsors field trips to selected universities throughout California. For more information, call 714-564-6165.

## STUDENT RESOURCES (Continued)

## VETERANS RESOURCE CENTER

The Veterans Resource Center is dedicated to supporting veterans as they transition from military service to college and civilian life. The VRC provides the following services: Assistance with accessing VA Education Benefits, specialized orientations and workshops, college preparation through the Veterans Upward Bound program (VUB), academic counseling, a dedicated space to study and use computers, referrals to on and off campus veterans programs and resources, and opportunities to meet and socialize with other veterans at the college. For additional information or assistance, call the VRC at 714-564-6050, visit the website at www.sac.edu/vrc, or come to our office at SAC in the west side of the Planetarium building, $\mathrm{M}-120$.

## Veteran Education Benefits

Veterans and eligible persons who wish to utilize their education benefits must notify the VRC prior to the beginning of each semester by completing a Certification Request Form after having completely registered in courses required for their program. Courses must apply towards the approved degree or certificate offered at Santa Ana College. Other documentation such as Educational Plans, DD214 s , and Certificates of Eligibility will be needed for new students. Satisfactory academic progress must be maintained by all VA applicants. All those collecting VA educational benefits are required to immediately report any changes of classes, both adds and drops, to the VRC as this may cause overpayments. Veterans and eligible dependents/spouse who are on academic probation [below 2 grade point average (GPA)], or progress probation [attempted units exceeds $50 \%$ of completed units], must show a continued improvement in GPA or course completion with each semester after the deficiency. A student who is on academic probation shall have VA educational benefits certification suspended after showing two semesters without satisfactory progress towards graduation requirement of 2 GPA . In such instances, a student will not be certified for a third semester and must petition for recertification. The student must show a counselor-approved program indicating what course of action must be completed to maintain satisfactory progress towards graduation or completion requirements.
Types of benefits that can be utilized
Veterans who qualify to receive benefits under the Montgomery BillActive Duty (Chapter 30), Montgomery Bill-Selected Active Reserve (Chapter 1606/1607), and eligible persons under the Survivors' and Dependents' Educational Assistance Program (Chapter 35) are encouraged to take advantage of their educational entitlement. Veterans with aggregate active duty after 9/10/01 may be eligible for the Post 9/11 Bill (Chapter 33). This program includes a basic allowance for housing (BAH), book stipend, and tuition/fees which are all based on the percentage of eligibility. Dependents of Service members who died in the line of duty after September 10, 2001 could also use Chapter 33 benefits under the Marine Gunnery Sergeant John David Fry Scholarship. Veterans with a service-connected disability may be eligible for vocational rehabilitation (Chapter 31). This program provides eligible veterans with a monthly allowance or BAH as well as payment for tuition, most fees, and necessary books and supplies. War orphans, dependents, and survivors of veterans considered $100 \%$ disabled as the result of a service-connected disability, who died from those conditions, or who died while on active duty, may be eligible for benefits.
Applicants should seek information regarding eligibility and payments from the VA Regional Office in OK - 1-888-442-4551. The Veterans Affairs Office within the VRC will assist with the paperwork needed to initiate the certification of the courses for the eligible student.

## Applying for Benefits

Each veteran and eligible person who wishes to enter Santa Ana College must follow the admissions procedures. See index for details on enrolling. Assistance is available in the VRC for those applying for the VA education benefits for the first time. For detailed information on the application process, please visit the GI Bill® website at www. gibill.va.gov. Please call or visit the VRC for details on the paperwork needed to initiate the certification process of the education benefits.

## Information can also be found on the VAO website: sac.edu/vao.

## Veterans Priority Registration

Veterans eligible for Priority Registration under the California Education Code 66025.8 will need to fill out the form in the VRC to determine eligibility. Course protection Guarantee under the Veterans Benefits \& Transition Act of 2018
Transcripts and Program Approval
VA regulations require that prior credit from other educational institutions attended be evaluated and applied in the students' approved program. Therefore, evaluation of all prior credit must be done at the end of the first semester of attendance. If the required transcripts are not on file, the VAO will not be able to certify payment beyond the first semester. To avoid any delay in payments, the VAO requests that all official transcripts be on file with the Admissions Office at the beginning of the first semester of attendance.
Veterans and eligible persons must have each course approved prior to registering for each semester. The VA requires that the VAO monitor progress towards a specific degree plan or approved certificate. Therefore, for payment purposes, students must select a major and take only those courses on the student educational plan specifically required for that major. Academic Counselors are available to provide comprehensive counseling services within the VRC. If the students have attended previous schools, official transcripts must be on file before a college program can be approved by the counselor.

## Military Service Credit

Three units for health education and one unit for exercise science may be granted on the basis of military service when a DD-214 is submitted to Admissions and Records. A copy of the student's DD-214 will be forwarded to Admissions for proper credit if it is given directly to the VRC. The credit granted can be used in area F under Plan A . Under Plan B, three units of credit are granted in area E. Military credit is not accepted under Plan C.

## Military Transcripts

Military transcripts are currently being accepted and evaluated in Admissions and Records. They may be applied towards electives or actual course equivalency. Official Academic Transcripts are required to be submitted during the first term the student attends the college. Military Withdrawals
Withdrawals due to military orders will not have adverse consequences. Admissions will use the following procedures:

- "MW" grade for compelled military withdrawal with annotated comment on transcript. (Military Withdrawal)
- Refund of enrollment, parking, and health fees.
- "MW" grade would not count in the progress probation calculation.
- Priority registration granted the first semester upon return.


## VETERANS UPWARD BOUND(VUB) \& VETERAN STUDENT SUPPORT SERVICES PROGAM (VSSS)

Veterans Upward Bound (VUB) at Santa Ana College is a free U.S. Department of Education TRIO program designed to help eligible U.S. military veterans and reservists enter and succeed in the postsecondary school of their choosing. VUB at Santa Ana College offers an 8 week refresher course in Math and English 5 times a year. Feel free to stop by our office in M-120 or call us at 714-564-6288.

## YESS PROGRAM

The Youth Empowerment Strategies for Success (YESS) Program is a Foster Youth Success Initiative (FYSI) which provides support to qualified Santa Ana College students who have emancipated from the foster care system, were in foster care after their 13th birthday, and who are currently between the ages of 16 and 24 . The program focuses on the following services to qualified former foster youth students: academic support workshops, bus passes or parking permits (when available), specialized counseling services, career guidance, financial aid information, independent living programs, study skills courses, and tutoring services. The YESS Program is located in VL-205.

## COLLEGE POLICIES AND STANDARDS

## ABSENCE/NON-PARTICIPATION/DROP

It is the student's responsibility to withdraw officially from a course via WebAdvisor.
However, because of enrollment demand a student may be dropped by the instructor when not appearing at the first class meeting or not participating in the first course activity designated to account for active enrollment.
A student may be dropped for non-participation if he/she has missed in excess of $10 \%$ of the total course activities including but not limited to class attendance, discussions, assessments, etc.
Under extenuating circumstances, a student may be reinstated by the instructor.
Note: Only those drops completed prior to the refund deadline are eligible for refund consideration.

## ATTENDANCE

Students are expected to attend all sessions of the classes in which they are enrolled. Students should report absences due to illness to the instructor immediately upon returning to class.

## AUDITING

Santa Ana College does not permit auditing of classes. Only students who are officially enrolled in a course may attend class.

## STUDY LOAD

In order to meet the graduation requirements in four semesters, students should carry an average of 15 units each semester. Students will ordinarily not be allowed to register for more than 18 units. When individual circumstances may require additional unit demand, an overload program in excess of 18 units may be approved for students who have maintained a B average or have satisfactory test scores on SCAT, SAT, ACT, or other similar measures that predict success, including the counselor's assessment of the difficulty of the program. Approval for such overloads may be secured from college counselors or the Dean of Counseling.
A summer session load should not exceed the equivalent of one unit per week or approximately nine units for an 8-week session. If over 9 units for summer or over 6 units for intersession, an overload petition is required.

## ACADEMIC HONESTY POLICY INFORMATION

Introduction
Students at Santa Ana College are expected to be honest and forthright in their academic endeavors. To falsify the results of one's research, to steal the words or ideas of another, or to cheat on an examination, corrupts the essential process by which knowledge is advanced. Academic dishonesty is seen as an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. As institutions, we also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, assisting other students in acts of dishonesty or coercing students into acts of dishonesty.

## Procedures

In cases where a violation of academic honesty is discovered, the faculty member is encouraged to file an "Academic Misconduct Incident Report" form and distribute the form to the appropriate offices listed.
There are two categories of sanctions: Limited and College-wide. Limited sanctions include an academic action such as assigning a lower grade or a grade of "F" for the assignment, project, or test. College-wide sanctions include any sanction that will affect a student's standing with the college-at-large, up to and including suspension or expulsion from the College.

In matters relating to academic honesty violations, the primary responsibility for disciplinary proceedings rests with the instructor and the academic division where the violation allegedly occurred. The Dean of Student Affairs will assist in all College-wide sanctions

## ACADEMIC HONORS

## Academic Honors at Graduation

Academic honors are awarded to students who do outstanding coursework leading to graduation from Santa Ana College. No association/affiliation with outside honor societies will be posted to the academic transcript or diploma. Graduation honors are awarded as follows:
PRESIDENT'S SCHOLAR. The President's Scholar designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.5 while completing the Honors Program requirements. In addition, the President's Scholar graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District colleges of which
15 units or more must be honors. All letter grades must be C or better. Rancho Santiago Community College District coursework and all transfer work will be computed in the Honor designated GPA. WITH HIGHEST HONORS. The highest honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 4.0. The highest honors graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District colleges of which 18 units or more must be letter grades. All letter grades must be A. Rancho Santiago Community College District coursework and all transfer work will be computed in the Honor designated GPA.
WITH HIGH HONORS. The high honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.8. The high honors graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District colleges of which 18 units or more must be letter grades of $\mathrm{A}, \mathrm{B}$, or C . Rancho Santiago Community College District coursework and all transfer work will be computed in the Honor designated GPA.
WITH HONORS. The honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.5. The honors graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District colleges of which 18 units or more must be letter grades of A, B, or C. Rancho Santiago Community College District coursework and all transfer work will be computed in the Honor designated GPA.
DEPARTMENTAL HONORS. Honors are awarded to students who do outstanding work in their departments. Eligibility is determined by inclusion in the honors categories listed above. Selection is made by departmental faculty with the division dean's approval.
COMPLETION OF HONORS TRANSFER PROGRAM. Completion of Honors Transfer Program designation is placed on the transcript of the graduate who has achieved an overall grade point average (GPA) of 3.0 while completing the Honors Program requirements. In addition, the Completion of Honors Transfer Program graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District colleges of which 15 units or more must b $\epsilon$ honors courses.
SEMESTER ACADEMIC HONORS. An honors list is issued each semester from the President's Office. Students are eligible by completing twelve or more units with a grade point average of 3.5 or better. Pass/no pass units are not considered in the twelve-unit requirement. Overall GPA must also be a 3.5 or better.

## ACADEMIC RENEWAL

In as much as past performance does not always reflect accurately a student's actual ability, Santa Ana College has established a policy of academic renewal.

- To be eligible, the student must have completed at least 15 units with a 3.0 GPA or 24 units with a 2.0 GPA or higher in sessions subsequent to the substandard work. All lower division units from all colleges attended will be counted from the semester immediately following the substandard work. These semesters cannot contain any substandard grades.
- The substandard academic renewal work will not count toward graduation or certification, and the permanent academic record shall be annotated in such a manner that all work remains legible. Up to 30 units combined of below "C" work from all institutions attended may be disregarded in the computation of the grade point average.
- After an associate degree or general education certification is posted, academic renewal without course repetition is not accepted.
- Academic Renewal Without Course Repetition is solely the policy of the Rancho Santiago Community College District and may not necessarily be followed by other institutions.
- Academic Renewal Without Course Repetition may be granted only once by either Santa Ana College or Santiago Canyon College, but not both.
The petition is submitted to Admissions and Records of the student's home campus (SAC or SCC). Please consult with a college counselor about any questions regarding Academic Renewal eligibility.
* For courses designated as non-repeatable (Title 5 §55041), only the first two substandard grades may be excluded in computing the student's grade point average (Title 5 § 55042(c).


## CAMPUS REGULATIONS

1. The Rancho Santiago Community College District supports liberal policies regarding free speech for individual students, college staff, nonofficial college groups, and visiting speakers.
2. Publicity for off-campus activities and organizations must be cleared through the Students Activities Office, in the Johnson Campus Center at Santa Ana College.
3. Posting or distribution of publicity for student activities on campus must be authorized by the Associated Students.
4. Smoking is prohibited on campus except in designated areas. This is an alcohol free and drug free campus. California Code A.B.846, Chapter 342-New Law (2004) prohibits smoking within 20 feet of main entrances or exits of buildings of California Community Colleges.
These regulations are available to all students and staff in the office of the Associate Dean, Student Development, at Santa Ana College, in the Village, VL-108, phone, 714-564-6211.
5. Please refer to Standards of Student Conduct (page 61) for specific policies.

## COOPERATIVE WORK EXPERIENCE EDUCATION

The Cooperative Work Experience Education Program represents a joint educational venture between the student, a college in the Santa Ana College, and a participating employer. Under terms of the program, qualified students may earn up to four units per semester on a Pass/No Pass basis for educational experiences on the job and coordinated coursework at Santa Ana College. Further information will be found in the course section of the catalog. Call the appropriate division for further information.

## COURSE REPETITION

A student who earns a D, F, W, or NP grade may repeat the course up to two times to improve the grade of the substandard work. Withdrawals (notations of W) will count toward the two allowable repeats. A student may not repeat a course more than two times to alleviate substandard work.
A student may not repeat a course to change a grade of $C$ or above. (Note this same procedure may be followed in case of grades UF and WF which appear on some older transcripts.) Courses repeated under the provisions of this section will be indicated as repeated on the permanent academic record of the student.
Course repetition at Santa Ana College does not guarantee that other institutions will approve such action. This determination will be made by the respective transfer institutions.

## Repeatability of Courses

Courses may be repeated under the following circumstances:
Substandard Work: A student has up to three enrollments in the same course (SAC and SCC combined) to receive a passing grade. After two attempts, the student loses the ability to register for the class online. A repeat form must be completed and submitted to the Admissions Office. After three attempts, the student can no longer register for the course within this college district.
Non Repeatable Course: A student who earns a D, F, NP or W grade may repeat the course twice to improve the grade of the substandard work. The last grade earned will count in the GPA calculation. Courses repeated under the provisions of this section will be indicated as repeated on the permanent academic record of the student. A student may not repeat a course to change a grade of $C$ or better. After three enrollments, the class must be completed outside the Rancho Santiago Community College District.
Significant Lapse of Time: Students may be permitted to repeat the course no less than 36 months since the most recent grade was obtained AND an institution of higher education to which a student wishes to transfer has established a recency requirement that the student cannot satisfy without repeating the course (Title 5, §55043). Students may submit a Petition for Course Repetition Exception Form to repeat the course. Grades awarded for courses repeated under this provision shall replace the original grade. Only one repetition may be used for significant lapse of time (W grade counts towards repetition). Legally Mandated Training: Repetition of courses for which the student is legally mandated by statue or regulation. Pursuant to Title 5 Section 55040, of the California Code of Regulations, Santa Ana College has adopted the following policy with regard to repeating courses for which the student has certified or documented that course repetition is legally mandated. Student may submit a Petition for Course Repetition Exception Form to repeat a course.
Course repetition shall be permitted in cases where such repetition is necessary for a student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. Such courses may be repeated for credit, any number of times, regardless of whether or not substandard work was previously recorded, and the grade and units received each time shall be included for purposes of calculating the student's grade point average. Santa Ana College reserves the right to require a student to certify or document in writing that course repetition is necessary to complete legally mandated training pursuant to this section.
Variable Unit Courses. When a course is designated as repeatable and is also variable unit, the number of repeats dictates how many times the course may be enrolled in for credit. A variable unit course which is not designated as repeatable may be registered for until the maximum number of units has been attempted. No portion of the class may be repeated to improve grade point average.

## Courses Related in Content（commonly referred to as a Family of Courses）

New regulations governing the repetition of credit courses in the California Community College system effective Fall 2013 have eliminated certain repeatability in the Art，Dance，Kinesiology（activity courses），Music，and Theatre departments．While students will not，in most cases，be allowed to repeat active participatory courses in these departments，students will still be allowed to enroll in a series of active participatory courses that are related in content（commonly referred to as a family of courses）a maximum of four times．
A family of courses may include more than four courses，but students are limited to a maximum of four courses in any family．Further，all grades，including W ，will count toward the four course enrollment limitation．Students can repeat Art，Dance，Kinesiology（activity courses），Music，and Theatre Arts courses that are included in Families of Courses in which an NP，D，F，or W was assigned；however，all enrollments count toward the 4 enrollment maximum for each family of courses．
For further questions regarding enrollment into a Family of Courses， contact the Admissions and Records office．

## CREDIT BY EXAMINATION

1．Applications for credit by examination may be obtained in the Admissions and Records Office at Santa Ana College．The student will be advised whether a testing fee is to be charged and where it should be paid．Applicants must be currently enrolled at Santa Ana College and be in good standing．
2．The list of courses which may be challenged for credit by examination is available in the division offices at Santa Ana College．
3．Except in the case of Registered Nursing courses，the student must not enroll in a course which is to be challenged．In the event a student decides to challenge a course in which he or she is already enrolled，he or she must withdraw from that course prior to the end of the second week of instruction．
4．Credit may be earned only for courses that are：1）currently listed in the catalog，and 2）specifically designated by the appropriate dean as courses that are eligible for credit by examination． A student may attempt credit by examination only once in a particular course．
5．Students should be aware that some divisions offer credit by examination only on specific dates；therefore，students should obtain examination schedules from the appropriate offices as early in the semester as possible．
6．The dean，in consultation with the department involved， will determine whether a departmental or a standardized examination is to be administered and when and where it will be administered．At this same time，the student will be given a course outline and any other pertinent information detailing subject matter requirements of the course being challenged．
7．Students may apply for credit by examination in sequential courses，but may take examinations for the courses having prerequisites in the sequence only if credit has been earned by examination or coursework in the earlier course（s）of the sequence．
8．Grading of the examination is on a Pass／No Pass basis．Pass represents a grade of＂C＂or better and will be shown on the transcript as＂credit by examination＂．Grades less than＂C＂will be reported to the college Admissions and Records Office but not recorded on the transcript．＂Pass＂grades will be computed as units earned but will not be counted in the grade point average．
9．The examiner shall transmit examination results to the Santa Ana College division office．The division dean will review the examination results and will transmit this information to the Admissions and Records Office．
10．Units for which $P$ is given in this category will not be counted in determining the 12 semester hours of credit in residence required for a certificate or an associate degree．

## EXAMINATIONS

It is expected that the instructor will give at least two evaluations of student performance prior to the issuance of mid－term grades and at least one other evaluation before the final examination．Final examinations are required in all courses．

## RIGHT TO REVIEW AND CHALLENGE RECORDS

The Family Educational Rights and Privacy Act（FERPA）affords students certain rights with respect to their education records．These rights include：
1．The right to inspect and review the student＇s education records within 30 days of the day the college receives a request for access．
Students should submit to the Registrar，or Dean of Admissions， written requests that identify the record（s）they wish to inspect． The College official will make arrangements for access and notify the student of the time and place where the records may be inspected．
2．The right to request the amendment of the student＇s education records that the student believes is inaccurate．
Students may ask the college to amend a record that they believe is inaccurate．They should write the college official responsible for the record，clearly identify the part of the record they want changed，and specify why it is inaccurate．
If the college decides not to amend the record as requested by the student，the college will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment．Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing．
3．The right to consent to disclosures of personally identifiable information contained in the student＇s education records，except to the extent that FERPA authorizes disclosure without consent． One exception，which permits disclosure without consent，is disclosure to school officials with legitimate educational interests． A school official is a person employed by the college in an administrative，supervisory，academic or research，or support staff position（including law enforcement unit personnel and health staff）；a person or company with whom the university has contracted（such as an attorney，auditor，or collection agent）；a person serving on the Board of Trustees；or a student serving on an official committee，such as a disciplinary or grievance committee，or assisting another school official in performing his or her tasks．
A school official has a legitimate educational interest if the officia needs to review an education record in order to fulfill his or her professional responsibility．Upon request，the college discloses education records without consent to officials of another school ir which a student seeks or intends to enroll．［NOTE：FERPA requires an institution to make a reasonable attempt to notify the student of the records request unless the institution states in its annual notification that it intends to forward records on request．］
4．The right to file a complaint with the U．S．Department of Education concerning alleged failures by Santa Ana College to comply with the requirements of FERPA．The name and address of the Office that administers FERPA is：

> Family Policy Compliance Office
> U.S. Department of Education
> 400 Maryland Avenue, SW
> Washington, DC 20202-5901

If students wish，copies of materials contained in the files subject to their review will be provided at a cost of $\$ 1$ per page．

## PASS/NO PASS

Pass/No Pass encourages students to explore academic areas outside a major field.

1. Courses in the student's major field may not be taken under the Pass/No Pass policy except for major courses for associate degrees for transfer, courses for which Pass/No Pass is the only grading option, and units earned through credit by examination or assessment.
2. Every university has a limitation on the number of courses/units that can be taken for Pass/No Pass and applied to graduation and may require General Education taken Pass/No Pass to be retaken for a letter grade. Universities sometimes prefer that students have letter grades in English, mathematics, speech, and critical thinking courses. Courses that meet major requirements at a university (other than major requirements for ADTs) typically must be taken for a letter grade. Also, Pass/No Pass grades could have a negative effect on scholarships and international students. In addition, students who plan to pursue graduate or professional studies later are advised to be selective in opting for courses on a Pass/No Pass basis. If the student is unclear about requirements, it is best to consult with a counselor before using the Pass/No Pass option.
3. Except as in item number one above, a maximum of 6 Pass/No Pass units may be carried during any one semester.
4. A maximum of 14 Pass/No Pass units is allowed for any degree program. This does not include units taken under credit by examination or assessment, or units earned in courses for which Pass/No Pass is the only grading option.
5. Pass/No Pass petitions are available at the Admissions and Records Office at Santa Ana College, and must be submitted between the first and fifth week of the fall and spring terms or thirty percent (30\%) of the term, whichever is less. Pass/No Pass status cannot be changed back to a letter grade. Petition for Exception to Academic Regulation (A and G) will not be approved.
6. Pass indicates a "C" or better.

## WITHDRAWAL FROM CLASS

Students who cannot continue in a course have an obligation to withdraw officially. Students are encouraged to consult with instructors concerning class withdrawals.
Students must officially withdraw by the web through the last day of the 12th week of instruction (or 75 percent of a term, whichever is less) and receive a transcript symbol of "W".
All instructor-initiated drops "EA" (Excessive Absence) through the 12th week or 75 percent of the class, whichever is less, will be assigned a "W".
The academic record of a student who remains in a class beyond the time allowed by district policy must reflect a symbol other than a "W", except under extenuating circumstances.

## EXTENUATING CIRCUMSTANCES

## Excused Withdrawal (EW)

A student may petition for an Excused Withdrawal due to extenuating circumstances (reasons beyond the student's control). Extenuating circumstances are approved based upon verifiable documentation supporting the request. If approved, the petitioned classes will be designated with an "EW" (Excused Withdrawal) on the transcript. An "EW" will not be counted in progress probation or dismissal calculations nor will it be counted towards the permitted number of withdrawals or counted as an enrollment attempt.

## Military Withdrawal (MW)

A student who is a member of an active or reserve U.S. military service and has received orders compelling a withdrawal from courses may request a military withdrawal. If approved, and" MW " will appear on the transcript for each course. "MW" shall not be
counted in the permitted number of withdrawals nor shall it be counted in progress and dismissal calculations.

Students should file the petitions as soon as possible. The petition must be filed no later than one year following the awarding of the original grade.

## INCOMPLETE WORK

When a student has attended regularly but because of illness or other unavoidable circumstances is unable to complete coursework or take the final examination, a grade of "I" may be given. If an "I" is issued, the instructor completes the Incomplete Grade Form which includes the condition(s) for removal of the "l", and the grade to be assigned if the condition(s) are not completed. A student may not register in some classes if an incomplete grade is pending. The work thus missed must be made up no later than one year following the end of the term in which it was assigned. A student may petition for a time extension due to unusual circumstances. It is the student's responsibility to contact the college Admissions and Records Office in such cases.
A final grade will be assigned when the work stipulated has been completed and evaluated according to the conditions set forth by the instructor or when the time limit for completing the work has passed.
Grades and Grade Point Average
Grades are based upon the quality of work completed, that is, upon actual accomplishment in courses offered for credit. Credit by examination, Pass/No Pass, "Ws," "MWs," "IPs" and "Is" are not figured into grade point averages. The grade point average is computed by dividing all other units attempted into all grade points received. The meaning of each grade and its value in grade points is as follows:

Grade
A - Excellent
B - Good
C - Satisfactory
D - Passing, less than satisfactory
F - Failing
P - Pass
NP - No Pass
W - Withdrawal
EW - Excused Withdrawal
MW - Military Withdrawal
I - Incomplete
IP - In Progress
RD - Report delayed
UF - Unauthorized Withdrawal
WF - Withdrawal, Failing

## Grade Points

4 per unit earned
3 per unit earned
2 per unit earned
1 per unit earned
0 per unit attempted
0 per unit earned
0 per unit attempted
0 (no units earned)
0 (no units earned)
0 (no units earned)
0 (no units earned)
0 (no units earned)
0 (no units earned)
0 (no units earned)
0 (no units earned)

## TRANSCRIPTS

Students may obtain an official transcript of records by filing in person, online (www.sac.edu), or mailing a request to the Admissions and Records Office, Santa Ana College, 1530 W. 17th Street, Santa Ana, CA 92706. The first two transcripts will be issued without charge, thereafter, a $\$ 3$ charge will be assessed for each additional transcript. An $\$ 8$ special handling fee will be charged for express transcripts. FedEx Next Day Delivery is available for an additional cost. All official transcripts are copies of the student's permanent record in the Office of Admissions and Records at the college. Only records prepared and issued directly from Admissions and Records will be considered official or certified for accuracy. Transcripts from other institutions are
property of the college and will not be released.
Admissions and Records does not hold transcripts for final grades. It is the student's responsibility to verify that all grades have been posted via WebAdvisor before requesting transcripts.

## DISCRIMINATION COMPLAINTS

Rancho Santiago Community College District does not discriminate on the basis of national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.
Students may file a discrimination complaint when they believe they have been deprived of a right granted to students by the Board of Trustees in any of the policies or regulations of the Rancho Santiago Community College District. The purpose of these complaint procedures is to resolve differences as fairly and expeditiously as possible while preserving the right of students and staff members. Students should contact the Vice Chancellor, Human Resources if they want to file a discrimination complaint or discuss their concerns of alleged discrimination. The procedures for filing and investigation of a discrimination complaint can be found at:
https://www.rsccd.edu/Trustees/Pages/AR-3435.aspx
Students can either file a discrimination complaint with the Vice Chancellor, Human Resources who can be contacted at
2323 N Broadway, Suite 407-2, Santa Ana, CA 92706
Telephone Number (714) 480-7489
Alternatively, the student can file a formal complaint with the State Chancellor's Office Web site at: www.cccco.edu/ChancellorsOffice/ Divisions/Legal/Discrimination/tabid/294/Default.aspx.

## GRIEVANCE PROCEDURES FOR STUDENTS

Students may file a grievance when they believe they have been deprived of a right granted to students by the Board of Trustees in any of the policies or regulations of the Rancho Santiago Community College District by employees, students, or others other than a discrimination complaint. The purpose of these grievance procedures is to resolve differences as fairly and expeditiously as possible while preserving the rights of students and staff members.

## Procedure

1. Students shall first confer with the person who took the action or made the ruling to which they object no later than thirty (30) days following the event which prompted the grievance. If for any reason the student is uncomfortable conferring with the person who took the action, they may proceed immediately to step two. The Associate Dean of Student Development will assist the student in arranging the appointment between the student and the staff member.
2. If the difference is not satisfactorily resolved, the student shall confer with the person's immediate supervisor. The Associate Dean of Student Development will assist in arranging the appointment between the student and the employee's supervisor.
3. If the grievance is still unresolved, the student may file a written statement setting forth the nature of the grievance on the Student Grievance Form with the Vice President of Student Services (or their designee) no later than thirty (30) days after conferring with the person's supervisor. The form should contain a description of the grievance including dates, times, pertinent facts, and the remedy sought by the student.
4. Upon receipt of the form, the Vice President of Student Services (or their designee) will send a Student Grievance Staff Response Form to both the staff member and the supervisor for completion within ten (10) days.
5. The Vice President of Student Services (or their designee) shall
then select a Student Grievance Panel*. The administrator involved shall then forward the completed forms to the panel chair for review and recommendation. The panel shall have the power to make an appropriate investigation of the grievance and shall state its findings and make a recommendation.
6. If the grievance is sustained by the panel, it will recommend appropriate action for relief of the grievance and communicate this in writing to the person(s) to whom the grievance was directed. If the findings of the panel do not sustain the grievance the panel shall communicate this finding in writing to the studen who filed the grievance. The ruling of the Student Grievance Panel is final.

## Student Grievance Panel Structure

- One non-voting chair (except in situations of a tie vote)
- One student representative
- One classified representative
- One faculty representative
- One administrative representative

NOTE: In addition to the college-specific Student Grievance Procedures outlined above, the Rancho Santiago Community College District has adopted a process for the resolution of grievances which are outlined in Administrative Regulation 3435. This regulation provides a process that can be used by any member of the RSCCD community to resolve a discrimination concern. Details about this process are located at rsccd.edu/Trustees/Pages/AR-3435.aspx
For assistance with any portion of this process, please feel free to contact the Office of the Vice President of Student Services at 714-564-6085 or the RSCCD Title IX Compliance Officer at 714-480-7489 during regular business hours.

## HONORS PROGRAM AND HONORS COURSES

The Honors Transfer Program at Santa Ana College welcomes students who want to challenge themselves and offers honors sections of transferable general education courses, combined "stacked" classes, and contracts. The honors experience is characterized by close interaction with Honors Transfer Program faculty, small class size, and special projects and activities. The major benefits for members of the program include:

- Honors transfer agreements with several four-year institutions that offer minimally "priority consideration for admission," and in some instances guaranteed admission with additional GPA requirements. These Honors Transfer Program institutions include, among others: California State University Fullerton, Chapman University, Gonzaga University, La Sierra University, Mills College, Pitzer College, Pomona College, Occidental College, Tufts University, UCI, UCLA, and Whitman College in Washington. Changes are noted on the honorstransfercouncil.org website.
- Recognition of program completion on the Santa Ana College or the Santiago Canyon College transcript and diploma.
- Designation as a President's Scholar (for those students who qualify).
- Recommendation by the Faculty Officer of the Honors Program.
- Library privileges at some of the transfer institutions.
- Scholarship eligibility.
- Access to a counselor specializing in honors transfer requirements. NOTE: No association/affiliation with outside honor societies will be posted to the academic transcript or diploma.
Any student wishing to become a member of the Honors Transfer Program must submit a completed application packet (available online at the SAC website or in the Honors Program Coordinator's office in D-428 at Santa Ana College). The following are considered minimum for acceptance into the program:
- Minimum cumulative GPA of 3.0 (in 6 transferable units for students already in college) or a minimum cumulative high school GPA of 3.0 for entering freshmen.
- Two academic references to be listed on the application.

The philosophy of honors studies at Santa Ana College is that honors courses are not more work than non-honors courses. Instead, honors courses are enriched and creative. Students may take honors courses without being in the Honors Transfer Program, as long as they meet the following guidelines:

- Students have a minimum cumulative 3.0 GPA, and
- Students meet the prerequisites of an honors course as stated in the schedule of classes.
All honors courses taught at either college within the Rancho Santiago Community College District are to be taken for a letter grade only, not P/NP. Note: For the purposes of articulation, course repeatability, and academic renewal, honors courses are equated with their non-honors counterparts. For example, English 101 and English 101 H are equated courses, so if a student received a passing grade of " $C$ " or better, he or she cannot take English 101H just to get "H" credit. Likewise, if a student received a non-passing grade in English 101 H , he or she could take English 101 and, if the student receives a passing grade in that course, petition to have the English 101H non-satisfactory grade replaced through academic renewal with course repetition.
Honors Transfer Program members who are enrolled in the HTP and who have gone through an Honors Orientation may also earn up to twelve units and no more than three contracts through honors project contracts. Contracts will earn honors credit only when both the work for the contract and the regular coursework in the UC-transferable course tied to the contract have been completed and have earned an average grade of " $B$ " or better. Contracts require the approval of the instructor of record for the course, the area division dean, and the HTP Coordinator. In the case of the STEM Honors Contract Addendum, more documentation will be required depending upon the activities involved. More information is available at the offices of the HTP and MESA Coordinators. Contract forms are available at the HTP Coordinator's office. For more information, contact the Honors Transfer Program Coordinator, Kathy Patterson (714-564-6528) at Santa Ana College.


## INDEPENDENT STUDY

Independent Study credit may be earned in any discipline. Transfer credit is designated as Independent Study 199; nontransfer credit is designated as Independent Study 099. These courses are offered on a credit/no credit basis.
Independent Study projects are normally for one unit of credit and require a minimum of 54 hours of directed work per unit of credit. Within the 54-hour minimum, the instructor meets with each student on a weekly basis for at least one hour or a minimum of 18 hours for each one unit project. Independent Study may be repeated for credit for a maximum of three units. Recommended projects of more than one unit must have prior approval from the Vice President of Academic Affairs. The proposal is subject to prior approval by the supervising instructor and the division dean in order for the student to enroll in Independent Study 099 or 199.
To be eligible for Independent Study, a student must be concurrently enrolled in at least one other class in the Rancho Santiago Community College District, with the exception of summer sessions. The student must also show evidence of competence in the academic major as well as the area in which independent study is proposed.

## OPEN ENROLLMENT

The policy of this district is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to regulations contained in Article 2.5 (commencing with Section 55200) of Sub Chapter 1 of Chapter 6 of Title 5 of the California Code of Regulations.

## PHOTOGRAPHY

Santa Ana College/Santiago Canyon College, a non-profit California Community College, reserves the right to use photography and video images of students and visitors, age 18 and older, taken on our property and at college-sponsored events for marketing and promotional purposes. Objection to the use of an individual's photograph may be made in writing to Public Affairs and Publications, RSCCD District Office, 2323 N. Broadway, Suite 408, Santa Ana, CA 92706.

## PROBATION - DISMISSAL

A student's academic standing is calculated and reviewed at the end of each fall and spring semester, based only on his/her SAC/SCC cumulative GPA. There are three categories of academic standing: probation, subject to dismissal, and dismissal.

## Probation

1. Academic probation. After attempting twelve or more units, a student is placed on probation when the SAC/SCC cumulative grade point average for all work attempted falls below 2.0. (W's are counted in the attempted units).
2. Progress probation. A student who has attempted a total of twelve units will be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W", "I", and/or "NP" are recorded reaches or exceeds fifty percent.

## Academic/Progress Probation Intervention

Students placed on academic/progress probation are required to attend a counseling intervention workshop. An email notification is sent to the student and a registration hold is placed on the student record until completion of the workshop.

## Loss of Priority Registration

1. Academic probation. Students who have two consecutive semesters with a Cumulative GPA below 2.0 will lose priority registration for the next registration period. Their registration date will be after all new applicants.
2. Progress probation. Students are placed on progress probation when the percentage of coursework at SAC/SCC that has an entry of "W", "I", "NP", and "NC" reaches or exceeds fifty percent (50\%) of the coursework attempted.
IMPORTANT NOTE: Registration priority shall be lost at the first registration opportunity after a student is placed on academic or progress probation or any combination thereof for two consecutive terms.

## Student Right to Appeal

A student has the right to appeal an exception to a current Santa Ana College academic policy, including academic probation and progress probation. Student must complete and submit a Priority Registration \& California College Promise Grant Appeal form. Appeal forms are available in the Admissions \& Records office.

## Removal From Probation

1. Academic probation. A student on academic/progress probation shall be removed from probation when the student's cumulative grade point average reaches 2.0 or higher.
2. Progress probation. A student who has been placed on progress probation shall be removed from probation when the percentage of units for which entries of "W", "I", and/or "NP" falls below 50\%.

## Subject To Dismissal

A student's academic standing is calculated and reviewed at the end of fall and spring semester, based upon a SAC/SCC cumulative grade point average. Summer is not counted as it is considered a session because it is not a full semester. A student who is on academic probation shall be subject to dismissal if the student earned a SAC/ SCC cumulative grade point average (GPA) of less than 2.0 in all units attempted in each of 2 consecutive semesters.

## Dismissal

1. Academic dismissal. A student's academic standing is calculated and reviewed at the end of fall and spring semester, based upon a SAC/SCC cumulative grade point average. Summer is not counted as it is considered a session because it is not a full semester. A student who is on academic probation shall be dismissed if the student earned a SAC/SCC cumulative grade point average (GPA) of less than 2.0 in all units attempted in each of 3 consecutive semesters.
2. Progress dismissal. A student who has been placed on progress dismissal shall be dismissed when the percentage of units in which the student has enrolled and for which entries of "W," "I," and/or "NP" are recorded reaches or exceeds 50\% for three consecutive semesters.
3. Dismissal after fall semester. A student may be given the academic standing of "Subject to Dismissal" at the end of fall semester when his/her SAC/SCC cumulative GPA falls below 2.0 after three consecutive semesters. The student is given the grace period of spring semester to remain in school. However, an academic hold is placed on the student record in April to prevent any further registrations until all grades have been reviewed at the end of spring semester.
If the student achieves a 2.0 GPA for the spring semester, the student is allowed to remain at the college on probationary status, despite a SAC/SCC cumulative GPA of less than 2.0. If the 2.0 GPA for spring is NOT achieved, the student is academically dismissed. Students who are academically dismissed have a HOLD placed on their record and receive an email notifying them of their academically dismissed status (AD).
4. Petition for reinstatement after dismissal. A student may initiate the process for reinstatement after dismissal at the end of spring semester by completing the Petition for Reinstatement After Dismissal form. This form is available in the Admissions and Records Office. A student can be reinstated if the spring semester GPA is 2.0 or better. If the spring semester GPA is less than 2.0, the student can petition using the Exceptions to Academic Regulations petition for reinstatement. This committee meets the week prior to the start of the fall semester. A student should make alternative plans in cases involving a denied petition. Students who have SAC as a home campus submit their petition to the SAC Admissions and Records Office.
5. Consequence of academic dismissal. A student cannot register for classes at SAC or SCC for one full semester. When the student returns to SAC or SCC after "sitting" out one semester, the student returns on academic probation. In order to remain at SAC or SCC, the student must achieve a 2.0 semester GPA in the spring and fall semesters.

When a student is academically dismissed and the last semester GPA is less than 2.0, the student is denied reinstatement and may not enroll at SAC or SCC for one semester before reapplying to either college.

## Remedial Course Limit

A student may complete a maximum of 30 semester units of basic skills remedial courses. Remedial courses include non-degree or precollegiate basic skills classes in math, English, reading, learning and study skills.
A waiver is required beyond 30 units. Students must show a "C" or better or a 2.0 GPA in remedial courses to qualify for a waiver. Waiver forms are available in counseling.

## STANDARDS OF STUDENT CONDUCT

Guidelines for Student Conduct are set forth in the California Education Code, California Administrative Code, Title V, policies of the Board of Trustees, and all civil and criminal codes. Students enrolling ir district educational programs assume an obligation to obey state law and district rules and regulations governing the conduct of students. Students who enroll in those instructional programs in which the college has affiliations with various outside associations must comply with the college's policies and procedures and also with the outside associations' policies and procedures. This includes but is not limited tc students enrolled in the programs of Fire Academies, Criminal Justice Academies and Nursing.

## GUIDELINES FOR STUDENT CONDUCT

The following represent violations for disciplinary action, up to but not limited to expulsion, that may be taken:
A. Dishonesty, cheating, plagiarism, lying, or knowingly furnishing false information to the district or college officials performing their duties.
B. Forgery, alteration, or misuse of district documents, records, or identification.
C. Willful misconduct that results in damage to any real or personal property owned by the district or district employees (damage includes, but not limited to vandalism, such as cutting, defacing, breaking, etc.).
D. Obstruction or disruption of pedestrian or vehicular traffic or of teaching, research, administration, or of other district activities on or off District premises. This includes obstruction or disruption of administration, disciplinary procedures, or authorized college activities.
E. Assault, battery, or any threat of force or violence upon a student, college personnel, or campus visitor; willful misconduct which results in injury or death to a student, college personnel, or campus visitor. This includes fighting on district property or at a district sponsored event, on or off district premises.
F. Detention of any person on district-owned or controlled property or at district-sponsored or supervised functions or other conduct which threatens or endangers the health or safety of another.
G. Theft of any property of the district which includes property of a member of the district community or a campus visitor.
H. Unauthorized entry into or unauthorized use of district property, supplies, equipment, and/or facilities.
I. Misrepresentation of oneself or of an organization to be an agent of the district.
J. Sexual assault or physical abuse, including rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, or threat or assault, or any conduct that threatens the health and safety of the alleged victim, which includes students, college personnel, or campus visitors.
K. Use, possession, distribution, or being under the influence of alcoholic beverage on district property or at any district sponsored event.
L. Use, possession, distribution, or being under the influence of narcotics, other hallucinogenic drugs or substances, or any poison classified as such by Schedule "D" in Section 4160 of the Business and Professions Code on District property or at any Districtsponsored event except as expressly permitted by law.
M. Expression which is libelous, slanderous, obscene or which incites students so as to create a clear and present danger of commission of unlawful acts on district premises, or violation of district regulations, or the substantial disruption of the orderly operation of the college.
N. Engaging in lewd, indecent, or obscene behavior on district property or at any district-sponsored function.
O. Possession or use while on the district premises, or a districtsponsored function, of any firearm, knife, explosive, or other dangerous object, including but not limited to any facsimile firearm, knife, or explosive. Exceptions include those participating in a criminal justice educational program who are authorized such possession or those who are enrolled in a course which authorizes such possession.
P. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any district policy or administrative regulation.
Q. Engaging in harassing or discriminatory behavior based on race, sex (i.e., gender), religion, age, national origin, disability, sexual orientation or any other status protected by law.
R. Continuous disruptive behavior or willful disobedience, habitual profanity or vulgarity, open and persistent abuse of college personnel, or open and persistent defiance of the authority of college personnel, which includes physical as well as verbal abuse, including the use of racial epithets and hate speech.
S. Disruptive written or verbal communication, vulgarity, open and persistent abuse of other students which include verbal abuse, racial epithets and hate speech.
T. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Board of Trustees.
U. Violation of the Computer Usage Policy is applicable to students using computer classrooms, computer labs, the wireless network, or other locations on and off district property. A violation is considered any of the following:
(a) Accessing with or without permission, or causing to be accessed without authorization, altering, damaging, deleting, hacking, destroying, or otherwise using any data, computer, computer system, computer software and programs, or computer network belonging to or used by the college or any member of the District.
(b) Accessing with or without permission, taking, copying, or making use of any data from a computer, computer system, or computer network, or taking or copying any supporting documentation, whether existing or residing internal or external to a computer, computer system, or computer network belonging to or used by the college or District.
(c) Using or causing to be used computer services without permission.
(d) Disrupting or causing the disruption of computer services or denying or causing the denial of computer services to an authorized user of a computer, computer system, or computer network belonging to or used by the college or District.
(e) Introducing any computer contaminant or virus into any computer, computer system, or computer network belonging to the college or District.
(f) Sending any message using any computer system or network without authorization or sending any message in the name of another person or entity.
(g) Using any account or password without authorization.
(h) Allowing or causing an account number or password to be used by any other person without authorization.
(i) Accessing or causing to be accessed, downloading or causing to be downloaded, pornographic or obscene materials except when accessing such material which is part of the instructional process or assignment for a class in which the student is currently enrolled.
(j) Use of systems or networks for personal commercial purposes.
(k) "Cyberstalking", which is to be understood as any use of the college or district computer system, computer network, or computer programs to stalk another person via excessive messages or inquiries, inappropriate or threatening messages, racially motivated communications, photos or other means of communication.
V. Any act constituting good cause for suspension or expulsion, or violation of district policies or campus regulations.
For additional information, please refer to the Student Handbook online at www.sac.edu under the Student Life page.
Procedures for Student Grievances Regarding Grades
Education Code 76224 states:
(a) When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final.

## Procedure

1. Student shall meet with the instructor to discuss the grade. If the issue is not resolved and the student believes that the grade is based on a mistake, fraud, bad faith, or incompetency, (EC 76224), he/she may appeal in writing to the Division Dean. Such an appeal must be made within a one year period following the semester which the grade was assigned.
2. Forms for the written appeal may be found in any divisional Dean's office.
3. The student may be requested to set-up an appointment with the appropriate Division Dean to discuss the written grievance.
4. The appropriate Division Dean will review the allegations and consult with the instructor.
5. The Division Dean will review the issue and will notify the student and instructor in writing of his/her decision.
6. The decision of the Division Dean is final.

## TRANSPORTATION

Some classes may be conducted off campus. Unless students are specifically advised otherwise, they are responsible for arranging for transportation to and from the class site. Although the district may assist in coordinating the transportation and/or recommend travel times, route or caravanning, be advised that the district assumes no liability or responsibility for the transportation, and any person driving a personal vehicle is NOT an agent of the district.

## TRANSFER CREDIT

Santa Ana College will give credit for college units earned at another regionally accredited college or university. In order for transfer units to be applied towards a petition for degree or transfer certification, all official transcripts from other colleges must be on file in Admissions office.

## UNIT OF CREDIT

A unit of college credit represents three hours of student time each week for a semester; one hour of scheduled classroom lecture and two hours in outside preparation. A longer time is scheduled for laboratory courses since more of the work is done in the classroom. One full quarter unit is equal to two-thirds of a semester unit.

## REGISTERED SEX OFFENDER INFORMATION

Information concerning registered sex offenders can be obtained from the Santa Ana Police Department, 3rd Floor Lobby, 60 Civic Center Plaza, Santa Ana, on Mondays through Fridays, from 9am to 12pm and from 1-4pm; and from the Orange Police Department, Youth Services Bureau, 1107 North Batavia Street, Orange, by calling 714-744-7311 for an appointment.
"Sex offenders are required to register with the police in the jurisdiction in which they reside and at institutions of higher learning if they are students there or if they work there as employees, contractors, or volunteers. Sex offenders who may be required to register should do so at the Santa Ana Police Department if attending Santa Ana College or at the Orange Police Department if attending Santiago Canyon College."

## WAIT LIST POLICY

You are not able to Wait List more than one section per course. You cannot Wait List a course that will conflict with another course. As seats become available, eligible students will be moved into an open seat. You will be notified by email (it is your responsibility to make sure that your e-mail is up-to-date) and will have 3 calendar days to pay for the course or you may be dropped. If your name remains on the Wait List, you must attend the first class meeting and obtain the instructor's add code to add the course (Log in to WebAdvisor often to check your status on the waitlist).

## COLLEGE CREDIT INSTRUCTIONAL PROGRAMS

Programs of study leading to the certificate or the associate degree or certification in specialized vocational areas are alphabetically arranged.
Programs which lead to transfer to universities and fouryear colleges do not necessarily reflect the transfer requirements of specific schools. If the student wishes to receive an associate degree in a specific discipline, the requirements as set forth must be met. However, in planning a program for transfer, it should be noted that the transfer requirements for
both the major and general education vary widely. Hence it is recommended that the student review the catalog of the school of transfer and consult with the counseling staff of Santa Ana College in planning transfer objectives.
Required sequences and frequency of course offerings as well as length of time required to obtain a degree or certificate can be found on the college website at www.sac.edu/academicaffairs/coursesequences.

## COURSE CODES

| ACCT | Accounting | ENGR | Engineering | MATH | Mathematics |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ANTH | Anthropology | ENTR | Entrepreneurship | MGMT | Management |
| ART | Art | ENVR | Environmental Studies | MKTG | Marketing |
| ASIA | Asian American Studies | ERTH | Earth Science | MNFG | Manufacturing Technology |
| ASL | American Sign Language | ETHN | Ethnic Studies | MUS | Music |
| ASTR | Astronomy | FAC | Fire Academy | NCE | Nursing - Continuing Education |
| AUTO | Automotive Technology | FDM | Fashion Design Merchandising | NRN | Nursing-Registered |
| BA | Business Applications | FOT | Fire Officer Training | NUTR | Nutrition and Food |
| BANK | Banking | FREN | French | OS | Occupational Studies |
| BIOL | Biology | FSA | Fire Public Safety | OTA | Occupational Therapy Assistant |
| BLST | Black Studies | FTC | Fire Technology | PARA | Paralegal |
| BUS | Business | GEOG | Geography | PHAR | Pharmacy Technology |
| CDEV | Child Development | GEOL | Geology | PHIL | Philosophy |
| CHEM | Chemistry | HIST | History | PHOT | Photography |
| CHNS | Chinese | IDS | Interdisciplinary Studies | PHYS | Physics |
| CHST | Chicano Studies | ITAL | Italian | POLT | Political Science |
| CJ | Criminal Justice | JAPN | Japanese | PSC | Physical Science |
| CJA | Criminal Justice Academies | KNAC | Kinesiology Activities | PSYC | Psychology |
| CMPR | Computer Science | KNAD | Kinesiology Adapted Activities | READ | Reading |
| CMSD | Communications \& Media Studies | KNAF | Kinesiology Aerobic Fitness | SLPA | Speech-Language Pathology Assistant |
| CMST | Communication Studies | KNAQ | Kinesiology Aquatics | SOC |  |
| CNSL | Counseling | KNFI | Kinesiology Fitness | SPAN | Spanish |
| CULN | Culinary Arts | KNHE | Kinesiology Health Education | SPEC | Special Services |
| DNCE | Dance | KNIA | Kinesiology Intercollegiate Athletics | STDY | Study Skills |
| DSL | Diesel | KNPR | Kinesiology Professional | TELV | TV/Video Communications |
| ECON | Economics | KNSM | Kinesiology Sports Medicine | THEA | Theatre Arts |
| EDUC | Education | LAW | Law | VIET | Vietnamese |
| EMLS | English Multilingual Students | LIBI | Library \& Information Studies | WELD | Welding |
| EMT | Emergency Medical Technician | LIBR | Library Technology | WMNS | Women's Studies |
| ENGL | English | MA | Medical Assistant |  |  |

## 66 INSTRUCTIONAL PROGRAMS

## ACCOUNTING

## Accounting Degree

## Program code: sac.acct.as

The associate degree in accounting prepares students for entry-level positions and promotional opportunities in accounting, taxation, and administrative departments of businesses in areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decisionmaking. Entry-level employment opportunities include positions in accounts receivable and accounts payable, payroll, income tax preparation, and cost accounting. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation, and financial statement analysis.

## Learning Outcome(s):

1. Students will create clear, concise, well organized written business documents, including financial statements, memos and reports, that can be used in an effective manner to communicate.
2. Students will acquire adequate technical knowledge to create financial information to be used in the accounting and related business environment
3. Student will be able to combine critical thinking skills and technical knowledge to solve problems in a constantly-changing professional environment.
Required Core Courses: Units

| ACCT 101 | Financial Accounting | 4 |
| :--- | :--- | :--- |
| ACCT 102 | Managerial Accounting | 4 |

ACCT 104 Federal and California Taxes 4

ACCT 210 Accounting Information Systems 3

| BUS 150 | Introduction to Information Systems and <br> Applications | 3 |
| :--- | :--- | :--- |

MGMT 122 Business Communications

- or -

BUS 222 Business Writing
Select a minimum of 3 units from the following electives:
ACCT 108 Tax Practices and Procedures 3
ACCT 113 Intermediate Income Taxes - Corporations 2

| ACCT 114 | Intermediate Income Taxes - Partnerships and | 2 |
| :--- | :--- | :--- |

ACCT 124 Computerized Income Tax Preparation $\quad 1$
ACCT 125 Volunteer Income Tax Assistance (VITA) I 2
ACCT 204 Managerial Cost Accounting 3
ACCT 205 Intermediate Accounting I 3
ACCT 206 Intermediate Accounting II 3
ACCT 211 Auditing 3

ACCT 212 Accountants' Ethics and Responsibilities
Students intending to obtain a bachelor's degree in Accounting or Business are advised to meet with a counselor, and to also look at the degree requirements listed in the catalog of the transfer university of their choice.

Total Units 24-25

## General Accounting Certificate (Transcripted) <br> Program code: sac.acctg.ca

A certificate in accounting prepares students for entry-level positions and promotional opportunities in accounting, taxation, and administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision-making. Entry-level employment opportunities include positions in accounts receivable/payable, payroll, income tax preparation, cost accounting, and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation, and financial statement analysis.

## Learning Outcome(s):

Students will acquire adequate general knowledge of accounting to enter into a business environment as an entry-level accounting clerk.
Required Core Courses: ..... Units
ACCT 101 Financial Accounting ..... 4
ACCT 102 Managerial Accounting ..... 4
BUS 222 Business Writing ..... 3

- or -
MGMT 122 Business Communications ..... 3
ACCT 210 Accounting Information Systems ..... 3
BA 188 Microsoft Excel ..... 2
- and -
BA 189 Advanced Microsoft Excel ..... 2
Select a minimum of 5 units from the following: ..... Units
ACCT 032 Payroll Accounting ..... 1
ACCT 035 QuickBooks I ..... 2
ACCT 036 QuickBooks II ..... 2
4
ACCT 108 Tax Practices and Procedures ..... 3
ACCT 113 Intermediate Income Taxes - Corporations ..... 2
ACCT 114 Intermediate Income Taxes - Partnerships and ..... 2
ACCT 124 Computerized Income Tax Preparation ..... 1
ACCT 204 Managerial Cost Accounting ..... 3
ACCT 205 Intermediate Accounting I ..... 3
ACCT 206 Intermediate Accounting II ..... 3
ACCT 211 Auditing ..... 3
ACCT 212 Accountants' Ethics and Responsibilities ..... 4
Students intending to obtain a bachelor's degree in Accounting orBusiness are advised to meet with a counselor and to also look at thedegree requirements listed in the catalog of the transfer university oftheir choice. Students planning to transfer to four-year institutionsshould strongly consider taking Business 222, Business Writing, tomeet the communication requirement.


## Computerized Accounting-QuickBooks Certificate (Transcripted) <br> Program code: sac.acctq.ca

A certificate in accounting prepares students for entry-level positions and for promotional opportunities in accounting departments of businesses, including areas such as manufacturing, merchandising, financial services, wholesale trades, and government. Specialized training in computerized accounting systems enables students to maintain accounting records, develop financial reports, and make effective use of financial information for analysis and decisionmaking. Entry-level employment opportunities include positions in accounts receivable, accounts payable, payroll, and cost accounting. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation, and financial statement analysis.

Learning Outcome(s):
Students will acquire adequate general knowledge of Quick Books \& accounting to enter into a business environment as an entry-level clerk utilizing Quick Books.

Take ALL of the following courses: Units

| ACCT 032 | Payroll Accounting | 1 |
| :--- | :--- | :--- |
| ACCT 035 | QuickBooks I | 2 |
| ACCT 036 | QuickBooks II | 2 |
| ACCT 101 | Financial Accounting | 4 |
| ACCT 124 | Computerized Income Tax Preparation | 1 |
| BUS 150 | Introduction to Information Systems and | 3 |

Select a minimum of 3 units from the following electives: Units
BA 188 Microsoft Excel 2
BA 189 Advanced Microsoft Excel 2
BUS 222 Business Writing 3

MGMT 122 Business Communications 3
Total Units $16-17$

## Computerized Bookkeeping - QuickBooks Certificate (Transcripted) <br> Program code: sac.acctbq.ca

A certificate in accounting prepares students for entry-level positions and for promotional opportunities in accounting, taxation and administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision-making. Entry-level employment opportunities include positions in accounts receivable/payable, payroll, income tax preparation, cost accounting, and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation, and financial statement analysis.

## Learning Outcome(s):

Students will acquire adequate general knowledge of QuickBooks \& accounting to enter into a business environment as an entry-level clerk utilizing Quick Books.

| Required Core: | Units |  |
| :--- | :--- | ---: |
| ACCT 032 | Payroll Accounting | 1 |
| ACCT 035 | QuickBooks I | 2 |
| BA 179 | Introduction to Microsoft Office | 4 |


| Select one of the following courses: | Units |  |
| :--- | :--- | ---: |
| ACCT 010 | Accounting Procedures | 3 |
| ACCT 101 | Financial Accounting | 4 |
| Select one of the following courses: | Units |  |
| BA 017 | Business Writing Skills | 3 |
| BUS 222 | Business Writing | 3 |
| MGMT 122 | Business Communications | 3 |

Select a minimum of 1 unit from the following electives: Units

| ACCT 124 | Computerized Income Tax Preparation | 1 |
| :--- | :--- | ---: |
| BA 188 | Microsoft Excel | 2 |
| BA 189 | Advanced Microsoft Excel | 2 |
|  |  | Total Units |

## General Bookkeeping Certificate (Untranscripted)

Program code: sac.genbk.cert
A certificate in general bookkeeping preparers a student with basic knowlege of bookkeeping to enter into a business environment. Entrylevel employment opportunities include accounting or bookkeeping clerk in accounts receivable, accounts payable and payroll.

## Learning Outcome(s):

Students will possess adequate general knowledge of bookkeeping to enter into a business environment as an entry level bookkeeping clerk.
Take ALL of the following courses: Units
ACCT 010 Accounting Procedures 3

- or -

| ACCT 101 | Financial Accounting | 4 |
| :--- | :--- | :--- |
| ACCT 032 | Payroll Accounting | 1 |
| BUS 150 | Introduction to Information Systems and | 3 |

Select one of the following courses: Units
BA 017 Business Writing Skills 3

| BUS 222 | Business Writing | 3 |
| :--- | :--- | :--- |
| MGMT 122 | Business Communications | 3 |

Select a minimum of 3 units from the following electives: Units
ACCT 124 Computerized Income Tax Preparation 1
BA 188 Microsoft Excel 2
BA 189 Advanced Microsoft Excel 2
BANK $010 \quad$ Teller Training for Financial Institutions 2
Total Units $\quad 13-15$

## Accounting and Financial Planning Certificate (Untranscripted)

## Program code: sac.acctf.cert

A certificate in accounting prepares students for entry-level positions and promotional opportunities in accounting, taxation, and administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision-making. Entrylevel employment opportunities include positions in accounts receivable/ payable, payroll, income tax preparation, cost accounting, and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation, and financial statement analysis.

## Learning Outcome(s):

Students will acquire adequate general knowledge of accounting and personal finance to establish a foundation for future employment or for advanced studies in the accounting or finance field.
Take ALL of the following courses: Units
ACCT 101 Financial Accounting 4
ACCT 104 Federal and California Taxes 4
BUS 130 Personal Finance 3
BUS 160 Introduction to Stock and Bond Investments 3

Select one of the following courses: Units
ACCT 102 Managerial Accounting 4

BUS $140 \quad$ Principles of Finance
Total Units $\quad 17-18$

## Enrolled Agent Certificate (Untranscripted)

## Program code: sac.acctea.cert

The certificate curriculum in accounting prepares students for entrylevel positions and promotional opportunities in accounting, taxation and administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision-making. Entrylevel employment opportunities include positions in accounts receivable/ payable, payroll, income tax preparation, cost accounting, and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation and financial statement analysis.

## Learning Outcome(s):

1. Students will prepare basic tax returns for taxable and flowthrough entities using commercially available tax software
2. Students will develop a fundamental understanding of the components of taxable income determination across taxable entities, so that the student builds a foundation for effectively learning future tax laws
3. Students will understand the basic rights and responsibilities of taxable entities in the U.S.
Required Core Courses: Units

| ACCT 101 | Financial Accounting | 4 |
| :--- | :--- | :--- |
| ACCT 104 | Federal and California Taxes | 4 |
| ACCT 108 | Tax Practices and Procedures | 3 |
| ACCT 113 | Intermediate Income Taxes-Corporations | 2 |
| ACCT 114 | Intermediate Income Taxes-Partnerships and LLCs | 2 |
| ACCT 124 | Computerized Income Tax Preparation | 1 |
|  | Total Units | $\mathbf{1 6}$ |

## Professional Accounting - Accounting Study \& Ethics Certificate (Transcripted) <br> Program code: sac.actse.ca

This certificate is designed for an individual that has a bachelor's degree other than in accounting that wishes to be licensed as Certified Public Accountant (CPA). This certificate in conjunction with Certificate of Professional Accounting - Accounting Subjects and Certificate of Professional Accounting - Business Subjects will prepare an individual for the CPA exam as well as meet the educational requirements for licensure. Alternatively, a student that already possesses a bachelor's degree in Accounting from a major College or University may solely complete this certificate to fulfill the educational requirements for licensure. The courses contained in this certificate meet the specific course requirements set forth by the California Board of Accountancy (CBA) including the requirements of SB 773. Upon successful completion of this certificate along with the Certificate of Professional Accounting - Accounting Subjects and Certificate of Professional Accounting - Business Subjects, a student will have taken all the necessary Accounting, Business and Ethics courses required for licensure (license granted upon successful passing of the Uniform CPA exam). CPA licensure affords promotional opportunities in public accounting, taxation, as well as administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. This certificate covers accounting and ethical principles necessary for financial reporting, analysis and critical review of accounting information. Entry-level employment opportunities include professional positions in financial statement auditing, income tax preparation, cost accounting, financial reporting and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these same areas

## Learning Outcome(s:)

Upon successful completion of the program students will be able to:

1. Make ethical decisions in the workplace.
a. Students will complete 10 hours of ethics courses including Accounting 212 Accountants' Ethics and Responsibilities.
b. Students will incorporate ethical standards in Accountants' Ethics and Responsibilities class through case study review, research and discussion.
2. Understand accounting and business concepts.
a. Students will demonstrate accounting and business concepts in the certificate classes through examination and practical exercises. b. Students will prepare accounting and business reports based upon relevant accounting and business principles.
3. Communicate effectively orally and in writing.
a. Students will draft research papers \& case study reports.
b. Students will use proper grammar, punctuation, and spelling.
4. Be proficient in using accounting technology.
a. Students will demonstrate the use of the Microsoft suite (Word, PowerPoint and Excel) in their completion of assignments.
b. Students will complete assignments using accounting-specific software.
5. Exhibit critical thinking skills.
a. Students will analyze cases related to the accounting specialty classes.
b. Students will analyze fact patterns to demonstrate the application of accounting principles to fact patterns.

Note 1: Some of the courses listed in this certificate overlap with courses listed in the Certificate of Professional Accounting -
Accounting Subjects and/or the Certificate of Professional Accounting - Business Subjects. It is imperative that an individual does not take any courses for this certificate that have already counted towards either the Certificate of Professional Accounting - Accounting Subjects or the Certificate of Professional Accounting - Business Subjects. Additionally, a student must understand the requirements for "Accounting Study" set forth by the CBA and listed below:

- Minimum 6 semester units in accounting subjects
- Maximum 14 semester units in business-related subjects
- Maximum 9 semester units in other academic work relevant to business and accounting(maximum 3 units from any one area):
- Skills-based courses - Courses completed in the following disciplines: English, Communications, Journalism, and the Physical, Life, Natural, \& Social Sciences
- Foreign Languages/Cultural \& Ethnic Studies - Courses in foreign languages (including sign language) and courses with the terms "culture, cultural, or ethnic" in the titles
- Industry-based courses - Courses with the words "industry" or "administration" in the title or courses completed in the following disciplines: Engineering, Architecture, and Real Estate
- Maximum 4 semester units in internships/independent studies in accounting and/or business-related subjects
For more information regarding the "Accounting Study" educational requirements set forth by the CBA please refer to:
http://www.dca.ca.gov/cba/applicants/ed-requirements.shtml
Note 2: While a bachelor's degree is not a prerequisite to obtain this certificate, the student needs to obtain a bachelor's degree for CPA exam eligibility (may occur concurrently). In addition to passing the Uniform CPA exam and meeting the educational requirements, an individual must also meet general accounting and business work experience as required by the CBA for licensure. Please refer to http:// www.dca.ca.gov/cba/index.shtml for a complete list of all requirements and options for licensure requirements for a CPA.
Note 3: A student may be eligible to sit for the CPA exam concurrent with obtaining this certificate. To qualify and sit for the Uniform CPA exam one will need a bachelor's degree and evidence of at least 24 semester units of business-related subjects and 24 semester units of accounting subjects. For more information regarding this requirement, please refer to: dca.ca.gov/cba/applicants/ed-requirements.shtml

| Ethics - Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ACCT 212 | Accountants' Ethics and Responsibilities | 4 |
| BUS 101 | Business Law | 3 |
|  | - or - |  |
| BUS 105 | Legal Environment of Business | 3 |
| PHIL 108 | Ethics | 3 |
| Accounting Study - Accounting Subjects Electives | Units |  |
| Select At Least 6 Units: | 2 |  |
| ACCT 035 | QuickBooks I | 2 |
| ACCT 036 | QuickBooks II | 4 |
| ACCT 104 | Federal and California Taxes | 3 |
| ACCT 108 | Tax Practices and Procedures | 2 |
| ACCT 113 | Intermediate Income Taxes - Corporations | 2 |
| ACCT 114 | Intermediate Income Taxes - Partnerships and | LLCs |
| ACCT 124 | Computerized Income Tax Preparation | 1 |
| ACCT 170 | Microsoft Dynamics for Financial Accounting - | 4 |
| ACCT 204 | Managerial Cost Accounting | 3 |
| ACCT 205 | Intermediate Accounting I | 3 |
| ACCT 206 | Intermediate Accounting II | 3 |



This certificate is designed for an individual that has a bachelor's degree other than in accounting that wishes to be licensed as Certified Public Accountant (CPA). This certificate in conjunction with Certificate of Professional Accounting - Business Subjects and Certificate of Professional Accounting - Accounting Study \& Ethics will prepare an individual for the CPA exam as well as meet the educational requirements for licensure. The courses contained in this certificate meet the specific course requirements of section "Accounting Subjects" set forth by the California Board of Accountancy (CBA). Upon successful completion of this certificate along with the Certificate of Professional Accounting - Business Subjects and Certificate of Professional Accounting - Accounting Study \& Ethics, a student will have taken all the necessary Accounting, Business and Ethics courses required for licensure (license granted upon successful passing of the Uniform CPA exam). CPA licensure affords promotional opportunities in public accounting, taxation, as well as administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. This certificate covers accounting principles necessary for financial reporting, analysis and critical review of accounting information. Entry-level employment opportunities include professional positions in financial statement auditing, income tax preparation, cost accounting, financial reporting and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these same areas.

## 70 INSTRUCTIONAL PROGRAMS

## Learning Outcome(s):

Upon successful completion of the program students will be able to:

1. Understand accounting concepts.
a. Students will demonstrate accounting concepts in the accounting classes through examination and practical exercises.
b. Students will prepare accounting financials based upon accounting principles.
2. Communicate effectively orally and in writing.
a. Students will draft research papers \& case study reports.
b. Students will use proper grammar, punctuation, and spelling.
3. Be proficient in using accounting technology.
a. Students will demonstrate the use of the Microsoft suite (Word, PowerPoint and Excel) in their completion of assignments.
b. Students will complete assignments using accounting-specific software.
4. Exhibit critical thinking skills.
a. Students will analyze cases related to the accounting specialty classes.
b. Students will analyze fact patterns to demonstrate the application of accounting principles to fact patterns.
Note 1: Some of the courses listed in this certificate overlap with courses listed in the Certificate of Professional Accounting Business Subjects and/or the Certificate of Professional Accounting - Accounting Study \& Ethics. It is imperative that an individual does not take any courses for this certificate that have already counted towards either the Certificate of Professional Accounting - Business Subjects or the Certificate of Professional Accounting - Accounting Study \& Ethics.
Note 2: While a bachelor's degree is not a prerequisite to obtain this certificate, the student needs to obtain a bachelor's degree for CPA exam eligibility (may occur concurrently). In addition to passing the Uniform CPA exam and meeting the educational requirements, an individual must also meet general accounting and business work experience as required by the CBA for licensure. Please refer to http:// www.dca.ca.gov/cba/index.shtml for a complete list of all requirements and options for licensure requirements for a CPA.
Note 3: A student may be eligible to sit for the CPA exam concurrent with obtaining this certificate. To qualify and sit for the Uniform CPA exam one will need a bachelor's degree and evidence of at least 24 semester-units of business-related subjects and 24 semester- units of accounting subjects. For more information regarding this requirement, please refer to: dca.ca.gov/cba/applicants/ed-requirements.shtml
Accounting Subjects - Required Core Courses:
Units

| ACCT 101 | Financial Accounting | 4 |
| :--- | :--- | :--- |
| ACCT 102 | Managerial Accounting | 4 |
| ACCT 104 | Federal and California Taxes | 4 |
| ACCT 205 | Intermediate Accounting I | 3 |
| ACCT 206 | Intermediate Accounting II | 3 |
| ACCT 211 | Auditing | 3 |

Accounting Subjects - Electives Select a minimum of 3 units: Units ACCT 113 Intermediate Income Taxes - Corporations 2

| ACCT 114 | Intermediate Income Taxes - Partnerships and | 2 |
| :--- | :--- | :--- |


| ACCT 204 | Managerial Cost Accounting | 3 |
| :--- | :--- | :--- |
| ACCT 210 | Accounting Information Systems | 3 |

ACCT 210 Accounting Information Systems

## Professional Accounting - Business Subjects Certificate (Transcripted) <br> Program code: sac.actbs.ca

This certificate is designed for an individual that has a bachelor's degree other than in accounting that wishes to be licensed as Certified Public Accountant (CPA). This certificate in conjunction with Certificate of Professional Accounting - Accounting Subjects and Certificate of Professional Accounting - Accounting Study \& Ethics will prepare an individual for the CPA exam as well as meet the educational requirements for licensure. The courses contained in this certificate meet the specific course requirements of section "Business Subjects" set forth by the California Board of Accountancy (CBA). Upon successful completion of this certificate along with the Certificate of Professional Accounting - Accounting Subjects and Certificate of Professional Accounting - Accounting Study \& Ethics, a student will have taken all the necessary Accounting, Business and Ethics courses required for licensure (license granted upon successful passing of the Uniform CPA exam). CPA licensure affords promotional opportunities in public accounting, taxation, as well as administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. This certificate covers business \& finance principles necessary for financial reporting, analysis and critical review of accounting information. Entry-level employment opportunities include professional positions in financial statement auditing, income tax preparation, cost accounting, financial reporting and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these same areas

## Learning Outcome(s):

Upon successful completion of the program students will be able to:

1. Understand accounting \& business concepts.
a. Students will demonstrate accounting \& business concepts in the certificate classes through examination and practical exercises.
b. Students will prepare accounting \& business reports based upon relevant accounting \& business principles.
2. Communicate effectively orally and in writing.
a. Students will draft research papers \& case study reports.
b. Students will use proper grammar, punctuation, and spelling.
3. Be proficient in using accounting technology
a. Students will demonstrate the use of the Microsoft suite (Word, PowerPoint and Excel) in their completion of assignments.
b. Students will complete assignments using accounting specific software.
4. Exhibit critical thinking skills.
a. Students will analyze cases related to the accounting specialty classes.
b. Students will analyze fact patterns to demonstrate the application of accounting principles to fact patterns.

Note 1: Some of the courses listed in this certificate overlap with courses listed in the Certificate of Professional Accounting Accounting Subjects and/or the Certificate of Professional Accounting - Accounting Study \& Ethics. It is imperative that an individual does not take any courses for this certificate that have already counted towards either the Certificate of Professional Accounting - Accounting Subjects or the Certificate of Professional Accounting - Accounting Study \& Ethics
Note 2: While a bachelor's degree is not a prerequisite to obtain this certificate, the student needs to obtain a bachelor's degree for CPA exam eligibility (may occur concurrently). In addition to passing the Uniform CPA exam and meeting the educational requirements, an individual must also meet general accounting and business work experience as required by the CBA for licensure. Please refer to http:// www.dca.ca.gov/cba/index.shtml for a complete list of all requirements and options for licensure requirements for a CPA.
Note 3: A student may be eligible to sit for the CPA exam concurrent with obtaining this certificate. To qualify and sit for the Uniform CPA exam one will need a bachelor's degree and evidence of at least 24 semester units of business-related subjects and 24 semester units of accounting subjects. For more information regarding this requirement, please refer to: dca.ca.gov/cba/applicants/ed-requirements.shtml

| Business Subjects - Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| ACCT 204 | Managerial Cost Accounting | 3 |
|  | - or - |  |
| ACCT 210 | Accounting Information Systems | 3 |
| ECON 120 | Principles/Macro | 3 |
| ECON 121 | Principles/Micro | 3 |
| MATH 219 | Statistics and Probability | 4 |
| Business Subjects - Electives - <br> Select a Minimum of 11 units from below or from any courses not taken in required section above: |  | Units |
| ACCT 108 | Tax Practices and Procedures | 3 |
| ACCT 113 | Intermediate Income Taxes - Corporations | 2 |
| ACCT 114 | Intermediate Income Taxes - Partnerships and LLCs | 2 |
| ACCT 124 | Computerized Income Tax Preparation | 1 |
| BA 188 | Microsoft Excel | 2 |
| BA 189 | Advanced Microsoft Excel | 2 |
| BUS 100 | Fundamentals of Business | 3 |
| BUS 120 | Principles of Management | 3 |
| BUS 121 | Human Relations and Organizational Behavior | 3 |
| BUS 130 | Personal Finance | 3 |
| BUS 140 | Principles of Finance | 3 |
| BUS 160 | Introduction to Stock and Bond Investments | 3 |
| BUS 222 | Business Writing | 3 |
| CMPR 167 | Microsoft Access | 3 |
| MKTG 113 | Principles of Marketing | 3 |

## Tax Preparer Certificate (Untranscripted)

## Program code: sac.taxpr.cert

A tax preparer certificate prepares a student with knowledge and practical experience for individual income tax preparation and receive the qualifying education required by the California Tax Education Council (CTEC) to become a California Registered Tax Preparer (CRTP).
California law requires anyone who prepares (or assists with) tax returns for a fee, and is not an attorney, certified public accountant (CPA) or enrolled agent (EA), to register as a tax preparer with CTEC.
All CTEC Registered Tax Preparers (CRTP) must...

- First complete qualifying tax education from a CTEC-Approved Provider
- Obtain a PTIN (Preparer Tax Identification Number) from the IRS
- Purchase a $\$ 5,000$ tax preparer bond
- Register with CTEC within 18 months from the completion date on the certificate of completion
- CTEC requires a Registration Fee (amount varies by year)

Upon completion of this certificate program, a student would fulfill the education requirement to become a CRTP.
Entry-level employment opportunities include tax specialist and tax practitioner.
Growth potentials include management-level positions and selfemployment opportunities.

## Learning Outcome(s):

1. Complete a Federal tax return
2. Student will be able to process and file an individual Federal tax return.
Required Core Courses: Units
ACCT 104 Federal and California Taxes 4
ACCT 125 Volunteer Income Tax Assistance (VITA) I 2

ACCT 106 | Cooperative Work Experience Education - |
| :--- |
| Occupational |$\quad 0.5-1$

ACCT 010 Accounting Procedures

- or -

ACCT 101 Financial Accounting 4
Total Units $9.5-11$

## ADMINISTRATION OF JUSTICE <br> (See Criminal Justice) <br> AMERICAN SIGN LANGUAGE <br> American Sign Language Certificate (Transcripted) <br> Program code: sac.sign.ca

The Certificate of Achievement in American Sign Language (ASL) is offered as preparation for developing linguistic competency in ASL and readiness for entering a formal Interpreter Training Program or as an added skill as a direct service provider: instructional assistant, social work, speech pathology, etc. The certificate indicates skill in the use of ASL for personal communication, knowledge of American Deaf Culture and and an introductory awareness of Sign Language Interpreting and other professions working within the American Deaf community.

## Learning Outcome(s):

1. Students will maintain an ongoing dialogue in ASL at an intermediate conversational level.
2. Students will acquire an understanding of American Deaf culture that will allow them to interact in culturally appropriate ways with members of the American Deaf community.

## 72 INSTRUCTIONAL PROGRAMS

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| ASL 110 | American Sign Language I | 4 |
| ASL 111 | American Sign Language II | 4 |
| ASL 113 | Introduction to Interpreting for the Deaf | 3 |
| ASL 114 | Classifiers, Fingerspelling, and Numbering | 3 |
| ASL 116 | Introduction to Deaf Studies | 3 |
| ASL 210 | American Sign Language III | 4 |
| CDEV 107 | Child Growth and Development (DS1) - or - | 3 |
| CDEV 205 | Introduction to Children with Special Needs - or - | 3 |
| PSYC 157 | Introduction to Child Psychology - or - | 3 |
| PSYC 170 | Multicultural Psychology - or - | 3 |
| SLPA 160 | Introduction to Communicative Disorders and Treatment - or - | 3 |
| THEA 110 | Acting Fundamentals | 3 |

## ANTHROPOLOGY

## Option 1

## Anthropology Degree

## Program code: sac.anth.aa

The associate degree curriculum in anthropology is designed as a program of basic courses for students considering professional careers as archeologists, ethnographers, linguists, physical anthropologists; for those preparing to become social science teachers in elementary or secondary schools; for such diverse fields as psychology, medicine, law, political science, international relations, economics, or history; and for individuals who plan public service careers in social work, health and welfare programs, foreign service. Students should consult with faculty members for advice in selecting course offerings best suited to the individual's particular career objectives. The associate of arts degree prepares the student to move into a curriculum at a four-year institution leading to a baccalaureate degree in these careers. Consult a counselor for information about course requirements for specific universities.

## Learning Outcome(s):

Students will recognize and analyze the complex diversity of humans and their ancestors by examining our biological, cultural and evolutionary adaptation utilizing the scientific method.

## Required Core Courses: Units

ANTH $100 \quad$ Introduction to Cultural Anthropology
ANTH 100H Honors Introduction to Cultural Anthropology 3
ANTH 101 Introduction to Physical Anthropology 3
ANTH 103 Introduction to Archeology 3
*ANTH 104 Language and Culture

- or -
*ANTH 104H Honors Language and Culture
In addition to the above requirements, an additional minimum of 6 units for the Anthropology Major may be taken from Category A or Category B below.


## Category A

If your emphasis is cultural anthropology consider category $A$ :
ANTH 105 Ancient Mesoamerican Civilization 3
ANTH 108 Religion, Magic, and Witchcraft 3
**ANTH 125 Native Americans in the U.S. 3
ECON 120 Macroeconomics 3

ETHN 101 Introduction to Ethnic Studies 3

- or -

ETHN 101H Honors Introduction to Ethnic Studies 3
GEOG 100 World Regional Geography 3

- or -

GEOG 100H Honors World Regional Geography 3
GEOG 102 Cultural Geography 3

- or -

GEOG 102H Honors Cultural Geography 3
3 HIST 101 World Civilizations to the 16th Century 3

- or -

HIST 101H Honors World Civilizations to the 16th Century 3
IDS 117H Honors Introduction to Global Studies 3

PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H, Honors Introduction to Psychology 3
SOC 100 Introduction to Sociology 3

- or -

SOC 100H Honors Introduction to Sociology 3
WMNS 101 Introduction to Women's Studies 3
Category B
If your emphasis is physical anthropology consider category $B$ :

| ANTH 101L | Physical Anthropology Laboratory | 1 |
| :--- | :--- | :--- |
| ANTH 107 | Introduction to Forensic Anthropology | 3 |
| BIOL 109 | Fundamentals of Biology | 3 |


| BIOL 109H | Honors Fundamentals of Biology |  |
| :--- | :--- | :--- |
| BIOL 109L | Fundamentals of Biology Laboratory | 1 |

BIOL 127 Ecology 1

BIOL 149 Human Anatomy and Physiology $\quad 4$
BIOL 177 Human Genetics 3
BIOL 211 Cellular and Molecular Biology 5
BIOL 212 Animal Diversity and Ecology $\quad 5$

GEOL 101 Introduction to Geology 3
GEOL 101L Introduction to Geology Laboratory $\quad 1$
Total Units 18
It is strongly recommended that Anthropology majors transferring to the CSU or UC system complete Foreign Language courses at the 201 and 202 level, and/or MATH 219/219H.

* Note: ANTH 104 or 104 H are alternately listed as ENGL 104 or 104H.
** Note: ANTH 105 and ANTH 125 are alternately listed as HIST 105 and HIST 125.


## Option 2

## Associate in Arts Degree in Anthropology for Transfer Program code: sac.anth.aat

The Associate in Arts in Anthropology for Transfer (AA-T in Anthropology) is designed to prepare students for transfer into the CSU system to complete a baccalaureate degree in Anthropology. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the Associate in Arts in Anthropology for Transfer degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Anthropology major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the Associate in Arts in Anthropology for Transfer (AA-T in Anthropology)students will have an understanding of both the breadth and depth of the Anthropology discipline. This knowledge will be grounded in the comprehension of Anthropology principles, concepts, ideas, theories, research, and terminology. Students will also have the capacity to write and think in a critical and analytical way about issues pertaining to Anthropology and its application.

## Learning Outcome(s):

Students will recognize and analyze the complex diversity of humans and their ancestors by examining our biological, cultural and evolutionary adaptation utilizing the scientific method.
$\left.\begin{array}{llr}\text { Required Core (9 units) } & \text { Units } \\ \text { ANTH } 100 & \text { Introduction to Cultural Anthropology } \\ & \text { - or - }\end{array}\right)$

List C: Select One (3 units)

| Any course from List A or B not already used. |  |  |
| :---: | :---: | :---: |
| ANTH 105 | Ancient Mesoamerican Civilization | 3 |
| ANTH 108 | Religion, Magic, and Witchcraft | 3 |
| ANTH 125 | Native Americans in the U.S. | 3 |
| ENGL 102 | Literature and Composition | 3 |
|  | - or- |  |
| ENGL 102H | Honors Literature and Composition | 3 |
| SOC 100 | Introduction to Sociology | 3 |
|  | - or- |  |
| SOC 100H | Honors Introduction to Sociology | 3 |
| GEOG 102 | Cultural Geography | 3 |
| PHIL 112 | World Religions | 3 |

## ARCHITECTURE

(See Engineering-Drafting and Design Program Option II)

## ART

Option 1

## Art Degree

## Program code: sac.art.aa

The associate degree curriculum in art provides students with an opportunity for individual creative stimulus and development. Completion of the associate in arts degree also prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree or into a professional art school. Please consult a SAC counselor for information about course requirements for particular institutions. Careers in fine arts include art education, interior design, gallery operation, art merchandising, studio artist, illustration, art criticism, computer graphics, and animation and related fields.

## Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will possess technical skills (at the sophomore level) for producing art in several media
3. Students will demonstrate competency and acquire experience in creating original work for public display.

## Required Core Courses: Units

$\left.\begin{array}{lll}\text { ART 100 } & \begin{array}{l}\text { Introduction to Art Concepts } \\ \text { - or- }\end{array} & 3 \\ \text { ART 100H } & \text { Honors Introduction to Art Concepts }\end{array}\right)$

## 74 INSTRUCTIONAL PROGRAMS

| Electives: Choose 3 units from the list below: | Units |
| :--- | :--- | ---: |
| ART 009 Art Lab 0.5 <br> ART 010 Advanced Art Lab 0.5 <br> ART 103 Arts of Africa, Oceania, and Indigenous North 3 <br> ART 104 America Mexican and Chicano Art History <br> ART 106 Asian Art History 3 <br> ART 108 Contemporary Art History: Art Since Mid- 3 |  |

ART 121A Fundamentals of Typography 3

| ART 121B | Advanced Typography | 3 |
| :--- | :--- | :--- |
| ART 122 | Graphic Design I | 3 |

ART 132A Beginning Pastel Drawing and Painting $\quad 3$
ART 132B Intermediate Pastel Drawing and Painting $\quad 3$

| ART 140A | Watercolor Painting | 2 |
| :--- | :--- | :--- |
| ART 140B | Watercolor Painting | 2 |


| ART 143 | Landscape Watercolor | 2 |
| :--- | :--- | :--- |


| ART 150 | Primitive Pottery Techniques | 3 |
| :--- | :--- | :--- |
| ART 154 | Ceramics Summer Workshop | 3 |ART $156 \quad$ Clay Calculation: An Approach in Color Study $\quad 3$


| ART 157 | Ceramics-Raku and Saggar Firing Techniques | 3 |
| :--- | :--- | :--- |
| ART 158 | Ceramic Mural Project | 3 |


| ART 159A | Ceramic Color Decoration: Low Temperature | 3 |
| :--- | :--- | :--- |
| ART 159B | Ceramic Color Decoration: High Temperature | 3 |

ART 164 Web Design

| ART 165 | 3D Character Animation | 3 |
| :--- | :--- | :--- |
| ART 166A | 3D Texturing and Lighting Fundamentals | 3 |
| ART 167 | 3D Commercial Applications | 3 |


| ART 182 | Introduction to Jewelry | 3 |
| :--- | :--- | :--- |
| ART 195 | Introduction |  |


| ART 195 | Introduction to Digital Media Arts | 3 |
| :--- | :--- | :--- |
| ART 196A | 3D Modeling Fundamentals | 3 |

ART 230 Intermediate Drawing 3

| ART 231 | Intermediate Life Drawing | 1.5 |
| :--- | :--- | :--- |
| ART 232 | Advanced Life Drawing | 1.5 |


| ART 233 | Advanced Drawing | 3 |
| :--- | :--- | :--- |
| ART 240 | Intermediate Watercolor | 2 |


| ART 241 | Intermediate Painting | 3 |
| :--- | :--- | :--- |


| ART 242 | Advanced Painting | 1.5 |
| :--- | :--- | :--- |
| ART 243 | Portraitand |  |


| ART 243 | Portrait and Life Painting | 1.5 |
| :--- | :--- | ---: |
| ART 251 | Ceramics-Advanced Throwing and <br> Handbuilding | 3 |


|  | Handbuilding |  |
| :--- | :--- | :--- |
| ART 252 | Ceramics-Advanced Study Process in Ceramics <br> with Non-Traditional Media | 3 |


| ART 253 | Electric Kiln Ceramics | 3 |
| :--- | :--- | :--- |
| ART 282 | Jewelry II | 3 |


| ART 283 | Jewelry III | 3 |
| :--- | :--- | :--- |
| ART 298 | Art Practicum | 1 |

ART 298 Art Practicum

## Option 2(A)

## Associate in Arts in Art History for Transfer Program code: sac.arth.aat

The Associate in Arts in Art History for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in Art History. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, (admission is not guaranteed to a specific major or campus), along with priority admission consideration to the local CSU in the Art History major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Art History, students will be able to recognize, distinguish and categorize major art achievements and their relationship to history and culture through formal analysis of art works, comparison and contrast of artistic styles, and general assessment of the cultural diversity of human artistic expressions and their meanings around the world in different eras by means of both oral and written assignments such as oral presentations, written essays, and general exams.

## Learning Outcome(s):

1. Students will possess general knowledge of the monuments, movements and principal artists of major art periods of the past, including a broad understanding of the art of the twentieth century and acquaintance with the art history beyond Europe and the United States.
2. Students will demonstrate at the sophomore level skills in theory, analysis and criticism
3. Students will demonstrate a working knowledge of the tools and techniques of scholarship and be experienced in analytical and critical writing as well as presenting their research orally.
Required Core Courses:
ART 104 Mexican and Chicano Art History 3
ART 106 Asian Art History 3
List B: Select One Course (3 units) Units
ART 110 Two-Dimensional Design 3
ART 111 Three-Dimensional Design 3
ART 131 Beginning Life Drawing 3
ART 151 Ceramics-Introductory Level 3
ART 195 Introduction to Digital Media Arts 3
PHOT 180 Beginning Photography 3
List C: Select One Course (3 units) Units

Any course from List A or B not already used.
ART 105 History of Modern Art

ART 108 | Contemporary Art History: Art Since Mid- |
| :--- | :--- |
| Century |

Century

| HIST 101 | World Civilizations to the 16th Century | 3 |
| :---: | :---: | :---: |
|  | - or - |  |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century | 3 |
|  | - or - |  |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| IDS 121 | Humanities Through the Arts | 3 |
| PHIL 112 | World Religions | 3 |
|  | Total Units | 18 |

## Option 2(B)

## Associate in Arts in Studio Arts for Transfer

## Program code: sac.start.aat

The Associate in Arts in Studio Arts for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in Studio Arts and then into careers in fine arts include art education, interior design, gallery operation, art merchandising, studio artist, illustration, art criticism, computer graphics and animation, and related fields. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, (admission is not guaranteed to a specific major or campus), along with priority admission consideration to the local CSU in the Studio Arts major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-
T) degrees. Upon completion of the AA-T in Studio Arts, students will be able to recognize specific styles of art, apply vocabulary pertinent to the discussion of art both in and out of the classroom, and demonstrate an understanding of the technical processes of various art media by developing an art portfolio that demonstrates a broad knowledge of subject matter. Furthermore, students will be able to demonstrate an understanding of the principles of design and the elements of art, as well as identify relationships between art and society in which it is created, and apply developed criteria for viewing and judging art.

## Learning Outcome(s):

1. Students will possess technical skills (at the sophomore level) for producing art in several media
2. Students will demonstrate competency and acquire experience in creating original work for public display
3. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena.

## Required Core Courses:

| ART 102 | Survey of Western Art History II: Renaissance <br> through the Twentieth Century | 3 |
| :--- | :--- | ---: |
| ART 110 | Two-Dimensional Design | 3 |
| ART 111 | Three-Dimensional Design | 3 |
| ART 130 | Introduction to Drawing | 3 |
| List A: Select One Course (3 units) | Units |  |
| ART 101 | Survey of Western Art History I: Prehistory <br> through the Middle Ages | 3 |
| ART 103 | African Art History | 3 |
| ART 104 | Mexican and Chicano Art History | 3 |
| ART 105 | History of Modern Art | 3 |
| ART 106 | Asian Art History | 3 |


| List B: Select Three Courses (9 units) | Units |  |
| :--- | :--- | ---: |
| ART 131 | Beginning Life Drawing | 3 |
| ART 141 | Beginning Painting | 3 |
| ART 151 | Ceramics-Introductory Level | 3 |
| ART 182 | Introduction to Jewelry | 3 |
| ART 195 | Introduction to Digital Media Arts |  |
| ART 230 | Intermediate Drawing | 3 |
| PHOT 180 | Beginning Photography | 3 |
|  |  |  |

## Crafts Option Certificate

The certificate program in crafts offers courses that provide the aesthetic, technical knowledge and special skills necessary to design and produce hand crafted objects. Whether the interest is in exhibiting crafts as an art form or producing work with more commercial applications, the program provides for study in two areas, jewelry/ crafts and ceramics/crafts. This program is primarily designed to prepare art students as freelance artists/craftsmen.

## Crafts Certificate A-Jewelry Emphasis Certificate (Transcripted) <br> Program code: sac.artjw.ca

Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design.
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will acquire the aesthetic knowledge and technical skills (including stone-setting and enameling) necessary to become a freelance artist/craftsman who creates hand-crafted jewelry.

## Required Core Courses: <br> Units

ART 130 Introduction to Drawing 3
ART 182 Introduction to Jewelry 3
ART 282 Jewelry 3
ART 283 Advanced Jewelry 3

| ART 284 | Introduction to Stone Setting-Jewelry | 2 |
| :--- | :--- | :--- |
| ART 285 | Introduction to Enameling-Jewelry | 2 |

Total Units
16

## Crafts Certificate D-Ceramics Emphasis Certificate (Untranscripted)

Program code: sac.artce.cert
Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will possess the aesthetic knowledge and technical skills (including throwing, hand building and non-traditional media) necessary to become a freelance artist/craftsman who creates hand-crafted ceramics.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ART 100 | Introduction to Art Concepts | 3 |
| ART 111 | Three-Dimensional Design | 3 |
| ART 251 | Advanced Throwing and Hand Building | 3 |
| ART 252 | Advanced Study Process in Ceramics with Non- <br> Traditional Media | 3 |
| ART 253 | Electric Kiln Ceramics |  |
|  |  | Total Units |

## 76 INSTRUCTIONAL PROGRAMS

## Art-Graphic Design Degree

## Program code: sac.artgd.aa

The associate degree curriculum in graphic design prepares students for entry into the broad field of visual communication with an emphasis on the development of problem solving in the practical application of graphic design. These applications include design for the print media, advertising, architectural and environmental graphics, packaging, logos, corporate identity, the web and other electronic media, using both digital media tools as well as traditional hand skills. Degree Program A emphasizes skills for entry level employment in advertising agencies, print houses, design studios, freelance work, and related businesses. It also prepares students to apply to a four-year institution leading to a baccalaureate degree or into a professional art school with a graphic design emphasis. Degree Program B is specifically geared for students to transfer to a state university leading to a baccalaureate degree with more intense study of graphic design skills and applications. Completion of this associate degree also provides for entry into a profession in a variety of areas: e.g., advertising agency, printing house, design studio, freelance work and related businesses. Students planning for transfer should be aware that each university has unique degree requirements. Please consult a SAC counselor for information about course requirements for particular four-year institutions.

## Degree Program A-Professional Emphasis Or Transfer Preparation To Art School

## Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will acquire competency and experience in creating original work for public display.
Required Core Courses:

| ART 100 | Introduction to Art Concepts | 3 |
| :--- | :--- | :--- |
|  | -or - | 3 |
| ART 100H | Honors Introduction to Art Concepts | 3 |
| ART 105 | History of Modern Art | 3 |
| ART 110 | Two-Dimensional Design | 3 |
| ART 111 | Three-Dimensional Design | 3 |
| ART 121A | Fundamentals of Typography | 3 |
| ART 121B | Advanced Typography | 3 |
| ART 122 | Graphic Design I | 3 |
| ART 130 | Introduction to Drawing | 3 |
| ART 168 | Digital Media: Portfolio and Business Strategies | 3 |

Electives: Choose a minumum of 3 units Units

| ART 009 Art Lab | 0.5 |
| :--- | :--- |

ART 010 Advanced Art Lab 0.5
ART 131 Beginning Life Drawing 3
ART 140A Watercolor Painting 2

ART 195 Introduction to Digital Media Arts

| ART 198 | Topics | 2.5 |
| :--- | :--- | :--- |


| ART 221 | Graphic Design II | 3 |
| :--- | :--- | :--- |

ART 230 Intermediate Drawing 3
ART 298 Art Practicum $\quad 1$

| CMSD 123A | News Media Production | 4 |
| :--- | :--- | :--- |
| TELV 105 | Mass Media and Society | 3 |


|  | or - |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
| TELV 105H | Honors Mass Media and Society |  |  |  |
|  | Total Units | 33 |  |  |

## Degree Program B-Transfer to State University

Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will acquire competency and experience in creating original work for public display.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| ART 100 | Introduction to Art Concepts | 3 |
|  | - or - |  |
| ART 100H | Honors Introduction to Art Concepts | 3 |
| ART 101 | Survey of Western Art History I | 3 |
| ART 102 | Survey of Western Art History II | 3 |
| ART 105 | History of Modern Art | 3 |
| ART 110 | Two-Dimensional Design | 3 |
| ART 111 | Three-Dimensional Design | 3 |
| ART 121A | Fundamentals of Typography | 3 |
| ART 121B | Advanced Typography | 3 |
| ART 130 | Introduction to Drawing | 3 |
| ART 131 | Beginning Life Drawing | 3 |
| ART 141 | Beginning Painting | 3 |
| ART 168 | Digital Media: Portfolio and Business Strategies | 3 |
| Electives: Choose a minumum of 3 units |  | Units |
| ART 009 | Art Lab | 0.5 |
| ART 010 | Advanced Art Lab | 0.5 |
| ART 122 | Graphic Design I | 3 |
| ART 123 | Gallery Practices | 3 |
| ART 132A | Beginning Pastel Drawing and Painting | 3 |
| ART 140A | Watercolor Painting | 2 |
| ART 195 | Introduction to Digital Media Arts | 3 |
| ART 198 | Topics | 2.5 |
| ART 221 | Graphic Design II | 3 |
| ART 230 | Intermediate Drawing | 3 |
| ART 298 | Art Practicum | 1 |
| CMSD 123A | News Media Production | 4 |
| PHOT 180 | Beginning Photography | 3 |
| Total Units |  | 39 |

## 3D Modeling and Animation Certificate A - Art Emphasis Certificate (Transcripted)

Program code: sac.art3a.ca
he certificate program in 3D modeling and animation addresses the fundamental requirements that 3D artists are expected to know for entry-level positions in animation studios, advertising commercials, and video game companies, as well as bioscience, product, industrial and architectural design. Employment opportunities exist with small and large companies serving a broad spectrum of clientele in the delivery of still, animated, and interactive presentations. The certificate program is designed to develop the core technical skills required for these vast arenas of applications, as well as to increase the student's visual communication vocabulary and to raise awareness of the distinctive and evolving opportunities available in 3D

## Learning Outcome(s):

Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design.
Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena.
Students will demonstrate competency in the core technical skills for 3-D animation and modeling.
Required Core Courses: Units

| ART 184 | Art of Animation I | 3 |
| :--- | :--- | ---: |
|  | - or - | 3 |
| ART 195 | Introduction to Digital Media Arts | 3 |
|  | - and - | 3 |
| ART 185 | Fundamentals of Cartooning and Storyboarding | 3 |
| ART 166 | Creating Realism with Textures and Lights | 3 |
| Second semester, complete: 0 | 3 |  |
| ART 167 | 3D Commercial Applications | 3 |
| ART 196A | 3D Modeling Fundamentals | 5 |
| ART 197A | 3D Animation Fundamentals | 5 |
| ART 296 | Professional Art Production |  |
|  |  | Total Units |

## Art-Digital Media Arts Degree

## Program code: sac.artdm.aa

The associate degree program in Art-Digital Media Arts merges fine arts and technical knowledge required to develop skills necessary in two areas: graphic design and web design. Completion of the associate degree prepares students to move into curriculum at a four-year institution leading to a baccalaureate degree or into a professional art school with an emphasis in digital media art. Please consult a SAC counselor for information about course requirements for particular four-year institutions. Completion of the associate degree also provides for entry into a profession in a variety of areas: advertising agency, printing business, design studio, web production, freelance designer or related fields.
Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will acquire competency and experience in creating original work for public display.

## Required Core Courses:

Units

| ART 100 | Introduction to Art Concepts <br> -or- | 3 |
| :--- | :--- | :--- |
| ART 100H | Honors Introduction to Art Concepts <br> -or- | 3 |
| ART 107 | History of Animation | 3 |
| ART 110 | Two-Dimensional Design | 3 |
| ART 121A | Fundamentals of Typography | 3 |
| ART 122 | Graphic Design I | 3 |
| ART 129 | Introduction to Web Design | 3 |
| ART 130 | Introduction to Drawing | 3 |
| ART 162 | Digital Design with Photoshop-I | 3 |
| ART 168 | Digital Media: Portfolio and Business Strategies | 3 |
| ART 191A | Digital Publishing with InDesign | 3 |
| ART 192A | Digital Illustration with Illustrator | 3 |
| ART 195 | Introduction to Digital Media Arts | 3 |
|  |  |  |


| Choose electives from the list below: 3 units | Units |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
| ART 009 | Art Lab | 0.5 |  |  |
| ART 101 | Survey of Western Art History I: Prehistory <br> through the Middle Ages | 3 |  |  |
| ART 111 | Three-Dimensional Design | 3 |  |  |
| ART 121B | Advanced Typography | 3 |  |  |
| ART 125 | Cooperative Work Experience - Occupational | 1 -6 |  |  |
| ART 131 | Beginning Life Drawing | 3 |  |  |
| ART 141 | Beginning Painting | 3 |  |  |
| ART 193 | Motion Graphics with Adobe After Effects | 3 |  |  |
| ART 196A | 3D Modeling Fundamentals | 5 |  |  |
| ART 197A | 3D Animation Fundamentals | 5 |  |  |
| ART 221 | Graphic Design II | 3 |  |  |
| ART 230 | Intermediate Drawing | 3 |  |  |
| CMPR 100 | The Computer and Society | 3 |  |  |
| PHOT 180 | Beginning Photography |  |  |  |
| PHOT 191 | Intermediate Digital Photography |  |  |  |
|  |  |  |  |  |

## Digital Media Arts Certificate A-Production Artist Certificate (Transcripted)

## Program code: sac.dmapa.ca

The certificate programs in Digital Media Arts reflect the rapidly changing industry of the advertising/graphic design field in relation to graphic design for printed media, the impact of web design on e-commerce, and the integration of motion graphics into this field. The programs are designed with a combination of digital media courses to develop technical skills and creativity in the areas of digital imaging, publishing,front-end web design, and media design. Graduates of these programs will find entry into the profession at various levels with employment opportunities in the fields of advertising, graphic design, social media, printing industry, and e-commerce.

## Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will demonstrate competency in graphic design, digital publishing and digital illustration.

## Required Core Courses: <br> Units

ART 121A Fundamentals of Typography 3
ART 122 Graphic Design I 3

ART 168 Graphic Design II: Branding \& Identity 2
ART 195 Introduction to Digital Media Arts 3
3 units from Design Coursework Units
ART 162 Digital Illustration I 3
ART 191A Layout Design 3
ART 192A Digital Illustration II: Advanced Topics 3
3 units from Media Coursework Units
ART 164 Web Design 3
ART 193 Motion Graphics with Adobe After Effects 3
Total Units 17

## 78 INSTRUCTIONAL PROGRAMS

## Digital Media Arts Certificate B-UX Design Certificate (Transcripted)

## Program code: sac.dmbux.ca

The certificate programs in Digital Media Arts reflect the rapidly changing industry of the advertising/graphic design field in relation to graphic design for printed media, the impact of web design on e-commerce, and the integration of motion graphics into this field. The programs are designed to address developing technical skills and creativity in the areas of digital imaging, online page layout, graphic principles of web design, responsive design and interactives design elements for multimedia presentation. Graduates of these programs will find entry into the profession at various levels with employment opportunities in the fields of social media management, graphic design, communications and online marketing.

## Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will demonstrate competency in graphic design, digital illustration and web design.

## Required Core Courses:

| ART 121A | Fundamentals of Typography | 3 |
| :--- | :--- | ---: |
| ART 162 | Digital Illustration I | 3 |
| ART 164 | Web Design | 3 |
| ART 185 | Fundamentals of Cartooning and Storyboarding | 3 |
| ART 195 | Introduction to Digital Media Arts | 3 |
| 3 units from | Electives | Units |
| ART 122 | Graphic Design I | 3 |
| ART 125 | Cooperative Work Experience - Occupational | $1-6$ |
| CMPR 118 | JavaScript Programming | 3 |
| ENTR 105 | Social Media, Bootstrapping, and Market | 2 |

Total Units $18-21$

## Public and Community Art - Mural Painting Certificate (Transcripted)

## Program code: sac.artmu.ca

The certificate program in Public and Community Art - Mural Painting is designed to prepare students for employment in both the designing and painting of large-scale public art murals. These murals are in demand by communities (such as city governments, schools, parks) to enhance and beautify public and private sites and to combat blight and graffiti. Public and private institutions use murals to brand their visual logos and promote specific messages on their public sites. Private businesses also want to brand their locations with large paintings or murals that include visual images and graphic signage. Students in this program will utilize both digital and traditional techniques from visual composition, illustration, sign painting, and fine art painting while integrating historical, traditional and contemporary mural painting styles. Students will also gain the specialized training needed (including how to prepare exterior walls for murals, specialized paints and protective coatings, safety measures and specialized equipment, and composing designs digitally for large application) to confidently seek employment in the above areas.

Career opportunities include being the fine artist who creates, designs and paints murals, and/or using the acquired skills to be hired for mural restoration, as a fine arts painter, illustrator or the creation of handpainted graphics; set and exhibit designer and creator, and also painter for construction and maintenance purposes.

## Learning Outcome(s):

1. Demonstrate visual literacy, including competency in the nonverbal languages of art and design
2. Demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Demonstrate competency in skills necessary for mural painting including large scale rendering, wall preparation and safety protocols
4. Competency and experience in the production process of creating original work on deadline for mural projects
Required Core Courses: Units
ART 110 Two-Dimensional Design 3

ART 130 Introduction to Drawing 3

- or -
ART 141 Beginning Painting 3
ART 131 Beginning Life Drawing 3
ART 190 Introduction to Mural Painting and Design 3
ART 195 Introduction to Digital Media Arts 3
ART 291 Mural Painting and Design II 3
ART 292 Mural Painting and Design III 3
Electives: Choose 1 course from the list below: Units
ART 122 Graphic Design I 3
ART 124 Gallery Production 2
ART 158 Ceramic Mural Project 3

ART 168 Digital Media: Portfolio and Business Strategies 3
ART 192A Digital Illustration with Illustrator 3
ART 232 Advanced Life Drawing 3
ART 242 Advanced Painting 3

Total Units 23-24

## AUTOMOTIVE TECHNOLOGY

## Automotive Technology Degree

## Program code: sac.auto.as

In addition to the general education requirements, the associate degree curriculum in automotive technology is designed to prepare the student for employment in modern automotive service and repair. Technical instruction includes lecture and lab experiences in a variety of automotive subjects which the student may select according to his/ her interests. Employment opportunities are available in dealerships, independent shops and civil service, both domestic and import.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses: ..... Units
AUTO 102 Auto Essentials ..... 3

- or -
AUTO 106 Automotive Maintenance ..... 4
Plus 25 units selected from the following: ..... Units
AUTO 108 Oxyacetylene-Arc Welding ..... 3
AUTO 122 Electronics Fundamentals ..... 5
AUTO 124 Electrical Systems ..... 5
AUTO 132 Engine Performance ..... 5
AUTO 143 Automatic Transmission Service ..... 4
AUTO 144 Manual Drive Train and Axles ..... 4
AUTO 145 Advanced Drive Train Systems ..... 5

| AUTO 153 | Brakes | 4.5 |
| :---: | :---: | :---: |
| AUTO 154 | Steering and Suspension Service | 4.5 |
| AUTO 160 | Foundations of Mobile Air Conditioning and Refrigeration |  |
| AUTO 161 | Automotive Air Conditioning, Heating and Ventilation Systems |  |
| AUTO 172 | Engine Diagnosis and Maintenance | 4.5 |
| AUTO 176 | Engine Repair | 4.5 |
| AUTO 185 | Basic Clean Air Car Course |  |
| AUTO 186 | Advanced Clean Air Car Course |  |
| AUTO 187 | BAR Specified Diagnostic and Repair |  |
| AUTO 280 | Computer Control and OBD-2 Foundations |  |
| AUTO 281 | Fuel Injection Systems |  |
| AUTO 282 | Automotive Sensors |  |
| AUTO 283 | Diagnostic Test Equipment |  |
| AUTO 284 | OBD-2 Diagnosis and Networks |  |
| AUTO 285 | Hybrid Vehicles |  |
| AUTO 287 | Alternative Fuels |  |
| AUTO 288 | Diesel Engines: Light-Medium Duty Systems | 3 |
|  | Total U | -33 |
| Advanced Engine Performance Option Certificate (Transcripted) |  |  |
| Program code: sac.autae.ca |  |  |
| The certificate curriculum in advanced engine performance is designed to prepare students for entry into the specialized field of diagnosing, testing, and repairing computer controlled ignition, fuel and emission systems. It is recommended that students complete the Engine Performance and Electrical Option Certificate or have an equivalent trade experience. |  |  |

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

## Required Core Courses: Units

| AUTO 280 | Computer Control and OBD-2 Foundations | 3 |
| :--- | :--- | ---: |
| AUTO 281 | Fuel Injection Systems | 3 |
| AUTO 282 | Automotive Sensors | 3 |
| AUTO 283 | Diagnostic Test Equipment | 3 |
| AUTO 284 | OBD-2 Diagnosis and Networks |  |
|  | Total Units | 15 |

## Automotive Business Technology Certificate (Transcripted)

## Program code: sac.autbu.ca

The certificate curriculum in Automotive Business Technology is designed to prepare the student to better understand the business of automotive technology. The student completes automotive courses in their area of interest, such as Air Conditioning \& Heating, Fuel Injection Systems, Electrical Systems, etc., as well as essential business courses in Accounting, Management, Small Business Operations, or Marketing. Students would be qualified for entry level positions as Automotive Service Technicians and Mechanics in dealerships, service establishments, automotive centers, and self-employment in the auto industry. Through the completion of this program, an automotive technician would be better aware of the technical and business aspects of the automotive industry.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| AUTO 122 | Electronics Fundamentals | 5 |
| BUS 100 | Fundamentals of Business | 3 |
| Electives: 9 Units. Select electives from the following list: | Units |  |
| AUTO 124 | Electrical Systems | 5 |
| AUTO 132 | Engine Performance | 5 |
| AUTO 143 | Automatic Transmission Service | 4 |
| AUTO 144 | Manual Drive Train and Axles | 4 |
| AUTO 145 | Advanced Drive Train Systems | 5 |
| AUTO 153 | Brakes | 4.5 |
| AUTO 154 | Steering and Suspension Service | 4.5 |
| AUTO 160 | Foundations of Mobile Air Conditioning and | 5 |
| Refrigeration | 5 |  |
| AUTO 161 | Automotive Air Conditioning, Heating and | 5 |
| Ventilation Systems 172 | Engine Diagnosis and Maintenance | 4.5 |
| AUTO 176 | Engine Repair | 4.5 |
| AUTO 185 | Basic Clan Air Carser |  |

AUTO 185 Basic Clean Air Car Course ..... 5
AUTO 186 Advanced Clean Air Car Course ..... 2
AUTO 187 BAR Specified Diagnostic and Repair ..... 5
AUTO 280 Computer Control and OBD-2 Foundations ..... 3
AUTO 281 Fuel Injection Systems ..... 3
AUTO 282 Automotive Sensors ..... 3
AUTO 283 Diagnostic Test Equipment ..... 3
AUTO 284 OBD-2 Diagnosis and Networks ..... 3
AUTO 285 Hybrid Vehicles ..... 3
AUTO 287 Alternative Fuels ..... 3
AUTO 288 Diesel Engines: Light-Medium Duty Systems ..... 3
Electives: 3 Units. Select electives from the following list: ..... Units
ACCT 010 Accounting Procedures ..... 3
BUS 120 Principles of Management ..... 3
BUS $170 \quad$ Principles of Small Business Management ..... 3
MKTG 113 Principles of Marketing ..... 3
Total Units 20-24

## Chassis Service Option Certificate (Transcripted)

## Program code: sac.autcs.ca

The certificate curriculum in chassis service is designed to prepare the student for entry into the specialized field of brake, front suspension and steering service on both import and domestic vehicles.
Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

| Required Core Courses: | Units |  |  |
| :--- | :--- | :--- | ---: |
| AUTO 102 | Auto Essentials | 3 |  |
|  | - or- |  | 4 |
| AUTO 106 | Automotive Maintenance |  | 4.5 |
| AUTO 122 | Electronic Fundamentals |  | 4.5 |
| AUTO 153 | Brakes |  |  |
| AUTO 154 | Steering and Suspension Service |  | Total Units |

## Drive Train Service Option Certificate (Transcripted)

## Program code: sac.autdt.ca

The certificate curriculum in drive train service is designed to prepare the student for entry into the specialized field of standard and automatic transmissions, driveline, and differential service and repair on both import and domestic vehicles.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

| Required Core Courses: | Units |  |  |
| :--- | :--- | ---: | :--- |
| AUTO 102 | Auto Essentials | 3 |  |
|  | - or - |  |  |
| AUTO 106 | Automotive Maintenance | 4 |  |
| AUTO 122 | Electronics Fundamentals | 5 |  |
| AUTO 143 | Automatic Transmission Service | 4 |  |
|  | - or - |  |  |
| AUTO 144 | Manual Drive Train and Axles |  |  |
| AUTO 145 | Advanced Drive Train Systems |  | 5 |
|  |  | Total Units | $17-18$ |

## Engine Performance and Electrical Option Certificate (Transcripted)

Program code: sac.autep.ca
The certificate curriculum in tune-up and electrical service engine performance is designed to prepare students for entry into the specialized field of domestic and import automotive engine performance, electrical and air conditioning service. Advances in electronics have increased the demand for technical skills and knowledge in these specialized areas.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses:
Units
AUTO 122 Electronic Fundamentals
AUTO 124 Electrical Systems 5
AUTO 132 Engine Performance
AUTO 160 Foundations of Mobile Air Conditioning and Refrigeration

AUTO 161 Automotive Air Conditioning, Heating and Ventilation Systems

Total Units

## Engine Service Option Certificate (Transcripted)

## Program code: sac.autes.ca

The certificate curriculum in engine service is designed to prepare students as engine service helpers and apprentices. Course content includes engine diagnostic skills, measurement, engine teardown, and assembly. Timing belts, variable cam timing, turbochargers, and other engine components are covered. The program will enable those already employed in the field to upgrade their skills in engine maintenance and service.
Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

Required Core Courses
AUTO 102 Auto Essentials 3

- or -

AUTO 106 Automotive Maintenance 4
AUTO 122 Electronic Fundamentals 5
AUTO 172 Engine Diagnosis and Maintenance 4.5
AUTO 176 Engine Repair 4.5

Total Units $17-18$

## Automotive Air Conditioning Maintenance Certificate (Untranscripted) <br> Program code: sac.auacs.cert

The Automotive Air Conditioning Maintenance Certificate is designed to prepare the student for employment in industry, servicing modern automotive air conditioning systems. Air conditioning theory, refrigerant handling, and practical hands-on experience are emphasized. This training assists the student in preparation for national ASE A7 and EPA 609 certification.
Learning Outcome(s):
Students will demonstrate a working knowledge of modern automotive air conditioning systems. Students will be trained in correct use of automotive air conditioning equipment and diagnostic procedures.
Required Core Courses: Units

AUTO $160 \quad$| Foundations of Mobile Air Conditioning and |
| :--- |
| Refrigeration |

AUTO 161 Automotive Air Conditioning, Heating and 5
Total Units
10

## Alternative Fuels and Hybrid Maintenance Certificate (Untranscripted)

## Program code: sac.afhm.cert

The Alternative Fuels and Hybrid Maintenance Certificate is designed to prepare the student for employment in industry on alternative fuels, hybrid vehicles, and modern clean diesel. Safety, operation, and light maintenance are emphasized. The various types of common alternative fuels are covered, CNG (Compressed Natural Gas) is highlighted.
Learning Outcome(s):

1. Learning about alternative fuels and hybrids in the industry will enhance students' critical thinking and reasoning skills for future technology.
2. Offer course content that assists students in obtaining careers in the automotive industry.
Required Core Courses: Units
AUTO 285 Hybrid Vehicles 3
AUTO 287 Alternative Fuels 3
AUTO 288 Diesel Engines: Light-Medium Duty Systems $\quad 3$

## Automotive Chassis Maintenance (Untranscripted)

## Program code: sac.autcm.cert

The Automotive Chassis Maintenance Certificate is designed to prepare the student for employment diagnosing and serving automotive brake, steering, and suspension systems. Practical handson experience in tire balancing, front end alignment, brake service, and trouble codes is emphasized. This training assists the student in preparation for national ASE A5 Brakes and A4 Steering and Suspension certification.

## Learning Outcome(s):

1. Learning about current brakes and steering and suspension techniques will enhance students' critical thinking and reasoning skills for future technology.
2. Offer course content that assists students in obtaining careers in the automotive industry.
Required Core Courses: Units

| AUTO 153 | Brakes | 4.5 |  |
| :--- | :--- | :--- | ---: |
| AUTO 154 | Steering and Suspension Service | 4.5 |  |
|  |  | Total Units | 9 |

Automotive Electrical Maintenance Certificate

## (Untranscripted)

Program code: sac.autel.cert
The Automotive Electrical Maintenance Certificate prepares the student for electrical concerns on modern vehicles. Hands-on use of digital multimeters and wiring diagrams are emphasized. This training assists the student in preparation for national ASE A6 certification.

## Learning Outcome(s):

1. Learning about current brakes and steering and suspension techniques will enhance students' critical thinking and reasoning skills for future technology.
2. Offer course content that assists students in obtaining careers in the automotive industry.
Required Core Courses: Units

| AUTO 122 | Electronics Fundamentals |  | 5 |
| :--- | :--- | :--- | ---: |
| AUTO 124 | Electrical Systems |  | 5 |
|  |  | Total Units | 10 |

## Automotive Engine Maintenance Certificate (Untranscripted)

## Program code: sac.auten.cert

The Automotive Engine Maintenance Certificate is designed to prepare the student for employment diagnosing and servicing automotive engines. Practical hands-on experience in engine diagnosis, measurement, teardown, and assembly are emphasized. This training assists the student in preparation for national ASE A1 Engine Repair certification.

## Learning Outcome(s):

1. Learning about current engine maintenance techniques will enhance students' critical thinking and reasoning skills for future technology.
2. Offer course content that assists students in obtaining careers in the automotive industry.
Required Core Courses: Units

| AUTO 172 | Engine Diagnosis and Maintenance |  | 4.5 |
| :--- | :--- | :--- | :--- |
| AUTO 176 | Engine Repair | 4.5 |  |
|  |  | Total Units | $\mathbf{9}$ |

## BIOLOGY

## Option 1

## Biological Science Degree

## Program code: sac.biol.as

The associate degree in biological science prepares students for preprofessional careers and a curriculum in a four-year institution leading to a baccalaureate degree in such areas as microbiology, botany, zoology,molecular biology, and teaching. The biologist is also prepared to enter graduate or professional programs of specialized study such as medicine, dentistry, medical technology, osteopathy, veterinary medicine, agriculture, forestry, optometry, cell biology, molecular biology, and dental hygiene. See counseling for transfer requirements. Learning Outcome(s):

1. Students will successfully complete the sequence of biology courses needed for transfer (Biology 211 and 212 or Biology 211 and 214)
2. Students will successfully transfer to universities

Required Core Courses:
Units
BIOL 211 Cellular and Molecular Biology 5
BIOL 212 Animal Diversity and Ecology 5
BIOL 214 Plant Diversity and Evolution 5

- or -

BIOL 290 Biochemistry and Molecular Biology 5
CHEM 229 General Chemistry and Qualitative Analysis 5
Select a minimum of 3 units from the following electives: Units
BIOL 127 Ecology 1
BIOL 128 Natural History of the California Coast $\quad 1$
BIOL 129 Ecology of Southern California $\quad 1$
BIOL 131 Natural History of the Southwest 3
BIOL 132 Natural History of Death Valley $\quad 1$
BIOL 133 Desert Biology 1
BIOL 139 Health Microbiology 4

| BIOL 149 | Human Anatomy and Physiology | 4 |
| :--- | :--- | ---: |
| BIOL 169 | Natural History of the Sierra Nevadas | $1-3$ |

BIOL 170 Environmental Challenge of the 21st Century 1
BIOL 177 Human Genetics 3
BIOL 217 Pathophysiology 2
BIOL 229 General Microbiology 5
BIOL 239 General Human Anatomy 4
BIOL 249 Human Physiology 4
BIOL 259 Environmental Biology 4

Total Units 23-25

## 82 INSTRUCTIONAL PROGRAMS

## Option 2

## Associate in Science in Biology for Transfer

## Program code: sac.biol.ast

The Biology Associate in Science for Transfer degree (AS-T) prepares students for coursework leading to a baccalaureate degree in Biology at the CSU system. Please, consult a counselor regarding specific course requirements for your transfer institution. Completion of the AS-T degree also provides guaranteed admission with junior standing to the CSU system although it does not guarantee acceptance to a particular campus or major. See page 24 for a list of additional requirements for all Associate in Arts for transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Students earning a Biology AS-T must select either the IGETC for STEM or CSU-GE for STEM to complete the general education requirement.* Upon completion of the Biology AS-T degree, students will have the necessary foundation for upper division coursework as biology majors. The Biology AS-T is a starting point for students who are preparing for careers in biological sciences, biomedical sciences and related fields including research, consulting and government work, where scientific and technical skills are in high demand.

| Required Core Courses: : |  | Units |
| :---: | :---: | :---: |
| BIOL 211 | Cellular and Molecular Biology | 5 |
| BIOL 212 | Animal Diversity and Ecology | 5 |
| BIOL 214 | Plant Diversity and Evolution | 5 |
| List A |  |  |
| CHEM 219 | General Chemistry | 5 |
|  | - or - | Units |
| CHEM 219H | Honors General Chemistry | 5 |
| CHEM 229 | General Chemistry and Qualitative Analysis | 5 |
| MATH 180 | Analytic Geometry and Calculus | 4 |
|  | - or - |  |
| MATH 180H | Honors Analytic Geometry and Calculus | 4 |
| PHYS 217 | Engineering Physics I | 4 |
|  | - and - |  |
| PHYS 227 | Engineering Physics II | 4 |
|  | - OR- |  |
| PHYS 279 | College Physics I | 4 |
|  | - and - |  |
| PHYS 289 | College Physics II | 4 |

* Note: Only IGETC for STEM or CSU-GE for STEM will be accepted toward completion of the general education portion of this degree. IGETC and CSU-GE will not be accepted. (For those completing IGETC for STEM and planning to meet the CSU admission requirement an oral communication course, IGETC Area 1C, must be included.)


## BIOTECHNOLOGY

## Biotechnology Degree

## Program code: sac.biot.as

The associate degree in biotechnology prepares students for careers in a wide variety of industry or for curriculum at a four-year institution leading to a baccalaureate degree in such areas as molecular biology, biochemistry, cell biology and microbiology. These fields provide career opportunities in biomanufacturing, research and development, and teaching. See counseling for transfer requirements.

## Learning Outcome(s):

1. Students will understand the importance of soft skills in the workplace.
2. Students will be familiar with current good practice quality guidelines and regulations (cGXPs) used in the Biotechnology and Bioscience Industries.
3. Students will be proficient in laboratory skills necessary to obtain entry level jobs in the Biotechnology and Bioscience fields.
Required Core Courses: Units
BIOL 190 Introduction to Biotechnology 3
BIOL 190L Introductory Biotech Lab 1
BIOL 191 Biotech A: Basic Skills 4
BIOL 192 Biotech B: Proteins 4
BIOL 193 Biotech C: Nucleic Acids 4

BIOL 194 | Quality and Regulatory Compliance in |
| :---: |
| Bioscience |

| BIOL 211 | Cellular and Molecular Biology | 5 |
| :--- | :--- | :--- |

CHEM 209 Introductory Chemistry 4

CHEM 219 General Chemistry 5

- or -

CHEM 219H Honors General Chemistry 5
Total Units 32
Biotechnology Lab Assistant Certificate (Untranscripted)
Program code: sac.biola.cert
This certificate program is designed to prepare students for entry level jobs as laboratory assistants in biotechnology and related fields.

## Learning Outcome(s):

1. Students will have a fundamental overview of the applications and underlying principles of biotechnology.
2. Students will know how to operate and maintain standard laboratory equipment.
3. Students will have the knowledge and laboratory skills necessary to obtain entry level jobs in biotechnology.
Required Core Courses: Units
BIOL 190 Introduction to Biotechnology 3
BIOL 190L Introductory Biotech Lab 1
BIOL 191 Biotech A: Basic Skills 4
CHEM 209 Introductory Chemistry 4
Total Units

## Biotechnology Biomanufacturing Technician Certificate (Transcripted) <br> Program code: sac.btmft.ca

This certificate program in biotechnology biomanufacturing is designed to prepare students for entry level positions in the biomanufacturing industry in fields requiring basic laboratory skills such as aseptic technique, solution preparation, standard equipment utilization as well as knowledge of protein expression and purification. Learning Outcome(s):

1. Students will know how to obtain a purified sample of a genetically engineered protein.
2. Students will have the knowledge and laboratory skills necessary to obtain an entry level biomanufacturing job.
Required Core Courses:
BIOL 192 Biotech B: Proteins 4

| BIOL 194 | Quality and Regulatory Compliance in <br> Biosciences | 2 |
| :--- | :--- | :--- |

CHEM 219 General Chemistry 5

CHEM 219H Honors General Chemistry 5

## Biotechnology Laboratory Technician Certificate

## (Transcripted)

Program code: sac.btlt.ca
This certificate curriculum is designed to prepare students with the skills they need to work in the upstream processing area of a biotechnology company or provide them with the foundation necessary to transfer to a 4 year university to continue their studies in biotechnology.
Learning Outcome(s):

1. Students will know how to subclone a gene into a cloning or expression vector
2. Students will have the knowledge and laboratory skills necessary to obtain entry level jobs as a biotechnician.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| BIOL 193 | Biotech C: Nucleic Acids | 4 |
| BIOL 202 | Cell Culture Techniques | 2 |
| At least 8 units from the following list | Units |  |
| BIOL 139 | Health Microbiology | 4 |
| BIOL 177 | Human Genetics | 3 |
| BIOL 197 | STEM Internship/Work Experience | $1-4$ |
| BIOL 211 | Cellular and Molecular Biology | 5 |
| BIOL 229 | General Microbiology | 5 |
| BIOL 290 | Biochemistry and Molecular Biology | 5 |
| CHEM 229 | General Chemistry and Qualitative Analysis | 5 |
|  | Total Units | $\mathbf{1 4 - 1 6}$ |

development, and role of black culture in America

## Required Core Courses: Units

## Biotechnology Laboratory Technician: QA/QC Microbiology Certificate (Transcripted) <br> Program code: sac.btlqc.ca

This certificate curriculum in quality assurance and quality control microbiology and biology is designed to prepare students for careers in fields such as biotechnology, medical devices, pharmaceuticals, biologicals, food safety, biomanufacturing, and testing laboratories. Learning Outcome(s):

1. Students will learn an overview of the process of quality assurance and regulatory compliance used in the bioscience industry
2. Students will learn how to perform advanced aspects of aseptic technique
3. Students will have the knowledge and laboratory skills necessary to obtain entry level jobs in QC and QA microbiology.
Required Core Courses: Unit

BIOL 193 Biotech C: Nucleic Acids 4
BIOL 195 Biotech: QC Microbiology 2
BIOL 197 STEM Internship/ Work Experience 1
BIOL 202 Cell Culture Techniques 2
BIOL 229 General Microbiology $\quad 5$

## BLACK STUDIES

## Black Studies Degree

## Program code: sac.blst.aa

The associate degree curriculum in black studies emphasizes the history, development, and role of black culture. Completion of the degree program prepares students to pursue a major leading to a baccalaureate degree.
Learning Outcome(s):
Students will demonstrate an understanding of the history,
ART 103 African Art History 3

| BLST 101 | Introduction to Black Studies | 3 |
| :--- | :--- | :--- |
| ETHN 101 | Introduction to Ethnic Studies | 3 |


| ETHN 101H | Honors Introduction to Ethnic Studies | 3 |
| :--- | :--- | :--- |
| HIST 123 | History of Black People in the United States | 3 |


| HIST 146 | Black People in Twentieth Century America | 3 |
| :--- | :--- | :--- |
| MUS 103 | Jazz in America | 3 |

## 84 INSTRUCTIONAL PROGRAMS



## Business Administration Degree

## Program code: sac.bus.as

The associate degree curriculum in business administration enables students to move into a curriculum at a four-year institution leading to a baccalaureate degree. Career opportunities exist in many areas of business administration such as accounting, financial planning and analysis, financial service specialities, management, marketing and sales, production and logistics, and systems and technology development.

## Learning Outcome(s):

1. Students will create clear, concise, well organized written business documents such as memos, reports, and executive summaries including financial information that can be used in an effective manner to communicate
2. Students will possess adequate technical knowledge to create financial information to be used in the accounting and related business environment
3. Students will be able to transfer to a 4 year university as a business administration major.
*Students planning for university transfer should be aware that some universities only accept BUS 101 for the transfer major (e.g. California State University, Long Beach) while others only accept BUS 105 (e.g. California State University, Fullerton) for the transfer major. Please consult the Transfer Planning Guide and meet with a counselor for information about specific universities.
**Students planning for university transfer should be aware that California State University, Fullerton and many other universities require MATH 150 for the Business Administration degree. Please information about specific universities.
Numerous California State University campuses and private Administration. In the University of California system, UC Berkeley and about specific programs and transfer requirements.

## Option 2

## Associate in Science in Business Administration for Transfer <br> Program code: sac.bus.ast

The Associate in Science in Business Administration for Transfer (AS-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in Business Administration. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AS-T degree also provides guaranteed admission with junior status to the CSU system although does not guarantee acceptance to a particular campus. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees.
Upon completion of the AS-T degree in Business Administration, students will have a general understanding of business fundamentals, including the areas of accounting, economics, and computer information systems. In addition, they will have an understanding of the legal environment of business, and will have a sufficient understanding of mathematical concepts to enable them to successfully pursue a business degree at a four-year institution.
The AS-T degree in Business Administration is appropriate for students whose vocational plans include careers in business fields such as accounting, computer information systems, finance, management, marketing, or other business fields.

## Learning Outcome(s):

1. Students will create clear, concise, well organized written business documents such as memos, reports, and executive summaries including financial information that can be used in an effective manner to communicate
2. Students will possess adequate technical knowledge to create financial information to be used in the accounting and related business environment
3. Students will be able to transfer to a California State University as a business administration major.
Required Core: Units

| ACCT 101 | Financial Accounting | 4 |
| :--- | :--- | ---: |
| ACCT 102 | Managerial Accounting | 4 |
| ECON 120 | Principles/Macro | 3 |
| ECON 121 | Principles/Micro | 3 |
| BUS 101 | Business Law | 3 |
| BUS 105 | Ler- <br>  <br>  <br> Legal Environment of Business <br> - or - | 3 |
| LAW 105 | The Legal Environment of Business |  |
| List A: Select one of the following courses | 3 |  |

List A: Select one of the following courses Units
MATH 145 Finite Mathematics 4
MATH 150 Calculus for Biological, Management and Social 5

|  | Sciences | 4 |
| :--- | :--- | :--- |

- or -

| MATH 219H | Honors Statistics and Probability | 4 |
| :--- | :--- | :--- |
| PSYC 210 | Statistics for the Behavioral Sciences | 4 |

List B: Select two courses from the list below or from any Units course from List A that has not already been used.

| BUS 150 | Introduction to Information Systems and <br> Applications <br> - or - | 3 |
| :--- | :--- | :--- |
| CMPR 100 | The Computer and Society | 3 |
| BUS 100 | Fundamentals of Business | 3 |

- or -

BUS 222 Business Writing

## BUSINESS APPLICATIONS

## Business Applications and Technology Degree <br> Program code: sac.ba.as

The Business Applications and Technology Degree program provides professional training for employment as administrative office professionals. This program prepares students for Microsoft Office Specialist certification exams. Students will develop technical skills in using technology and applications for business projects based on current standards.

## Learning Outcome(s):

Students will be prepared for employment as an administrative staff for any size company from small business offices to large corporate organizations with training that encompasses knowledge and skill development to meet the demands of current business standards and technology, office procedures, business mathematics, and office administration.

## Required Core Courses:

| BA 035 | Computer Fundamentals | 1.5 |
| :--- | :--- | ---: |
| BA 147 | Introduction to Windows | 1.5 |
| BA 110 | Computer Keyboarding Skills | 0.5 |
| BA 115 | Computer Keyboarding Speed and Accuracy <br> Development | 0.5 |
| BA 179 | Introduction to Microsoft Office | 3 |
| BA 126 | Microsoft Outlook | 2 |
| BA 163 | Adobe Acrobat | 3 |
| BA 018 | Office Procedures | 3 |
| BA 017 | Business Writing Skills | 3 |
| BA 182 | Document Sharing and Collaboration using the <br> Cloud and Google Apps | 2 |
| BUS 080 | Business Mathematics | 3 |

Select one of the following courses: Units
BA 160 Microsoft Publisher 2
BA 189 Advanced Microsoft Excel 2

| CMPR 167 | Microsoft Access | 3 |
| :--- | :--- | :--- |
| BA 164 | Adobe Photoshop |  |

BA 166 Adobe Illustrator 3

| BA 169 | Adobe Dreamweaver | 3 |
| :--- | :--- | :--- |
| BA 170 | Adobe InDesign | 3 |


| ACCT 035 | QuickBooks I | 2 |
| :--- | :--- | :--- |
| BA 155 | WordPress | 2 |

Total Units 25-26

## Business Applications and Technology Certificate (Transcripted)

## Program code: sac.bat.ca

The Business Applications and Technology program provides professional training for employment as administrative office professionals. This program prepares students for Microsoft Office Specialist certification exams in Word, Excel, PowerPoint, and Outlook. Students will develop technical skills in using technology and applications for business projects based on current standards. Learning Outcomes(s)
Students will be prepared for employment as an administrative staff for any size company from small business offices to large corporate organizations with training that encompasses knowledge and skill development to meet the demands of current business standards and technology, office procedures, business mathematics, and office administration.

Required Core Courses:
Units

| BA 035 | Computer Fundamentals | 1.5 |
| :--- | :--- | :--- |
| BA 147 | Introduction to Windows | 1.5 |
| BA 110 | Computer Keyboarding Skills | 0.5 |
| BA 115 | Computer Keyboarding Speed and Accuracy <br> Development | 0.5 |
| BA 179 | Introduction to Microsoft Office | 3 |
| BA 126 | Microsoft Outlook | 2 |
| BA 163 | Adobe Acrobat | 3 |
| BA 017 | Business Writing Skills | 3 |
| BA 018 | Office Technology \& Professional Skills | 3 |
| BA 182 | Document Sharing and Collaboration using the <br> Cloud and Google Apps | 2 |

Total Units

## Digital Publishing Degree

Program code: sac.badp.aa
The Digital Publishing program is designed to professionally train students in all aspects of designing and publishing print and web business projects based on current business industry standards and technology. Instruction includes digital graphics, web design, page layout, typography, export file formats, proper file setup, integration of software tools, and professional design guidelines. This program prepares students for Adobe Certified Associate (ACA) certification exams including Photoshop, Illustrator, Dreamweaver, InDesign, Animate, After Effects, and Premiere Pro.

## Learning Outcome(s):

Students will be trained in all aspects of designing and publishing print and web business projects based on current business industry standards and technology.
Required Core Courses: Units

| BA 035 | Computer Fundamentals | 1.5 |
| :--- | :--- | ---: |
| BA 115 | Computer Keyboarding Speed and Accuracy <br> Development | 0.5 |
| BA 147 | Introduction to Windows | 1.5 |
| BA 179 | Introduction to Microsoft Office | 3 |
| BA 164 | Adobe Photoshop | 3 |
| BA 166 | Adobe Illustrator | 3 |
| BA 169 | Adobe Dreamweaver | 3 |
| BA 170 | Adobe InDesign | 3 |
| BA 163 | Adobe Acrobat | 3 |


| Select three courses from the following elective courses: | Units |
| :--- | :--- | ---: |
| BA 171 Adobe Premiere Pro 3 <br> BA 172 Adobe After Effects 3 <br> BA 173 Adobe Animate 3 <br> BA 155 WordPress 2 <br> BA 160 Microsoft Publisher 2 <br> BA 181 Everyone Can Code with Apple 2 <br> BA 182 Document Sharing and Collaboration using the 2 <br> Cloud and Google Apps   <br>  Drones for Business  <br>  Total Units $\mathbf{2 7 - 3 0 . 5}$ 158 |  |

## Digital Publishing Certificate (Transcripted)

Program code: sac.badp.ca
The Digital Publishing program is designed to professionally train students in all aspects of designing and publishing print and web business projects based on current business industry standards and technology. Instruction includes digital graphics, web design, page layout, typography, export file formats, proper file setup, integration of software tools, and professional design guidelines. This program prepares students for Adobe Certified Associate (ACA) certification exams including Photoshop, Illustrator, Dreamweaver, InDesign, Animate, After Effects, and Premiere Pro.

## Learning Outcome(s):

Students will demonstrate knowledge and competency in using Adobe Photoshop, Adobe Illustrator, Adobe Dreamweaver, Adobe InDesign and Microsoft Applications to integrate design principles that produce professional workplace documents.
Required Core Courses: Units
BA 163 Adobe Acrobat 3
BA 164 Adobe Photoshop 3
BA 166 Adobe Illustrator 3

| BA 169 | Adobe Dreamweaver | 3 |
| :--- | :--- | :--- |
| BA 170 | Adobe InDesign | 3 |

Select two courses from the following elective courses: Units

| BA 155 | WordPress | 2 |
| :--- | :--- | ---: |
| BA 160 | Microsoft Publisher | 2 |
| BA 173 | Adobe Animate | 3 |
| BA 171 | Adobe Premiere Pro | 3 |
| BA 172 | Adobe After Effects | 3 |
| BA 181 | Everyone Can Code with Apple | 2 |
| BA 182 | Document Sharing and Collaboration using the <br> Cloud and Google Apps | 2 |
| BA 158 | Drones for Business |  |
|  |  | Total Units | $\mathbf{1 8 . 5 \text { - 21 }}$

## Digital Graphic Design for Business Certificate (Untranscripted) <br> Program code: sac.dadg.cert

The purpose of the Digital Graphic Design for Business Certificate of Proficiency is to provide hands-on skill development and proper software expertise with business projects (logo design, brochures, business cards, advertisement, multi-page layout, and customization PDF documents) required to obtain employment as a Graphic Designer or related position as a free lance contractor or employee for any business. Students will learn proper software usage, file setup, terminology and guidelines based on current business standards.

## Learning Outcome(s):

Students will possess working knowledge and skill using Adobe software to create logo designs, brochures, business cards, advertisements, multi-page layouts and PDF documents for business. Required Core Courses:

| BA 163 | Adobe Acrobat | 3 |
| :--- | :--- | ---: |
| BA 166 | Adobe Illustrator | 3 |
| BA 170 | Adobe InDesign | 3 |
| ENTR 120 | Introduction to Working as a Freelance | 1 |
| ENTR 121 | People Skills for the Freelancer Independent <br> Contractor | 1 |
| ENTR 122 | Opportunities in Freelance Industries and <br> Trades | 1 |
| ENTR 123 | Marketing to Attract Customers and Grow Your | 1 |
| ENTR 124 | Freelance Business | Survival Finance and Accounting for the <br> Freelancer-Show Me the Money |
| ENTR 125 | Launch Your Freelance Business | 1 |
|  |  | Total Units |

## Adobe Applications for Business Certificate (Untranscripted)

## Program code: sac.baab.cert

The Adobe Applications for Business Certificate is designed to train students to use Adobe Photoshop, Illustrator, InDesign, and Dreamweaver software applications effectively and efficiently. Students will to develop business projects for print and the web using current business industry standards. Instruction includes beginning to advanced level software skills including proper use of tools, panels, and other software features required for image editing, page layout, typography, export file formats, integration of Adobe software, and proper file setup

## Learning Outcome(s):

1. Students will acquire knowledge and skill in using Adobe Photoshop, Adobe Dreamweaver, Adobe Illustrator and Adobe InDesign software to design various types of business documents.
2. Students will possess the necessary training and knowledge to pass the Adobe Certified Associate exam in Adobe Photoshop, Adobe Dreamweaver, Adobe Illustrator and Adobe InDesign.

| Required Core Courses: | Units |  |  |
| :--- | :--- | ---: | ---: |
| ART 195 | Introduction to Digital Media Arts | 3 |  |
| BA 164 | Adobe Photoshop | 3 |  |
| BA 169 | Adobe Dreamweaver |  | 3 |
| BA 170 | Adobe InDesign |  | 3 |
|  |  | Total Units | $\mathbf{1 2}$ |

## Adobe Web Projects for Business Certificate (Untranscripted) <br> Program code: sac.baaw.cert

Adobe Web Projects for Business Certificate professionally trains students to use Adobe software needed for business web projects. Students will learn proper software usage, file setup, terminology, search engine optimization, online marketing techniques, and guidelines based on current business standards. Multimedia will be integrated using Adobe software
This program prepares students for Adobe Certified Associate certification exams for Photoshop, Dreamweaver, and Animate
Learning Outcome(s):

1. Students will acquire the necessary training and knowledge to use Adobe software to create various types of business web projects that require the use of Adobe Photoshop, Adobe Dreamweaver and Adobe Animate.
2. Students will possess the training to prepare for the Adobe Certified Associate exam in Adobe Photoshop, Adobe Dreamweaver or Adobe Animate.

| Required Core Courses: |  | Units |  |
| :--- | :--- | :--- | ---: |
| BA 164 | Adobe Photoshop | 3 |  |
| BA 169 | Adobe Dreamweaver |  | 3 |
| BA 173 | Adobe Animate |  | 3 |
|  |  | Total Units | 9 |

## Computer Fundamentals for Business Certificate (Untranscripted)

## Program code: sac.cfb.cert

The Computer Fundamentals for Business Certificate program provides professional training in using common business applications and technology using current business standards, terminology, and techniques. Software application training in Windows operating system and Microsoft Office applications and prepares students for Microsoft Office Specialist certification exams in Word, Excel, and PowerPoint.
Learning Outcome(s):

1. Students will acquire knowledge and skills in the fundamental application of the Windows graphical user interface
2. Students will also possess skills in organizing and managing computerized files and folders using Windows Explorer
3. Students will also have general knowledge of how to use Microsoft Office applications to create basic workplace documents.
Required Core Courses: Units

| BA 035 | Computer Fundamentals |  | 1.5 |
| :--- | :--- | :--- | ---: |
| BA 147 | Introduction to Windows |  | 1.5 |
| BA 179 | Introduction to Microsoft Office |  | 3 |
|  |  | Total Units | 6 |

## 88 INSTRUCTIONAL PROGRAMS

## Microsoft Office Professional Degree

## Program code: sac.bamso.aa

The Microsoft Office Professional program provides technical skills training in Microsoft Office applications based on current business standards to enhance business projects, improve business communication, and increase productivity. This program prepares students for Microsoft Office Specialist certification exams including Word, Excel, PowerPoint, Outlook, and Access.

## Learning Outcome(s):

Students will gain training in computer skills based on current business industry standards and technology for any department within a company and learn to create professional office documents using the Microsoft Office suite including Word, Excel, Access, and PowerPoint.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| BA 035 | Computer Fundamentals | 1.5 |
| BA 115A | Computer Keyboarding Speed and Accuracy | 1 |
| Development | 2 |  |
| BA 125 | Microsoft Word | 2 |
| BA 147 | Microsoft Outlook | 1.5 |
| BA 160 | Microsoft Publisher | 2 |
| BA 163 | Adobe Acrobat | 3 |
| BA 188 | Microsoft Excel | 2 |
| BA 189 | Advanced Microsoft Excel | 2 |
| BA 190 | Microsoft PowerPoint | 2 |
| CMPR 167 | Microsoft Access | Total Units |
|  |  | 22 |

## Microsoft Office Professional Certificate (Transcripted)

## Program code: sac.bamso.ca

The Microsoft Office Professional program provides technical skills training in Microsoft Office applications based on current business standards to enhance professional business projects, improve business communication, and increase productivity. This program prepares students for Microsoft Office Specialist certification exams including Word, Excel, PowerPoint, and Outlook.

## Learning Outcome(s):

1. Students will demonstrate mastery in using Microsoft Office applications to create workplace documents that include Word processing, Excel spreadsheets, Access Databases and PowerPoint Presentations.
2. Students will acquire competency in writing business communications and handling administrative office procedures.
Required Core Courses:
BA 035 Computer Fundamentals 1.5

BA 115A Computer Keyboarding Speed and Accuracy 1

|  | Development |  |
| :--- | :--- | ---: |
| BA 188 | Microsoft Excel | 2 |
| BA 190 | Microsoft PowerPoint | 2 |
| BA 147 | Introduction to Windows | 1.5 |
| BA 163 | Adobe Acrobat | 3 |
|  |  | Total Units |
|  |  | 15 |

## Office Management Degree

## Program code: sac.baom.aa

The Office Management program is designed to prepare a student for employment and career advancement in a business office as an administrative professional. Course content includes business technology and software application training, administrative office management, office procedures, job search and advancement, professional image, leadership skills, business writing and verbal communication skills, business math, and corporate skills based on current business standards. This program prepares students for Microsoft Office Specialist certification exams including Word, Excel, PowerPoint, and Outlook.

## Learning Outcome(s):

Students will learn computer skills, administrative office management, office procedures, job search, professional image, business writing, and corporate skills based on current business industry standards.
Required Core Courses: Units
BA 017 Business Writing Skills 3
BA 018 Office Technology \& Professional Skills 3
BUS 080 Business Mathematics 3
BA 125 Microsoft Word 2

BA 126 Microsoft Outlook 2
BA $188 \quad$ Microsoft Excel 2
BA 190 Microsoft PowerPoint 2

Select one of the following courses: Units
BA 189 Advanced Microsoft Excel 2
CMPR 167 Microsoft Access $\quad 3$

| ACCT 035 | QuickBooks I | 2 |
| :--- | :--- | :--- |
| BA 163 | Adobe Acrobat | 3 |

Total Units 19-20

## Office Management Certificate (Untranscripted)

## Program code: sac.baom.cert

The Office Management program is designed to prepare a student for employment and career advancement in a business office as an administrative professional. Course content includes business technology and software application training, administrative office management, office procedures, job search and advancement, professional image, leadership skills, business writing and verbal communication skills, business math, and corporate skills based on current business standards.
This program prepares students for Microsoft Office Specialist certification exams including Word, Excel, PowerPoint, and Outlook.

## Learning Outcome(s):

1. Students will demonstrate knowledge and skill in successfully working as an administrative professional, office administrator, or administrative assistant in any corporation, manage business information using appropriate software, and perform records management, accounting, and office management activities.
2. Students will acquire general knowledge and skill in business writing using Microsoft applications and effectively handling general office procedures.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| BA 017 | Business Writing Skills | 3 |
| BA 018 | Office Technology \& Professional Skills | 3 |
| BA 125 | Microsoft Word | 2 |
| BA 126 | Microsoft Outlook | 2 |
| BA 188 | Microsoft Excel | 2 |
| BA 190 | Microsoft PowerPoint | 2 |
| BUS 080 | Business Mathematics | Total Units |
|  |  | 17 |

## Spanish / English Interpretation and Translation Certificate

## (Untranscripted)

## Program code: sac.base.cert

The Spanish/English Interpretation \& Translation introductory certificate prepares students for employment as trained bilingual English/Spanish interpreters to provide bilingual interpretation services in career fields that employ bilingual skills such as business, legal, educational, and medical professions. Written translation and oral interpretation skills will be utilized and developed in both English and Spanish. Fluency in Spanish and English is recommended.

## Learning Outcome(s):

1. Students will demonstrate skill and competency in providing services as a certified Spanish/English bilingual interpreter to courts, victims and defendants for a variety of business, legal, educational and medical translations
2. Students will translate spoken statements from Spanish to English by reproducing statements, questions and instructions.
Required Core Courses:

| BA 051 | Introduction to Spanish Bilingual Interpreting | 3 |
| :--- | :--- | ---: |
| BA 056 | General Foundation for Bilingual Business <br> Interpretation-Spanish/English | 3 |
| BA 057 | Medical Interpretation and Translation- <br> Spanish/English | 3 |
| BA 058 | Legal Interpretation and Translation- <br> Spanish/English <br> -or - <br> Legal Interpreting and Translation <br> Spanish/English | 3 |
| LAW 058 | Spa |  |

Select one of the following courses: Units

| ENGL 061 | Introduction to Composition | 4 |
| :--- | :--- | ---: |
| ENGL 101 | Freshman Composition | 4 |
| SPAN 101 | Elementary Spanish I | 5 |
| SPAN 102 | Elementary Spanish II | 5 |
| Select one of the following elective courses: | Units |  |
| BA 017 | Business Writing Skills | 3 |
| BA 163 | Adobe Acrobat | 3 |
| BA 179 | Introduction to Microsoft Office | 3 |
| BUS 103 | Cooperative Work Experience-Occupational | $1-4$ |
| MA 051A | Beginning Medical Terminology | 3 |
| LAW 100 | Introduction to Legal Studies | 3 |
| PARA 100 | The Paralegal Profession |  |
| SPAN 195A | Advanced Conversational Spanish |  |
|  | Total Units | $\mathbf{1 7 - 2 1}$ |

## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION BREADTH CERTIFICATE

## Program code: sac.csu.ca

(Complete all CSU general education breadth requirements (Plan B) as outlined on page 31) (Minimum 39 units)

## CHEMISTRY

## Option 1

Chemistry Degree
Program code: sac.chem.as
The associate degree curriculum in chemistry provides basic courses for a wide variety of occupations or prepares the student to enter a curriculum in a four-year institution leading to a baccalaureate degree. The major fields of chemistry are inorganic and organic chemistry, biochemistry, and chemical engineering. These fields provide career opportunities in industry, research, and teaching, and also entry into graduate or professional programs such as medicine, pharmacy and other related health fields. Please see a counselor for specific course requirements for your transfer university.
Learning Outcome(s):
Students will develop proficiency and knowledge of chemistry concepts, laboratory techniques and experimental data collection/analysis.
Required Core Courses: Units

## 4

The Associate in Science in Chemistry for Transfer (AS-T in Chemistry) prepares students to transfer into the CSU system leading to a Baccalaureate degree in Chemistry. Students with this degree also have a foundation in science to pursue other science-related fields or engineering. Please consult a counselor regarding specific course requirements for your transfer institution. Successful completion of the AS-T in Chemistry degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to a local CSU in a similar major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T.) and Associate in Science for Transfer (AS-T.) degrees. Students earning a Chemistry AS-T. must select IGETC for STEM to complete the general education rquirement.* Upon completion of the AS-T in Chemistry degree, students will gain a foundation in general and organic chemistry which is necessary in many fields of science and engineering.
Required Core Courses: ..... Units

CHEM 219 General Chemistry 5 - or -

CHEM 219H Honors General Chemistry 5
CHEM 229 General Chemistry and Qualitative Analysis 5

CHEM 249 Organic Chemistry I 5
CHEM 259 Organic Chemistry II 5
MATH 180 Analytical Geometry and Calculus 4 - or -

MATH 180H Honors Analytical Geometry and Calculus 4
MATH 185 Analytic Geometry and Calculus 4
PHYS 217 Engineering Physics I 4
PHYS 227 Engineering Physics II 4

## 90 INSTRUCTIONAL PROGRAMS

* Note: Only IGETC for STEM will be accepted toward completion of the general education portion of this degree. CSU-GE for STEM, CSU-GE, and IGETC will not be accepted. (For those planning to meet the CSU admission requirement an oral communication course, IGETC area IC, must be included.)


## CHICANO STUDIES

## Chicano Studies Degree

## Program code: sac.chst.aa

The associate degree curriculum in CHST emphasizes the history, development, and role of Chicano culture. Completion of the degree program prepares students to pursue a major leading to a baccalaureate degree.
Learning Outcome(s):
Students will demonstrate an understanding of the history, development, and role of Chicano culture in America.
Required Core Courses: Units
ART 104 Mexican and Chicano Art History 3
CHST 101 Introduction to CHST 3
ENGL 246 Survey of Chicano Literature 3

ETHN 101 Introduction to Ethnic Studies 3

- or -

ETHN 101H Honors Introduction to Ethnic Studies
HIST 124 Mexican American History in the United States
HIST 124H Honors Mexican American History in the United
States 3
HIST 153 History of Mexico 3

HIST 181 Survey of Chicana/Latina Women's History 3
SPAN 101 Elementary Spanish I

- or -

SPAN 102 Elementary Spanish II
A minimum of six (6) units (but, no more than three (3) units from any one discipline) taken from the following list:
ANTH 100 Introduction to Cultural Anthropology

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
ANTH 104 Language and Culture 3

- or -

ANTH 104H Honors Language and Culture
ANTH 105 Ancient Mesoamerican Civilization 3
ANTH 125 Native Americans in the U.S. 3
BLST 101 Introduction to African American Studies 3

| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| :--- | :--- | :--- |
| DNCE 105 | World Dance and Cultures | 3 |


| DNCE 110 | Beginning Mexican Folk Dance | 1 |
| :--- | :--- | :--- |

DNCE 111 Intermediate Mexican Folk Dance 1
DNCE 112 Ethnic Dance 1
ENGL 104 Language and Culture 3

- or -

ENGL 104H Honors Language and Culture 3
HIST 101 World Civilizations to the 16th Century 3

- or -

HIST 101H Honors World Civilizations to the 16th Century 3
HIST 102 World Civilizations Since the 16th Century

- or -

HIST 102H
Honors World Civilizations Since the 16th Century

| HIST 105 | Ancient Mesoamerican Civilization | 3 |
| :---: | :---: | :---: |
| HIST 125 | Native Americans in the U.S. | 3 |
| HIST 127 | Women in U.S. History | 3 |
| HIST 150 | Latin American Civilization to Independence | 3 |
| HIST 151 | Modern Latin American Civilization | 3 |
| MUS 102 | World Music | 3 |
|  | - or- |  |
| MUS 102H | Honors World Music | 3 |
| SOC 100 | Introduction to Sociology | 3 |
|  | - or- |  |
| SOC 100H | Honors Introduction to Sociology | 3 |
| SPAN 201 | Intermediate Spanish I | 5 |
|  | - or- |  |
| SPAN 201H | Honors Intermediate Spanish I | 5 |
| SPAN 202 | Intermediate Spanish II | 5 |
|  | - or- |  |
| SPAN 202H | Honors Intermediate Spanish II | 5 |
|  | Total U | 36 |

## CHILD DEVELOPMENT

## Associate in Science in Early Childhood Education for Transfer <br> Program code: sac.ece.ast

The Associate in Science in Early Childhood Education for Transfer (AS-T in Early Childhood Education) prepares students to move into the CSU system leading to a baccalaureate degree in Child Development, Human Development, Early Childhood Education or Child and Adolescent Studies. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AS-T in Early Childhood Education degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Child and Adolescent Development major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AS-T in Early Childhood Education, students will have general understanding of the main developmental theories as they pertain to the development, care, and education of young children. Additionally, students will have the capacity to evaluate and plan curriculum and environments for children based on observation of their physical, cognitive, emotional, social and creative characteristics.

## Learning Outcome(s):

1. Students will demonstrate a knowledge base of early childhood and development of young children 3-5 years old
2. will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Required Core Courses: | Units |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
| CDEV 107 | Child Growth and Development (DS1) | 3 |  |  |
| CDEV 108 | Observation and Assessment for Early Learning <br> and Development (DS3) | 3 |  |  |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |  |  |
| CDEV 111A | Principles and Practices of Teaching Young <br> Children | 3 |  |  |
| CDEV 111B | Introduction to Curriculum | 3 |  |  |
| CDEV 112 | Health, Safety, and Nutrition for Children | 3 |  |  |
| CDEV 221 | Living and Teaching in A Diverse Society | 3 |  |  |
| CDEV 298A | Practicum in Early Childhood Programs | 3.5 |  |  |
|  | Total Units |  |  | $\mathbf{2 4 . 5}$ |

## Child Development - Emphasis in Infant/Toddler Care and Development Degree <br> Program code: sac.cdit.aa

The Associate in Arts in Child Development - Infant/Toddler Teacher degree program provides students with a specialized focus on the unique strengths and needs of infants and toddlers. Students will study the comprehensive development of the young child, birth to three years, with a focus on understanding current brain research and best caregiving practices. The practicum component of the program will support the students as they transfer their learning to their work with young children. The program is available for early childhood educators, parents, administrators, and health care professionals.
In addition to the 36.5 units of Child Development coursework, students must also complete the general education requirements. This degree prepares students for transfer to a 4 -year university to obtain a bachelors degree. Refer to the Graduation Requirements or the CSUGE and IGETC patterns in this catalog for specific courses that meet the general education requirement. Contact Career Technical Education (CTE) counselors at SAC for additional assistance in planning your early childhood profession (714-564-6254).
Students who earn this degree should apply for the Early Childhood Infant/ Toddler Teacher Certificate and the California Teacher's Permit. In order to qualify for the degree, certificate and permit, a student must also have work experience with young children ( 175 days of 3 hours per day within 4 years). See Child Development faculty members for assistance.

## Learning Outcome(s):

1. Students will demonstrate a knowledge base of early childhood and development of young children 0-2 years old
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.
Required Core Courses: Units
CDEV 107 Child Growth and Development (DS1) 3

CDEV 108 Observation and Assessment for Early Learning 3

|  | CDEV 110 | Child, Family, and Community (DS2) |
| :--- | :--- | :--- |

CDEV 111A Principles and Practices of Teaching Young 3

|  | Children |  |  |
| :--- | :--- | :--- | ---: |
| CDEV 111B | Introduction to Curriculum for Young Children | 3 |  |
| CDEV 112 | Health, Safety, and Nutrition for Children | 3 |  |
| CDEV 116A | Infant/Toddler Growth and Development (DS4) | 3 |  |
| CDEV 116B | Care and Education for Infants and Toddlers (DS3) | 3 |  |
| CDEV 205 | Introduction to Children with Special Needs | 3 |  |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |  |
| CDEV 297 | Analyzing and Applying Teacher Strategies in <br> the Classroom | 3 |  |
| CDEV 298B | Practicum in Infant/Toddler Programs | 3.5 |  |
|  |  | Total Units | $\mathbf{3 6 . 5}$ |

## Child Development - Emphasis in Preschool Age Care and Development Degree Program code: sac.cdpc.aa

The Associate in Arts in Child Development - Emphasis in Preschool Care and Development provides students with knowledge about the comprehensive development of young children ages 3 to 5 years old. Students will focus on understanding developmentally appropriate practice, effective learning strategies, and how to create and implement a high quality classroom for young children. The practicum component of the program will support the students as they transfer their learning to their work with young children. The program is available for early childhood educators, parents, administrators, and health care professionals.
In addition to the 33.5 units of Child Development coursework, students must also complete the general education requirements. This degree prepares students for transfer to a 4 -year university to obtain a bachelors degree. Refer to the Graduation Requirements or the CSU-GE and IGETC patterns in this catalog for specific courses which meet the general education requirement. Contact Career Technical Education (CTE) counselors at SAC for additional assistance in planning your early childhood profession (714-564-6254).
Students who earn this degree should apply for the Early Childhood Teacher Certificate and the California Teacher's Permit. In order to qualify for the degree, certificate and permit, a student must also have work experience with young children ( 175 days of 3 hours per day within 4 years). See Child Development faculty members for assistance. Learning Outcome(s):

1. Students will demonstrate a knowledge base of early childhood and development of young children 3-5 years old
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Courses | Units |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
| CDEV 107 | Child Growth and Development (DS1) | 3 |  |  |
| CDEV 108 | Observation and Assessment for Early Learning <br> and Development (DS3) | 3 |  |  |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |  |  |
| CDEV 111A | Principles and Practices of Teaching Young <br> Children | 3 |  |  |
| CDEV 111B | Introduction to Curriculum for Young Children | 3 |  |  |
| CDEV 112 | Health, Safety, and Nutrition for Children | 3 |  |  |
| CDEV 205 | Introduction to Children with Special Needs | 3 |  |  |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |  |  |
| CDEV 231 | Developing Language and Literacy in Young <br> Children | 3 |  |  |
| CDEV 297 | Analyzing and Applying Teacher Strategies in <br> the Classroom | 3 |  |  |
| CDEV 298A | Practicum in Early Childhood Programs | 3.5 |  |  |
|  | Total Units |  |  | $\mathbf{3 3 . 5}$ |

## 92 INSTRUCTIONAL PROGRAMS

## Child Development - Emphasis in School-Age Care and Recreation Degree

## Program code: sac.cdsa.aa

The Associate in Arts in Child Development - Emphasis in School Age Care and Recreation is designed to prepare instructional and classroom master teachers to serve as paraprofessional members of the teaching team and/or teachers in school-age child care. Students are offered knowledge about the development of the school age child and the role of the adult in helping to integrate skills and aid classroom learning.
In addition to the Child Development coursework, students must also complete the general education requirements and complete work experience with young children (175 days of 3 hours per day within 4 years). See Child Development faculty members for assistance. This degree prepares students for transfer to a 4-year university to obtain a bachelors degree. Students who earn this degree should apply for the Certificate of Achievement in School Age Care and Recreation and the California Teacher's Permit (see Child Development faculty members for assistance).

## Learning Outcome(s):

1. Students will demonstrate a knowledge base of the development of school aged children
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations. 3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| CDEV 107 | Child Growth and Development (DS1) | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 111A | Principles and Practices of Teaching Young <br> Children | 3 |
| CDEV 111B | Introduction to Curriculum for Young Children | 3 |
| EDUC 113 | Tutoring Reading in Elementary Schools | 1 |
| CDEV 120A | Development of the School-Age Child (DS5) | 3 |
| CDEV 120B | School-Age Child Care and Recreation Activities <br> (DS5) | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| CDEV 297 | Analyzing and Applying Teacher Strategies in <br> the Classroom | 3 |
| CDEV 298A | Practicum in Early Childhood Programs | 3.5 |
| CDEV 299 | Cooperative Work Experience Education | $1-4$ |
|  |  | Total Units |

## Learning Outcome(s):

1. Students will demonstrate a knowledge base of the development of school aged children
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| CDEV 107 | Child Growth and Development (DS1) | 3 |
| CDEV 108 | Observation and Assessment for Early Learning <br> and Development (DS3) | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 111A | Principles and Practices of Teaching Young <br> Children | 3 |
| CDEV 111B | Introduction to Curriculum for Young Children | 3 |
| CDEV 112 | Health, Safety, and Nutrition for Children | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| CDEV 231 | Developing Language and Literacy in Young <br> Children | 3 |
| CDEV 297 | Analyzing and Applying Teacher Strategies in <br> the Classroom | 3 |
| CDEV 298A | Practicum in Early Childhood Programs | 3.5 |
|  |  | 33.5 |
| Infant/Toddler Teacher Certificate (Transcripted) |  |  |

## Program code: sac.cditt.ca

The Certificate of Achievement in Child Development - Infant/Toddler Teacher provides students with a specialized focus on the unique strengths and needs of infants and toddlers. Students will study the comprehensive development of the young child, birth to three years, with a focus on understanding current brain research and best caregiving practices. The practicum component of the program will support the students as they transfer their learning to their work with young children. The program is available for early childhood educators, parents, administrators and health care professionals. This certificate meets the coursework requirements of the Teacher Child Development Permit and prepares students to be competent and effective teachers and caregivers in infant and toddler classrooms. In order to earn the permit, students must complete the following: 16 units of general education, specifically a class in each of the following areas: English, Science or Math, Social Science, and Humanities/Fine Arts.
Additional work experience with young children (175 days of 3 hours per day within 4 years).
These two requirements will also qualify the students to earn a California Teacher Permit, which is used in federal and state early childhood programs as well as licensing regulations for private and faith based programs.Contact Career Technical Education (CTE) counselors at SAC for additional assistance in planning your early childhood profession (714-564-6254).
A minimum grade of " $C$ " in each course is required to earn this certificate and the California permit

## Learning Outcome(s)

1. Students will demonstrate a knowledge base of early childhood and development of young children 0-2 years old.
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations.
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| CDEV 107 | Child Growth and Development (DS1) | 3 |
| CDEV 108 | Observation and Assessment for Early Learning <br> and Development (DS3) | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 112 | Health, Safety, and Nutrition for Children | 3 |
| CDEV 111A | Principles and Practices of Teaching Young <br> Children | 3 |
| CDEV 111B | Introduction to Curriculum for Young Children | 3 |
| CDEV 116A | Infant/Toddler Growth and Development (DS4) | 3 |
| CDEV 116B | Care and Education for Infants and Toddlers <br> (DS3) | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| CDEV 297 | Analyzing and Applying Teacher Strategies in <br> the Classroom | 3 |
| CDEV 298B | Practicum in Infant/Toddler Programs | 3.5 |
|  |  | 36.5 |

## School-Age Teacher Certificate (Transcripted)

Program code: sac.cdsat.ca
The School-Age Care and Recreation Teacher Certificate is designed to prepare school-age classroom aides to serve as paraprofessional members of the teaching team in school-age child care. Students are offered knowledge about the development of the school-age child and the role of the adult in helping to integrate skills and aid classroom learning.
In order to earn the certificate, students must complete the following: 16 units of general education, specifically a class in each of the following areas: English, Science or Math, Social Science, and Humanities/Fine Arts.

Additional work experience with young children (175 days of 3 hours per day, within 4 years).
These two requirements will also qualify the students to earn a California Teacher Permit, which is used in federal and state funded programs as well as licensing regulations for private and faith based programs.

## Learning Outcome(s):

1. Students will demonstrate a knowledge base of the development of school aged children
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| CDEV 107 | Child Growth and Development (DS1) | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 111A | Principles and Practices of Teaching Young <br> Children | 3 |
| CDEV 111B | Introduction to Curriculum for Young Children | 3 |
| EDUC 113 | Tutoring Reading in Elementary Schools | 1 |
| CDEV 120A | Development of the School-Age Child (DS5) | 3 |
| CDEV 120B | School-Age Child Care and Recreation Activities <br> (DS5) | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| CDEV 297 | Analyzing and Applying Teacher Strategies in <br> the Classroom | 3 |
| CDEV 298A | Practicum in Early Childhood Programs | 3 |
| CDEV 299 | Cooperative Work Experience Education | $1-4$ |
|  |  | Total Units |

## Early Childhood Assistant Teacher Certificate (Untranscripted)

## Program code: sac.ecat.cert

This Early Childhood Assistant Teacher Certificate is the first step to building a career working with children and families. Introductory coursework will provide students with knowledge about the comprehensive development of young children. Students will have the opportunity to observe preschool children, as well as learn about the important resources that are available to children and families.
This certificate is available for early childhood educators, parents, administrators and health care professionals. In order to earn the certificate, students must complete the Steps for Success Orientation provided by the Department of Child Development and Education Studies and is offered in the 10th week of every fall and spring semester. Students will be provided with times and locations and will complete this orientation during their semester attending CDEV 108: Observation and Assessment.
These courses and requirements will also qualify students to apply for the California Assistant Teacher Permit, which is used in federal and state early childhood programs as well as licensing regulations for private and faith based programs.
After completing this certificate, students should consider completing the general education requirements for the AA Degree in Child Development with an Emphasis in Preschool-Age Care and Development. Contact Career Education counselors at SAC for additional assistance in planning your early childhood profession (714-564-6254).

## Learning Outcome(s):

1. Demonstrate a conceptual knowledge of theories related to children's development and learning
2. Identify professional expectations and ethical responsibilities of early childhood educators.
3. Demonstrate knowledge of community resources and understanding of diverse family needs
Required Core Courses: Units

| CDEV 107 | Child Growth and Development (DS1) | 3 |
| :--- | :--- | :--- |
| CDEV 108 | Observation and Assessment for Early Learning <br> and Development (DS3) | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| Total Units | 9 |  |

## STEAM (Science, Technology, Engineering, Arts, Math) Certificate for EarlyChildhood Educators Certificate (Untranscripted) <br> Program code: sac.steam.cert

The purpose of the STEAM (Science, Technology, Engineering, Arts, Math) Certificate for Early Childhood Educators is to empower teachers to employ a project-based learning approach that crosses all of these disciplines in solving everyday problems. This approach aligns with Common Core Standards and has been shown to engage students and allow them to use both left and right-brained thinking in the same exercise. This certificate provides a strong researched-based curricular foundation with immediate practical classroom applications. Additionally, the STEAM certificate can be used towards earning professional growth hours for the child development permit.
Learning Outcome(s):

1. Students will demonstrate a knowledge basis of STEAM (Science, Technology, Engineering, Art, and Mathematics) within the early childhood.
2. Students will apply left and right-brain thinking activities into practice.
3. Students will understand and be conversant about the current trends that have influenced education as well as be able to analyze their application and importance for teaching today.
Required Core Courses:

## Units

| CDEV214 | Creative Art Experiences for Children | 1.5 |
| :--- | :--- | ---: |
| CDEV229 | Brain Development and Learning | 2 |
| CDEV232 | Math and Science Methods for Early Learning <br> Environments | 2 |
| CDEV210 | Creative Music Experiences for YoungChildren | 2 |
| CDEV231 | Developing Language and Literacy in Young <br> Children | 3 |
| CDEV200 | Introduction to Technology in Early Childhood <br> Education | 2 |

## Support for Students with Special Needs Certificate (Untranscripted) <br> Program code: sac.cdsss.cert

The Support for Students with Special Needs Certificate is designed to prepare students with knowledge, skills, and resources to address the diverse needs of children and adolescents with special needs. Students are offered intervention strategies, adaptive curriculum, and tools to both support and empower educators and families in both natural and/or inclusive education settings.

## Learning Outcome(s):

1. Demonstrate and apply knowledge of specific effective instructional practices and management techniques for students with special needs.
2. Adapt learning activities and materials to accommodate the needs of diverse learners.
3. Practice ethical and professional behaviors and attitudes necessary to the role of a special needs support provider while applying knowledge of legal, ethical, health, and safety considerations and procedures; demonstrate understanding of the roles of support providers as collaborative team members and communicate effectively with others in the educational setting.
4. Apply current education, motivation, child development and diversity research, theory, and practice to effectively support students with special needs.
Required Core Courses:
Units

| CDEV 205 | Introduction to Children with Special Needs | 3 |
| :--- | :--- | :--- |
| CDEV 206 | Curriculum and Intervention Strategies | 3 |
| CDEV 207 | Supporting and Empowering Families of <br> Children with Special Needs | 3 |

## COMMUNICATION STUDIES

## Option 1

## Communication Studies Degree <br> Program code: sac.cmst.aa

The associate degree curriculum in communication studies provides training for communicating and dealing with people. Completion of the associate in arts degree prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree, and then into careers in the field of business, industry, government, or education in such areas as teaching, public speaking, announcing, and public relations. Learning Outcome(s):

1. Students will describe, analyze, interpret, and evaluate both in theory and practice the key constructs advanced in the following fields of Communication Studies: interpersonal, intercultural, small group dynamics, debate, and public discourse
2. Students will analyze and demonstrate understanding of current theories of communication in written and oral formats
3. Students will demonstrate knowledge of effective strategies for initiating, maintaining, and ending communication encounters.
Required Core Courses:
CMST 101 Introduction to Interpersonal Communication

- or -

CMST 101H Honors Introduction to Interpersonal 3

|  | Communication | 3 |
| :--- | :--- | :---: |
| CMST 102 | Public Speaking | 3 |
| CMST 103 | Introduction to Intercultural Communication | 3 |
|  | - or - |  |

One additional elective from the following: Units

| CMST 151 | Voice and Diction for Effective Communication | 3 |
| :--- | :--- | :--- |
| CMST 152 | Oral Interpretation | 3 |


| CMST 170 | Introduction to Phonetics | 3 |
| :--- | :--- | :--- |
| CMST 206 | Gender Communication | 3 |


| CMST 206H | Honors Gender Communication |  | 3 |
| :--- | :--- | :--- | ---: |
|  | Total Units | 18 |  |

## Option 2

## Associate in Arts in Communication Studies for Transfer

## Program code: sac.cmst.aat

The Associate in Arts in Communication Studies for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in communication studies. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Communication Studies major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Communication Studies students will have a general understanding of the main communication studies theories as they pertain to interpersonal communication, public speaking, interpersonal communication, and argumentation and debate. Students will have the capacity to write and think in a critically analytical way about issues pertaining to the process of human communication.

## Learning Outcome(s):

1. Students will describe, analyze, interpret, and evaluate both in theory and practice the key constructs advanced in the following fields of Communication Studies: interpersonal, intercultural, small group dynamics, debate, and public discourse
2. Students will analyze and demonstrate understanding of current theories of communication in written and oral formats
3. Students will demonstrate knowledge of effective strategies for initiating, maintaining, and ending communication encounters.

## Required Core Courses:

CMST 102 Public Speaking
List A - select two courses (6 units)
CMST 140 Argumentation and Debate
CMST 101 Introduction to Interpersonal Communication 3

- or -

CMST 101H Honors Introduction to Interpersonal

|  | Communication | 3 |
| :--- | :--- | :--- |
| CMST 145 | Group Dynamics |  |

List B - select two courses (6 units) Units

Any List A course not used above
CMST 103 Introduction to Intercultural Communication 3

- or -

CMST 103H Honors Introduction to Intercultural 3 Communication

| CMST 151 | Voice and Diction for Effective Communication | 3 |
| :--- | :--- | :--- |
| CMST 152 | Oral Interpretation | 3 |

CMSD 105 Mass Media and Society 3

- or -

CMSD 105H Honors Mass Media and Society 3
List C - select one course (3 units) Units
Any course not selected above
ANTH 100 Introduction to Cultural Anthropology 3 - or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
CMSD 111 Media, Race and Gender 3
CMST 158 Readers Theatre 3
CMST 170 Introduction to Phonetics 3
CMST 206 Gender Communication 3

- or -

CMST 206H Gender Communication 3
ENGL 102 Literature and Composition 3

- or -

ENGL 102H Honors Literature and Composition 3
PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H Honors Introduction to Psychology 3
SOC 100 Introduction to Sociology 3

- or -

SOC 100H Honors Introduction to Sociology

## 96 INSTRUCTIONAL PROGRAMS

## COMMUNICATIONS \& MEDIA STUDIES

## Option 1

## Communications \& Media Studies Degree

## Program code: sac.cmsda.aa

The Associate in Arts in Communications and Media Studies degree offers students a unique blend of media theory and practice. The program provides critical and cultural analysis of media and communications, while offering students comprehensive study in reporting, writing, visual reporting, design, and editing across media platforms. Students build their production skills while working at the college's nationally acclaimed publications el Don and eldonnews.org. Completion of the degree prepares students to move into a four-year program, leading to a baccalaureate degree and potential careers in such fields as Web-based media, social media and print reporting, editing, photography, and design, public relations, advertising, radio, digital media, and television writing, and production. Please consult a SAC counselor for information about course requirements for particular four-year institutions. Course content provides Web-based, multimedia storytelling and visual reporting, writing, editing, photography, and digital design skills

## Learning Outcome(s):

1. Students will apply the basic principles of journalism such as accuracy, fairness, and public service
2. Students will demonstrate an understanding of the history and role of professionals and institutions in shaping communications and be able to discuss the legal and ethical underpinnings of U.S. Mass Media
3. Students will research news stories using a variety of sources and evaluate the accuracy of information sources.
Required Core Courses:
Units
$\begin{array}{lll}\text { CMSD } 103 & \text { Introduction to Visual Communications } & 3\end{array}$
CMSD 105 Mass Media and Society 3

CMSD 111 Media, Race, and Gender 3
CMSD 121 Introduction to Reporting and Newswriting 3
CMSD 123A News Media Production 4
CMSD 123B Intermediate Reporting and Newswriting 4
CMSD 201 Visual Reporting 2
CMSD 210 Intermediate Reporting and Newswriting $\quad 3$
CMSD 222 Writing Across Media 3
CMSD 298A Designing for Print and Digital Media 3
Total Units 31

## Option 2

## Associate in Arts in Journalism for Transfer Program code: sac.cmsd.aat

The Associate in Arts in Journalism for Transfer (AA-T Journalism) prepares students to move into the CSU system leading to a baccalaureate degree in Journalism, and then into careers in daily reporting, media editing, writing, Web-based multimedia reporting, visual reporting, photography, print and digital design, public relations, advertising, radio, digital media, and television writing and production. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T Journalism degree also provides guaranteed admission with junior status to the CSU system (admission not guaranteed to a specific major or campus), along with priority admission consideration to a local CSU. See page
24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Journalism, students will be able to define and execute newsgathering strategies; write articles under deadline; edit their own and others' articles for proper spelling, grammar and AP Style; define relevant news content; gather news information weekly; and assess legal and ethical media issues at the final level of a traditional lower division Journalism sequence. Through news production, students will demonstrate proficiency in developing effective designs and layouts for story presentation; develop news stories through written, visual, audio, video or other multimedia formats; determine the best format -print, multimedia, visual -for telling basic news stories; build a portfolio that demonstrates a range of storytelling formats and styles; and navigate content management software used to create online publications.

## Learning Outcome(s):

1. Students will apply the basic principles of journalism such as accuracy, fairness, and public service
2. Students will demonstrate an understanding of the history and role of professionals and institutions in shaping communications and be able to discuss the legal and ethical underpinnings of U.S. Mass Media
3. Students will research news stories using a variety of sources and evaluate the accuracy of information sources.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| CMSD 105 | Mass Media and Society | 3 |
|  | - or - | 3 |
| CMSD 105H | Honors Mass Media and Society | 3 |
| CMSD 121 | Introduction to Reporting and Newswriting | 4 |
| CMSD 123A | News Media Production | Units |
| List A: select 1 course from the following: (3-4 units) | 3 |  |
| CMSD 103 | Introduction to Visual Communications | 4 |
| CMSD 123B | Intermediate News Media Production | 3 |
| CMSD 160 | Introduction to Photojournalism | 3 |
| CMSD 210 | Intermediate Reporting and Newswriting | Units |
| List B: select | 2 courses from the following: (6-8 units) | 3 |
| CMSD 111 | Media, Race and Gender | 3 |
| CMST 140 | Argumentation and Debate | 3 |
| CMSD 298A | Designing for Print and Digital Media | 3 |
| CNSL 144 | Reasoning and Problem Solving | 4 |
| READ 150 | Critical Reading | 3 |
| PHIL 110 | Critical Thinking | 4 |
|  | - or - | 4 |


| ECON 120 | Principles/Macro | 3 |
| :---: | :---: | :---: |
|  | - or - |  |
| ECON 121 | Principles/Micro | 3 |
| ENGL 102 | Literature and Composition | 4 |
|  | - or - |  |
| ENGL 102H | Honors Literature and Composition | 4 |
|  | - or - |  |
| ENGL 103 | Critical Thinking and Writing | 4 |
|  | - or - |  |
| ENGL 103H | Honors Critical Thinking and Writing | 4 |
| MATH 219 | Statistics and Probability | 4 |
|  | - or - |  |
| MATH 219H | Honors Statistics and Probability | 4 |
| PHIL 111 | Introductory Logic | 4 |
| PHOT 180 | Beginning Photography | 3 |
| POLT 101 | Introduction to American Governments | 3 |
|  | - or - |  |
| POLT 101H | Honors Introduction to American Governments | 3 |
| POLT 201 | Introduction to Comparative Politics | 3 |

## B-Broadcast Communications \& Media Studies Emphasis <br> Degree

## Program code: sac.cmsdb.aa

The program in Communications and Media Studies offers students a unique blend of theory and practice. The program provides critical and cultural analysis of media and communications in conjunction with a hands-on production sequence in print, digital, and Web-based multimedia, leading to potential entry-level positions in multimedia and communications fields.

## Learning Outcome(s):

1. Students will apply the basic principles of journalism such as accuracy, fairness, and public service
2. Students will demonstrate an understanding of the history and role of professionals and institutions in shaping communications and be able to discuss the legal and ethical underpinnings of U.S. Mass Media
3. Students will research qnews stories using a variety of sources and evaluate the accuracy of information sources.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| CMSD 105 | Mass Media and Society | 3 |
|  | - or - |  |
| CMSD 105H | Honors Mass Media and Society | 3 |
| CMSD 121 | Introduction to Reporting and Newswriting | 3 |
| CMSD 101 | Introduction to Interpersonal Communication | 3 |
|  | - or - |  |
| CMST 101H | Honors Introduction to Interpersonal Communication | 3 |
| CMST 151 | Voice and Diction for Effective Communication | 3 |
| TELV 100 | Introduction to Electronic Media: Broadcasting, Cable, Video | 3 |
| TELV 110 | Introduction to Television Production | 3 |
| TELV 130 | Principles of Broadcast News | 3 |
| TELV 142 | Acting for Television and Film | 3 |

Note: The following courses satisfy general education requirements and are prerequisites for the major: ENGL 101 or 101H, 102 or 102H.


| HIST 121H | Honors The United States since 1865 | 3 |
| :--- | :--- | :--- |
| PHIL 110 | Critical Thinking | 4 |

- or -
PHIL 110H Honors Critical Thinking 4
POLT 101 Introduction to American Governments 3
- or -

| POLT 101H | Honors Introduction to American Governments | 3 |
| :--- | :--- | :--- |
| PSYC 100 | Introduction to Psychology | 3 |

- or -
PSYC 100H Honors Introduction to Psychology 3

| TELV 009 | Laboratory | 0.5 |
| :--- | :--- | :--- |


| TELV 101 | TV and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 112 | 3 |  |


| TELV 112 | Introduction to Video Editing and | 3 |
| :--- | :--- | :--- || TELV 120 | $\begin{array}{l}\text { Beginning Screenwriting for TV, Film, the Web, } \\ \text { Corporate Video and Digital Media }\end{array}$ | 3 |
| :--- | :--- | :--- |


| TELV 121 | Intermediate Screenwriting for TV, Film, the | 3 |
| :--- | :--- | :--- |
|  | Web, Corporate Video and Digital Media |  |


| TELV 131 | Beginning Broadcast News Workshop | 2 |
| :--- | :--- | :--- |
| TELV 150 | Producing and Directing for Television | 3 |
| TELV 260 | Lighting Fundamentals | 3 |
| THEA 110 | Acting Fundamentals | 3 |

## 98 INSTRUCTIONAL PROGRAMS

## Communications \& Media Studies Certificate (Transcripted)

## Program code: sac.cmsd.ca

The certificate program in Communications \& Media Studies offers students a unique blend of theory and practice. The program provides critical and cultural analysis of media and communications in conjunction with a hands-on production sequence in print, digital and Web-based multimedia, leading to potential entry-level positions in multimedia and communications fields.

## Learning Outcome(s):

1. Students will apply the basic principles of journalism such as accuracy, fairness, and public service
2. Students will demonstrate an understanding of the history and role of professionals and institutions in shaping communications and be able to discuss the legal and ethical underpinnings of U.S. Mass Media
3. Students will research news stories using a variety of sources and evaluate the accuracy of information sources.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| CMSD 102 | Multimedia Storytelling | 3 |
| CMSD 103 | Visual Communications | 3 |
| CMSD 110 | Introduction to Narrative Nonfiction | 4 |
| CMSD 121 | Introduction to Reporting and Newswriting | 3 |
| CMSD 123A | News Media Production | 4 |
| CMSD 125 | Media Editing Workshop | 1.5 |
| CMSD 201 | Visual Reporting | 2 |
| CMSD 222 | Writing Across Media | 3 |
| CMSD 298A | Designing for Print and Digital Media | 3 |
|  |  | Total Units |

## COMMUNITY SOCIAL SERVICES

## Community Social Services Degree

## Program code: sac.css.aa

The major course requirements for the associate degree in Community Social Services enable students to move into a transfer curriculum at a four-year university that can lead to a baccalaureate degree in Human Services. The baccalaureate degree in Human Services prepares students for graduate programs in Counseling, Social Work and Marriage and Family Therapy. Please see a counselor for specific course requirements for your transfer university.

## Learning Outcome(s):

1. Students will think critically and communicate effectively about community social service issues using written and oral communication
2. Students will demonstrate the effective use of empathic listening and interviewing skills
3. Students will evaluate and integrate information to draw reasonable conclusions based on evidence.
Required Core Courses: Units
CDEV 107 Child, Growth and Development 3

- or -

PSYC 157 Introduction to Child Psychology 3
CNSL 150 Introduction to Human Services 3
CNSL 155 Skills for the Helping Professions 3
SOC 112 Relationships, Marriages, and Family Dynamics

- or -

PSYC 100 Introduction to Psychology

PSYC 100H Honors Introduction to Psychology

Select a minimum of 6 units from the electives below: Units
ANTH 100 Introduction to Cultural Anthropology 3

- or -

| ANTH 100H | Honors Introduction to Cultural Anthropology | 3 |
| :--- | :--- | :---: |
| BIOL 149 | Human Anatomy and Physiology | 4 |
| CDEV 116 | Infant/Toddler Growth and Development (DS4) | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| CDEV 220 | The Child as a Victim | 3 |
| CNSL 116 | Career/Life Planning and Personal Exploration | 3 |
| EDUC 100 | Introduction to Education | 3 |
| EDUC 210 | The Teaching Experience: Secondary Education | 3 |
| MATH 219 | Statistics and Probability | 4 |

- or -

MATH 219H Honors Statistics and Probability 4
MATH 105 Mathematics for Liberal Arts Students 3
PSYC 250 Introduction to Abnormal Psychology $\quad 3$

SOC 100 Introduction to Sociology 3

- or -

| SOC 100H | Honors Introduction to Sociology | 3 |
| :--- | :--- | :--- |
| SOC 112 | Relationships, Marriages, and Family Dynamics | 3 |
| PSYC 100 | Introduction to Psychology | 3 |

PSYC 100H Honors Introduction to Psychology 3

Total Units $\quad 18-20$

## COMPUTER INFORMATION SYSTEMS

## Computer Information Systems Degree

Program code: sac.cis.as
The associate degree curriculum in Computer Information Systems is concerned with the development of procedures that are effective and efficient, computer languages suitable for starting these procedures, and systems for executing the procedures. This may include the ability to write programs in Visual BASIC, C++ or Java, experience microcomputer data processing applications such as Excel or Access, and ability to structure data for the computer. Students intending to obtain a bachelor's degree in Computer Information Systems should consult the major requirements for upper division standing listed under the Business Administration major at the school of their choice. Learning Outcome(s):
Students will know how to write a program and use data processing software.
Required Core Courses: Units
BA 189 Advanced Microsoft Excel 2
CMPR 105 Visual BASIC Programming 3
CMPR 134 Microsoft Windows Operating System 3
CMPR 167 Microsoft Access $\quad 3$

CMPR 173 Introduction to Networking Technology 3
CMPR 205 Advanced Visual Basic 3

CMPR 247 Windows Server Operating System 3
Select ONE course from the following: Units
BUS 150 Introduction to Information Systems and
Applications

- or -

CMPR 100 The Computer and Society

| Select a minimum of THREE units from the following: | Units |  |
| :--- | :--- | ---: |
| ACCT 101 | Financial Accounting | 4 |
| ACCT 102 | Managerial Accounting | 4 |
| ACCT 160 | Accounting with Sage MAS Software | 3 |
| CMPR 104 | Cooperative Work Experience Education- <br> Occupational | $1-4$ |
| CMPR 112 | Java Programming | 3 |
| CMPR 117 | Perl Programming and CGI | 3 |
| CMPR 118 | JavaScript Programming | 3 |
| CMPR 120 | Introduction to Programming | 3 |
| CMPR 121 | Programming Concepts | 3 |
| CMPR 125 | Help Desk Skills | 1.5 |
| CMPR 135 | Software Deployment Mechanisms | 1.5 |
| CMPR 136 | Building a Small Office/Home Office Network | 1.5 |
| CMPR 137 | Personal Computer Troubleshooting | 3 |
| CMPR 139 | Configuration and Administration of Local Area | 1.5 |
| CMPR 169 | Structured Query Language (SQL) | 3 |
| CMPR 152 | HTML | 3 |
| CMPR 168 | Advanced Microsoft Access | 3 |
| CMPR 206 | Visual Basic for Web Development | 3 |
| CMPR 214 | XML Programming | 3 |
| CMPR 248 | Microsoft SQL Server | 3 |

Total Units 26-27

## Computer Information Systems Certificate (Transcripted) Program code: sac.cis.ca

The Certificate of Achivement curriculum in Computer Information Systems is concerned with the development of procedures that are effective and efficient, computer languages suitable for starting these procedures, and systems for executing the procedures. This may include the ability to write programs in Visual BASIC, C++ or Java, experience microcomputer data processing applications such as Excel or Access, and ability to structure data for the computer. Students intending to obtain a bachelor's degree in Computer Information Systems should consult the major requirements for upper-division standing listed under the Business Administration major at the school of their choice.
Learning Outcome(s):
Students will know how to write a program and use data processing software.
Take ALL of the following courses:
BA 189 Advanced Microsoft Excel 2
CMPR 105 Visual BASIC Programming 3
CMPR 134 Microsoft Windows Operating System 3
CMPR 167 Microsoft Access 3
CMPR 173 Introduction to Networking Technology 3
CMPR 205 Advanced Visual Basic 3
CMPR 247 Windows Server Operating System 3
Select ONE course from the following: Units

BUS 150 Introduction to Information Systems and
CMPR 100 The Computer and Society
Select a minimum of THREE units from the following: Units
ACCT 101 Financial Accounting 4
ACCT 102 Managerial Accounting 4
ACCT 160 Accounting with Sage MAS Software 3

| CMPR 104 | Cooperative Work Experience Education- |  |
| :--- | :--- | ---: |
| Occupational | $1-4$ |  |
| CMPR 112 | Java Programming | 3 |
| CMPR 117 | Perl Programming and CGI | 3 |
| CMPR 118 | JavaScript Programming | 3 |
| CMPR 120 | Introduction to Programming | 3 |
| CMPR 121 | Programming Concepts | 3 |
| CMPR 124A | MCDST Preparation | 3 |
| CMPR 125 | Help Desk Fundamentals | 3 |
| CMPR 135 | Software Deployment Mechanisms | 1.5 |
| CMPR 136 | Building a Small Office/Home Office Network | 1.5 |
| CMPR 137 | Personal Computer Troubleshooting | 3 |
| CMPR 139 | Configuration and Administration of Local Area | 1.5 |
| CMPR 152 | Hetworks | 3 |
| CMPR 168 | Advanced Microsoft Access | 3 |
| CMPR 169 | Structured Query Language (SQL) | 3 |
| CMPR 206 | Visual Basic for Web Development | 3 |
| CMPR 214 | XML Programming | 3 |
| CMPR 248 | Microsoft SQL Server | 3 |
|  |  | 3 |

## Database Certificate (Untranscripted)

## Program code: sac.cisdb.cert

The associate degree and certificate curriculum in Computer Information Systems is concerned with the development of procedures that are effective and efficient, computer languages suitable for starting these procedures, and systems for executing the procedures. This may include the ability to write programs in Visual BASIC, C++ or Java, experience microcomputer data processing applications such as Excel or Access, and ability to structure data for the computer. Students intending to obtain a bachelor's degree in Computer Information Systems should consult the major requirements for upperdivision standing listed under the Business Administration major at the school of their choice

## Learning Outcome(s):

Students will know how to write a database program and use database software.
Take ALL of the following courses: Units
CMPR 105 Visual BASIC Programming 3
CMPR 167 Microsoft Access 3

CMPR 168 Advanced Microsoft Access 3
CMPR 169 Structured Query Language (SQL) 3
CMPR 205 Advanced Visual BASIC 3
Total Units
15

## Enterprise Systems Certificate (Untranscripted)

## Program code: sac.cmpres.cert

Prepares students to be involved with running Enterprise (large-scale) computer systems. Students will learn how to design and configure multicomputer networking systems, configure, administrate, and maintain servers, and manage related issues such as reliability, safety and security. Learning Outcome(s):
Students will know how to use Enterprise System software.
Take ALL of the following courses: Units
CMPR 173 Introduction to Networking Technology 3
CMPR 247 Windows Server Operating System 3
CMPR 248 Microsoft SQL Server 3
CMPR 249 Microsoft Internet Information Server (IIS) 3

## Help Desk Certificate (Untranscripted)

## Program code: sac.cishd.cert

The associate degree and certificate curriculum in Computer Information Systems is concerned with the development of procedures that are effective and efficient, computer languages suitable for starting these procedures, and systems for executing the procedures. This may include the ability to write programs in Visual BASIC, C++ or Java, experience microcomputer data processing applications such as Excel or Access, and ability to structure data for the computer. Students intending to obtain a bachelor's degree in Computer Information Systems should consult the major requirements for upperdivision standing listed under the Business Administration major at the school of their choice.

## Learning Outcome(s):

Students will know how to use Help Desk software.
Take ALL of the following courses: Units
CMPR 100 The Computer and Society

| CMPR 104 | Cooperative Work Experience Education- <br> Occupational | $1-4$ |
| :--- | :--- | :--- |

CMPR 124A MCDST Preparation 3
CMPR 125 Help Desk Skills
CMPR 137 Personal Computer Troubleshooting
Select ONE course from the following:
Units
CMPR 134B Windows Vista Operating System
3
CMPR 134C Microsoft Windows 7 Operating System
CMPR 134D Microsoft Windows 8 Operating System
Total Units
14.5-17.5

## Networking Certificate (Untranscripted)

## Program code: sac.cisnw.cert

Network certificate is an mid-level certification for network technicians. This certification is designed to test the competency of a mid-level network technician in supporting and configuring TCP/IP clients in terms of network design, cabling, hardware setup, configuration, installation, support, and troubleshooting.
Learning Outcome(s):
Students will know how to use Networking software.
Take ALL of the following courses:
CMPR 134 Microsoft Windows Operating System
$\underline{\text { CMPR } 138 \text { CompTIA Network+ Guide to Networks }}$

CMPR 173 Introduction to Networking Technology 3
CMPR 247 Windows Server Operating System
Total Units
PC Maintenance and Troubleshooting Certificate

## (Untranscripted)

Program code: sac.cmprm.cert
PC Troubleshooting certificate is designed to prepare students in the technical field of PC repair and maintenance, sufficient for completers to sit for the CompTIA A+ Certification Examinations in hardware and software.
Learning Outcome(s):
Students will know how to use PC maintenance and troubleshooting software.

| Take ALL of the following courses: | Units |  |
| :--- | :--- | ---: |
| CMPR 134 | Microsoft Windows Operating System | 3 |
| CMPR 153 | A+ Essentials Hardware | 3 |
| CMPR 154 | A+ Essentials Software | 3 |
| CMPR 173 | Introduction to Networking Technology | 3 |
| CMPR 247 | Windows Server Operating System | 3 |
|  | Total Units | $\mathbf{1 5}$ |

## Web Site Development Certificate (Untranscripted) <br> Program code: sac.ciswp.cert

Web Site Development gives students the skills to design, implement, and publish content (pages on the World Wide Web.
Learning Outcome(s):
Students will know how to use web programming software.
Take the following 3 courses: Units
CMPR 152 HTML 3
CMPR 118 Javascript Programming 3
Select ONE course from the following:
CMPR 112 Java Programming 3

- or -

CMPR 213 C\# Programming 3
Total Units
9

## COMPUTER RELATED PROGRAMS

The Rancho Santiago Community College District offers two major programs, which are described below.

## COMPUTER INFORMATION SYSTEMS

## (See Page 98)

Computer Information Systems (CIS) is a program for students interested in the application of computer hardware and software to business. CIS courses prepare students for entry-level positions in programming, networking, or computer support. These courses may be used for job advancement, an associate degree or certificate of competency, or transfer to a four-year institution. CIS courses cover major programming languages (Visual BASIC, C++, Java) as well as software used in business for database management, spreadsheets, and networking. The introductory course for the CIS program is BUS 150.

## COMPUTER SCIENCE

Computer Science courses are designed to meet the varying goals of students interested in employment or education in the computer field. There are courses on specific languages for professionals who want to supplement their skills with the knowledge of a current programming language (PC Assembler, C++, Visual BASIC, Java). A certificate in computer science can be earned by those students desiring to enter the workplace at entry-level positions. Also, an associate degree can be earned by those students desiring to transfer to a four-year institution with a major in Computer Science.
The Computer Science courses provide instruction in low-level and high-level languages, intermediate and advanced techniques in programming, and hardware organization. Refer to Computer Science in the courses section of this catalog and to the schedule of classes for specific information.

## Option 1

## Computer Science Degree

## Program code: sac.cmpr.as

The associate degree and certificate curriculum in computer science leads to entry-level employment in computer science, engineering, and other areas where high aptitude in computer programming is recognized. The program prepares students for careers as engineering aides, scientific computing technicians, and junior programmers. The program also prepares students to transfer to a university with a major in Computer Science.

## Learning Outcome(s):

Students will know how to use computer science software.
Take ALL of the following courses:
CMPR 100 The Computer and Society 3
CMPR 120 Introduction to Programming 3
CMPR 121 Programming Concepts 3

| CMPR 129 | Introduction to Computer Organization | 4 |
| :--- | :--- | :--- |
| CMPR 131 | Data Structures Concepts | 3 |

Select ONE course from the following: Units
CMPR 112 Java Programming 3
CMPR 205 Advanced Visual BASIC 3

CMPR 213 C\# Programming

| Select an additional SIX units from the following: | Units |  |
| :--- | :--- | ---: |
| CMPR 112 | Java Programming | 3 |
| CMPR 117 | Perl Programming and CGI | 3 |
| CMPR 118 | JavaScript Programming | 3 |
| CMPR 134 | Microsoft Windows Operating System | 3 |
| CMPR 135 | Software Deployment Mechanisms | 1.5 |
| CMPR 139 | Configuration and Administration of Local Area | 1.5 |
| CMPR 140 | Networks | Discrete Structures for Computer Science |
| CMPR 141 | UNIX Operating System | 3 |
| CMPR 142 | Advanced Unix | 3 |
| CMPR 205 | Advanced Visual Basic | 3 |
| CMPR 213 | C\# Programming | 3 |
| CMPR 243 | UNIX System Programming | 3 |
| CMPR 247 | Windows Server Operating System | 3 |
| CMPR 248 | Microsoft SQL Server | 3 |
| CMPR 249 | Microsoft Internet Information Server (IIS), | 3 |
| MATH 180 | Analytic Geometry and Calculus | 3 |
| MATH 185 | Analytic Geometry and Calculus | 4 |
|  | Total Units | 25 |

## Option 2

## Associate in Science in Computer Science for Transfer Program code: sac.cmpr.ast

The Associate in Science in Computer Science for Transfer (AS-T Computer Science) prepares students to transfer into the CSU system. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the Associate in Science in Computer Science for Transfer (AS-T Computer Science) also provides guaranteed admission with junior status to the CSU system although does not guarantee acceptance to a particular campus or major. See page 24 of the SAC catalog for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees.*
Upon completion of the AS-T in Computer Science (AS-T Computer Science), students will be well- versed in the use of standard computer control structures to solve problems and develop algorithms. They will have developed skills in writing programs that utilize functions as a method of program organization and control. Additional areas of emphasis will include objects, object-oriented programming, data structures, and abstract data types. Computer science students will also obtain knowledge of computer architecture and organization. The Computer Science curriculum also requires the student to have significant skills in mathematics and the applications of those skills to real world problem solving.
Degree requires completion of classes in a general education package. See catalog for information on requirements
Learning Outcome(s):
Students will know how to use computer science software.
Required Core (29 units) Units
CMPR 121 Programming Concepts 3
CMPR 131 Data Structures Concepts 3
CMPR 129 Introduction to Computer Organization 4
CMPR 140 Discrete Structures for Computer Science 3
MATH 180 Single Variable Calculus I 4

MATH 185 Single Variable Calculus II 4
PHYS 217 Engineering Physics I 4
PHYS 227 Engineering Physics II 4

* Note: Only IGETC (Plan C) will be accepted toward completion of the general education portion of this degree. Unlike other Associate Degrees for Transfer, CSU-GE (Plan B) completion will not be accepted for this degree. (An Oral Communication course, IGETC Area 1C, must be completed in order to meet CSU admission requirements.)


## Computer Science Certificate (Transcripted)

Program code: sac.cmpr.ca
The certificate curriculum in computer science leads to entry-level employment in computer science, engineering and other areas where high aptitude in computer programming is recognized. The program prepares students for careers as engineering aides, scientific computing technicians and junior programmers. The program also prepares students to transfer to a university with a major in Computer Science. Learning Outcome(s):
Students will know how to use computer science software.
Take ALL of the following courses: Units
CMPR 100 The Computer and Society 3
CMPR 120 Introduction to Programming 3
CMPR 121 Programming Concepts 3
CMPR 129 Introduction to Computer Organization 4
CMPR 131 Data Structures Concepts 3

| Select ONE course from the following: |  | Units |
| :---: | :---: | :---: |
| CMPR 112 | Java Programming | 3 |
| CMPR 205 | Advanced Visual BASIC | 3 |
| CMPR 213 | C\# Programming | 3 |
| Select an additional SIX units from the following: |  | Units |
| CMPR 112 | Java Programming | 3 |
| CMPR 117 | Perl Programming and CGI | 3 |
| CMPR 118 | JavaScript Programming | 3 |
| CMPR 134 | Microsoft Windows Operating System | 3 |
| CMPR 135 | Software Deployment Mechanisms | 1.5 |
| CMPR 139 | Configuration and Administration of Local Area Networks | 1.5 |
| CMPR 140 | Discrete Structures for Computer Science | 3 |
| CMPR 141 | UNIX Operating System | 3 |
| CMPR 142 | Advanced Unix | 3 |
| CMPR 205 | Advanced Visual Basic | 3 |
| CMPR 213 | C\# Programming | 3 |
| CMPR 243 | UNIX System Programming | 3 |
| CMPR 244 | Microsoft Exchange Server | 3 |
| CMPR 247 | Windows Server Operating System | 3 |
| CMPR 248 | Microsoft SQL Server | 3 |
| CMPR 249 | Microsoft Internet Information Server (IIS), | 3 |
| MATH 180 | Analytic Geometry and Calculus | 4 |
| MATH 185 | Analytic Geometry and Calculus | 4 |
| Total Units |  | 25-27 |

## Programming Certificate (Untranscripted)

## Program code: sac.cmrp.cert

The certificate curriculum in computer science leads to entry-level employment in computer science, engineering and other areas where high aptitude in computer programming is recognized. The program prepares students for careers as engineering aides, scientific computing technicians and junior programmers. The program also prepares students to transfer to a university with a major in Computer Science.

## Learning Outcome(s):

Students will know how to use programming software.

| Take ALL of the following courses: | Units |  |
| :--- | :--- | ---: |
| CMPR 120 | Introduction to Programming | 3 |
| CMPR 121 | Programming Concepts | 3 |
| CMPR 131 | Data Structures Concepts | 3 |
| Select ONE course from the following: | Units |  |
| CMPR 112 | Java Programming | 3 |
| CMPR 205 | Advanced Visual BASIC | 3 |
| CMPR 213 | C\# Programming |  |
|  |  | Total Units |

## CRIMINAL JUSTICE

## Option 1

Criminal Justice Degree

## Program code: sac.cj.as

The Criminal Justice Option Degree curriculum is designed to prepare students for entry-level employment in local, state, federal, or private sector criminal justice agencies that do not require bachelor's degrees, and to provide students who wish to transfer to a four-year academic institution with 27 units of criminal justice course work. This degree prepares students for careers in the fields of law enforcement, probation, corrections, courts, and private security.

## Learning Outcome(s):

1. Students will develop critical thinking and ethical reasoning skills
2. Students will successfully pursue and be prepared for careers in Criminal Justice.
Required Core Courses: Units
CJ 101 Introduction to Criminal Justice 3

- or -

CJ $101 \mathrm{H} \quad$ Honors Introduction to Criminal Justice 3

| CJ 102 | Introduction to Corrections | 3 |
| :--- | :--- | :--- |
| CJ 103 | 3 |  |

CJ 103 Concepts of Criminal Law 3

- or -

| CJ 103 H | Honors Concepts of Criminal Law | 3 |
| :--- | :--- | :---: |
| CJ 105 | Legal Aspects of Evidence | 3 |
| CJ 107 | $\begin{array}{l}\text { Principles and Procedures in the Criminal Justice } \\ \text { System } \\ \text { - or - }\end{array}$ | 3 |
| PARA 107 | $\begin{array}{l}\text { Principles and Procedures in the Criminal Justice } \\ \text { System }\end{array}$ | 3 |
| CJ 109 | Community Interaction | 3 |

- or -

| CJ 109 H | Honors Community Interaction | 3 |
| :--- | :--- | :--- |
| CJ 148 | Report Writing for Criminal Justice Personnel | 3 |

Electives 6 units: Select electives from the following list: Units
CJ 104 Prison Experience 3
CJ 106 Coroner Death Investigation 3
CJ $108 \quad$ Crime Scene Investigation 3
CJ 110 Street Gangs 3
CJ 205 Criminal Investigation Principles $\quad 3$
CJ 209 Organized Crime 3
CJ $210 \quad$ Drug Abuse and Criminal Justice $\quad 3$
CJ 220 Juvenile Delinquency and Control 3

Completion of Criminal Justice Academies 099A, Basic Police
Academy, will satisfy the requirements in lieu of the above 6 units of electives. All students must complete the basic seven-course core curriculum to qualify for the degree.

Option 2

## Associate in Science in Administration of Justice for Transfer

## Program code: sac.cj.ast

The Associate in Science in Administration of Justice for Transfer (AS-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in Criminal Justice. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AS-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Criminal Justice major.
See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AS-T in Administration of Justice students will have a greater understanding of illegal behavior and how their behavior interacts with the criminal justice system. The student will also learn the operation of the criminal justice system from arrest, trial, corrections and release into the community.

## Learning Outcome(s):

1. Students will develop critical thinking and ethical reasoning skills
2. Students will successfully pursue and be prepared for careers in Criminal Justice.

## Required Core (6 units)

| CJ 101 | Introduction to Criminal Justice | 3 |
| :--- | :--- | ---: |
|  | - or - | 3 |
| CJ 101 H | Honors Introduction to Criminal Justice | 3 |
| CJ 103 | Concepts of Criminal Law |  |
|  | - or - | 3 |
| CJ $103 H$ | Honors Concepts of Criminal Law | Units |
| List A - Select two courses (6 units) | 3 |  |
| CJ 102 | Introduction to Corrections | 3 |
| CJ 105 | Legal Aspects of Evidence | 3 |
| CJ 107 | Principles and Procedures in the Criminal Justice | 3 |
| CJ 108 | System | Crime Scene Investigation |
| CJ 109 | Community Interaction | 3 |
| CJ 205 | Criminal Investigation Principles | 3 |
| CJ 220 | Juvenile Delinquency and Control | 3 |

List B - select two course (6-8 units) Units

Any course from List A not already used

| MATH 219 | Statistics and Probability | 4 |
| :--- | :--- | ---: |
|  | - or - | 4 |
| MATH 219H | Honors Statistics and Probability |  |
|  | - or - | 4 |
| SOCS 219 | Statistics and Probability | 4 |
|  | - or - | 4 |
| SOCS 219H | Honors Statistics and Probability | 4 |
| PHIL 110 | Critical Thinking | 4 |
| PHIL 110H | - or - | 4 |
| PHIL 111 | Introductory Logic | 3 |
| POLT 101 | Introduction to American Governments | 4 |
| POLT 101H | - or - | 4 |


| PSYC 100 | Introduction to Psychology - or - | 3 |
| :---: | :---: | :---: |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| SOC 100 | Introduction to Sociology | 3 |
|  | - or - |  |
| SOC 100H | Honors Introduction to Sociology | 3 |
| CJ 106 | Coroner Death Investigations | 3 |
| CJ 210 | Drug Abuse and Criminal Justice | 3 |

## Corrections Officer Program Certificate (Untranscripted) Program code: sac.cjco.cert

The Corrections Officer Certificate is designed to upgrade the skills and knowledge that criminal justice professionals require, and provides knowledge of new procedures, policies, and judicial rulings to anyone interested in the criminal justice system, particularly in the field of corrections. This certificate consists of course work that is fundamental for working in the fields of law enforcement, probation, corrections, courts, and private security, and leads to completion of the

## Learning Outcome(s):

1. Students will develop critical thinking and ethical reasoning skills
2. Students will successfully pursue and be prepared for careers in Criminal Justice.

## Required Core Courses: <br> Units

CJ 101 Introduction to Criminal Justice

- or -

CJ 101H Honors Introduction to Criminal Justice 3
CJ 102 Introduction to Corrections 3
CJ 103 Concepts of Criminal Law 3

| CJ 103H | Honors Concepts of Criminal Law | 3 |  |
| :--- | :--- | ---: | ---: |
| CJ 105 | Legal Aspects of Evidence | 3 |  |
| CJ 148 | Report Writing for Criminal Justice Personnel | 3 |  |
| CJ 205 | Criminal Investigation Principles |  |  |
|  | Total Units |  |  |
|  |  | $\mathbf{1 8}$ |  |

104 INSTRUCTIONAL PROGRAMS

## Law Enforcement Option Certificate (Transcripted)

## Program code: sac.cjle.ca

The Law Enforcement Option Certificate is designed to meet or exceed the minimum P.O.S.T. requirements for entry-level employment as peace officers. This certificate requires successful completion of the Basic Police Academy (CJA 099A). Students interested in this certificate should contact an academic counselor, the Criminal Justice Academies, and the Criminal Justice Department for details.

## Learning Outcome(s):

1. Students will develop critical thinking and ethical reasoning skills
2. Students will successfully pursue and be prepared for careers in Criminal Justice.
Required Core Courses: Units

| CJA 010 | Pre-Employment Preparation for Law Enforcement | 1.5 |
| :--- | :--- | ---: |
| CJA 099A | Basic Police Academy | $20-21$ |
| CJ |  |  |

CJ 101 Introduction to Criminal Justice 3

CJ 101H Honors Introduction to Criminal Justice 3
CJ 103 Concepts of Criminal Law 3

CJ 103H Honors Concepts of Criminal Law 3
CJ 105 Legal Aspects of Evidence 3
CJ $107 \quad$ Principles and Procedures in the Criminal Justice System

- or -

PARA 107
Principles and Procedures in the Criminal Justice System
CJ 109 Community Interaction

- or -

CJ 109H Honors Community Interaction
Total Units 36.5-37.5

## DANCE

## Dance Degree

Program code: sac.dnce.aa
The associate in arts degree program in dance provides training in three areas of technique: ballet, modern, and jazz. Integral parts of the curriculum are practical experience in concert performance and production work as well as a theoretical background in choreography, somatics and dance history. Completion of the associate in arts degree prepares the student to enter a four-year institution leading to a baccalaureate degree.
Please consult a SAC counselor for information about course requirements for particular four-year institutions. The dance program provides training for careers and employment in the performing arts, education, choreography, movement therapy, arts consultancy, dance criticism and related fields.

## Required Core Courses:

Units
DNCE 100 Dance History and Appreciation

- or -

DNCE 100H Honors Dance History and Appreciation 3
DNCE 201B Ballet II 2

| DNCE 202B | Choreography for Dance Majors | 3 |
| :--- | :--- | :--- |

DNCE 204A Dance Production I 2

DNCE 204B Dance Production II 2
DNCE 206B Modern Dance II 2
DNCE 209 Modern Dance III 2
DNCE 210 Modern Dance IV 2
DNCE 213 Ballet III 2

| DNCE 214 | Ballet IV | 2 |
| :---: | :---: | :---: |
| DNCE 219B | Jazz Dance II | 2 |
| DNCE 220 | Jazz Dance III | 2 |
| DNCE 221 | Jazz Dance IV | 2 |
| DNCE 240A | Repertory I | 2 |
| DNCE 240B | Repertory II | 2 |
| DNCE 260 | Somatic Practices in Dance | 3 |
| Plus 2 units from the following electives: |  | Units |
| DNCE 009A | Dance Laboratory I | 0.5 |
| DNCE 009B | Dance Laboratory II | 0.5 |
| DNCE 009C | Dance Laboratory III | 0.5 |
| DNCE 009D | Dance Laboratory IV | 0.5 |
| DNCE 102 | Introduction to Dance Forms | 3 |
| DNCE 105 | World Dance and Cultures | 3 |
| DNCE 106A | Introduction to Modern Dance | 1 |
| DNCE 106B | Introduction to Modern Dance | 1 |
| DNCE 107 | Dance Concert Performance | 1 |
| DNCE 108A | Introduction to Ballet | 1 |
| DNCE 108B | Introduction to Ballet | 1 |
| DNCE 110 | Beginning Mexican Folk Dance | 1 |
| DNCE 111 | Intermediate Mexican Folk Dance | 1 |
| DNCE 112 | Ethnic Dance | 1 |
| DNCE 117 | Introduction to Middle Eastern Dance | 1 |
| DNCE 118 | Introduction to Caribbean and Latin Dance Styles | 1 |
| DNCE 119A | Introduction to Jazz Dance | 1 |
| DNCE 119B | Introduction to Jazz Dance | 1 |
| DNCE 120A | Introduction to Hip-Hop Dance | 1 |
| DNCE 120B | Intermediate Hip-Hop Dance | 1 |
| DNCE 122 | Commercial Contemporary Dance | 1 |
| DNCE 123 | Introduction to Salsa Dance | 1 |
| DNCE 124 | Intermediate Salsa Dance | 1 |
| DNCE 130 | Dance Improvisation | 1 |
| DNCE 140 | Dance Repertory Workshop | 1 |
| DNCE 180 | Professional Studio Practices | 1 |
| DNCE 201A | Ballet I | 2 |
| DNCE 202A | Choreography | 3 |
| DNCE 206A | Modern Dance I | 2 |
| DNCE 219A | Jazz Dance I | 2 |
| DNCE 240C | Repertory III | 2 |
| DNCE 240D | Repertory IV | 2 |
| DNCE 250A | Hip-Hop Dance I | 2 |
| DNCE 250B | Hip-Hop Dance II | 2 |
| DNCE 251 | Hip-Hop Dance III | 2 |
| DNCE 261 | Somatic Practices in Modern Dance | 1 |
| DNCE 262 | Somatic Practices in Ballet | 1 |
| DNCE 263 | Somatic Practices in Jazz Dance | 1 |
| DNCE 270 | Dance Practicum | 1 |
| DNCE 296 | Special Studies in Modern Dance | 1 |
| DNCE 297 | Special Studies in Jazz Dance | 1 |
| DNCE 298 | Special Studies in Ballet Dance | 1 |
|  | Total | 37 |

## Dance Certificate of Achievement (Transcripted)

## Program code: sac.dnce.co

The certificate program in dance combines comprehensive advanced courses in dance technique with courses of a specialized nature to provide a complete program of study and training in technique and performance.
This program is designed to develop skills necessary for a career as a dance performer and to provide extensive pre-professional performance experience. Employment opportunities exist in a variety of areas: dance companies; instructor in private dance studios; dancer for commercial stage, television, and film; choreographer/performer in music videos; and production choreographer.

## Learning Outcome(s):

1. Students will demonstrate competency and experience in the creation and presentation of public performances of dance
2. Students will possess proficient skills and technique in modern dance and ballet, with competency in jazz dance, enabling students to transfer as juniors to a 4 -year college dance program
3. Students will develop a clear understanding of the interaction between choreographer, performer and audience and the areas of lighting, costume and set designers through the creation and presentation of public performances in dance.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| DNCE 122 | Commercial Contemporary Dance | 1 |
| DNCE 180 | Professional Studio Practices | 1 |
| DNCE 202B | Choreography for Dance Majors | 3 |
| DNCE 204A | Dance Production I | 2 |
| DNCE 204B | Dance Production II | 2 |
| DNCE 205A | Dance Touring Ensemble I | 2 |
| DNCE 205B | Dance Touring Ensemble II | 2 |
| DNCE 209 | Modern Dance III | 2 |
| DNCE 210 | Modern Dance IV | 2 |
| DNCE 213 | Ballet III | 2 |
| DNCE 214 | Ballet IV | 2 |
| DNCE 220 | Jazz Dance III | 2 |
| DNCE 221 | Jazz Dance IV | 2 |
| DNCE 240A | Repertory I | 2 |
| DNCE 240B | Repertory II | 2 |
| DNCE 251 | Hip-Hop Dance III | 2 |
| Choose 2-3 | units from the these recommended electives: | Units |
| DNCE 009A | Dance Laboratory I | 0.5 |
| DNCE 009B | Dance Laboratory II | 0.5 |
| DNCE 009C | Dance Laboratory III | 0.5 |
| DNCE 009D | Dance Laboratory IV | 0.5 |
| DNCE 105 | World Dance and Cultures | 3 |
| DNCE 107 | Dance Concert Performance | 1 |
| DNCE 109A | Pilates Mat I | 1 |
| DNCE 109B | Pilates Mat II | 1 |
| DNCE 109C | Pilates Mat III | 1 |
| DNCE 110 | Beginning Mexican Folk Dance | 1 |
| DNCE 111 | Intermediate Mexican Folk Dance | 1 |
| DNCE 112 | Ethnic Dance | 1 |
| DNCE 117 | Introduction to Middle Eastern Dance | 1 |
| DNCE 118 | Introduction to Caribbean and Latin Dance | 1 |
| DNCE 123 | Introduction to Salsa Dance | 1 |
|  | Styles |  |


| DNCE 124 | Intermediate Salsa Dance | 1 |
| :--- | :--- | ---: |
| DNCE 130 | Dance Improvisation | 1 |
| DNCE 198 | Topics | 1 |
| DNCE 204C | Dance Production III | 2 |
| DNCE 204D | Dance Production IV | 2 |
| DNCE 205C | Dance Touring Ensemble III | 2 |
| DNCE 205D | Dance Touring Ensemble IV | 2 |
| DNCE 240C | Repertory III | 2 |
| DNCE 240D | Repertory IV | 2 |
| DNCE 250A | Hip-Hop Dance I | 2 |
| DNCE 250B | Hip-Hop Dance II | 2 |
| DNCE 260 | Somatic Practices in Dance | 3 |
| DNCE 261 | Somatic Practices in Modern Dance | 1 |
| DNCE 262 | Somatic Practices in Ballet | 1 |
| DNCE 263 | Somatic Practices in Jazz Dance | 1 |
| DNCE 270 | Dance Practicum | 1 |
| DNCE 290 | Choreography for the Camera | 3 |
| DNCE 291 | Dance Film Production | 3 |
| DNCE 296 | Special Studies in Modern Dance | 1 |
| DNCE 297 | Special Studies in Jazz Dance | 1 |
| Dance 298 | Special Studies in Dance | Iotal Units |
| TELV 110 | Introduction to Television Production | $33-34$ |
| THEA 110 | Acting Fundamentals | 3 |
| THEA 113 | Acting for the Camera | 3 |
| THEA 132 | Stage Makeup | 3 |
|  |  | 3 |
| DIE |  |  |

## DIESEL TECHNOLOGY

## Diesel and Heavy Equipment Technology Degree

## Program code: sac.dsl.as

In addition to the general education requirements, the associate degree in diesel and heavy equipment is designed to successfully prepare students to enter the medium and heavy-duty transportation industry as an apprentice or helper diesel mechanic or provide supplementary knowledge for equipment operators and truck drivers. The program provides lecture and lab activities related towards heavy-duty diesel engines, power train units, steering and suspension components, brakes, electrical, and fuel systems, as well as developing oxyacetylene and arc welding skills. Those working in the industry will be able to improve their competencies in each subject area. Employment opportunities exist for trained men and women in a rapidly expanding field.
Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses: Units
DSL 108 Oxyacetylene-Arc Welding 3
DSL 109 Truck Chassis: Brake and Suspension Service 4
DSL 110 Truck Chassis: Drive Train Service 4
DSL 125 Heavy Duty Diesel Engine: Top End Service 4
DSL 126 Heavy Duty Diesel Engine: Bottom End Service 4
DSL 132 Diesel Fuel Injection Systems Service 5
DSL 140 Diesel Electrical Systems 5

| Choose 3 units from the following electives: |  | Units |
| :---: | :---: | :---: |
| DSL 101 | Truck Preventative Maintenance | 5 |
| DSL 113 | Allison Transmission Service | 5 |
| DSL 115 | Introduction to Heavy Duty Mobile Hydraulics | 5 |
| DSL 121 | Mid-Range Diesel Engine Service | 4.5 |
| DSL 122 | Electronics Fundamentals | 5 |
| DSL 160 | Foundations of Mobile Air Conditioning and Refrigeration | 5 |
| DSL 162 | Air Conditioning and Heating | 3 |
| DSL 202 | Introduction to Coach Operations | 1 |
| DSL 203 | Transit Vehicle Electrical Systems | 2 |
| DSL 204 | Transit Vehicle Air Systems | 0.5 |
| DSL 205 | Transit Vehicle Air Brake Systems | 1 |
| DSL 206 | Transit Vehicle Automatic Transmissions | 1.5 |
| DSL 207 | Transit Vehicle Engines | 2.5 |
| DSL 208 | Transit Vehicle Heating, Ventilation, Air Conditioning | 1.5 |
| DSL 209 | Transit Vehicle Drive Train Suspension | 1 |
| DSL 210 | Transit Vehicle Wheelchair Lifts | 0.5 |
| DSL 287 | Alternative Fuels | 3 |
| DSL 288 | Diesel Engines: Light-Medium Duty Systems | 3 |
|  | Total Units | 32-34 |
| Diesel and Heavy Equipment Technology Certificate (Transcripted) <br> Program code: sac.dsl.ca |  |  |

The certificate curriculum in diesel and heavy equipment is designed to successfully prepare students to enter the medium and heavy-duty transportation industry as an apprentice or helper diesel mechanic or provide supplementary knowledge for equipment operators and truck drivers. The program provides lecture and lab activities related towards heavy-duty diesel engines, power train units, steering and suspension components, brakes, electrical, and fuel systems as well as developing oxyacetylene and arc welding skills. Those working in the industry will be able to improve their competencies in each subject area. Employment opportunities exist for trained men and women in a rapidly expanding field.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses:

| DSL 108 | Oxyacetylene-Arc Welding | 3 |
| :--- | :--- | :--- |
| DSL 109 | Truck Chassis: Brake and Suspension Service | 4 |
| DSL 110 | Truck Chassis: Drive Train Service | 4 |
| DSL 125 | Heavy Duty Diesel Engine: Top End Service | 4 |
| DSL 126 | Heavy Duty Diesel Engine: Bottom End Service | 4 |
| DSL 132 | Diesel Fuel Injection Systems Service | 5 |
| DSL 140 | Diesel Electrical Systems | 5 |
|  | Total Units | $\mathbf{2 9}$ |

## Mid-Range Engine Service Option Degree

Program code: sac.dslmr.as
In addition to the general education requirements, the associate degree curriculum in mid-range diesel engine service is designed to prepare students with knowledge and skills applicable to light to medium-duty diesel engines mass-produced in the trucking industry. Experience will be acquired in domestic and import versions of these engines. Students currently working in the trade on medium-duty gasoline engines or new students entering in the trade will benefit from this training.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

## Required Core Courses: <br> Units

DSL 108 Oxyacetylene-Arc Welding 3
DSL 121 Mid-Range Diesel Engine Service 4.5
DSL 125 Heavy Duty Diesel Engine: Top End Service 4
DSL 126 Heavy Duty Diesel Engine: Bottom End Service 4
DSL 140 Diesel Electrical Systems 5
Choose 3 units from the following electives: Units
DSL 101 Truck Preventative Maintenance 5
DSL 122 Electronics Fundamentals 5
DSL $160 \quad \begin{aligned} & \text { Foundations of Mobile Air Conditioning and } \\ & \text { Refrigeration }\end{aligned}$
DSL 162 Air Conditioning and Heating 3
DSL 165 Transport Refrigeration 5
DSL 287 Alternative Fuels 3
DSL 288 Diesel Engines: Light-Medium Duty Systems 3
Total Units 23.5-25.5

## Mid-Range Engine Service Option Certificate (Transcripted)

Program code: sac.dsImr.ca
The certificate curriculum in mid-range diesel engine service is designed to prepare students with knowledge and skills applicable to light to medium-duty diesel engines mass-produced in the trucking industry. Experience will be acquired in domestic and import versions of these engines. Students currently in the trade working on mediumduty gasoline engines or new students entering in the trade will benefit from this training.

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

## Required Core Courses: Units

DSL 108 Oxyacetylene-Arc Welding 3
DSL 121 Mid-Range Diesel Engine Service $\quad 4.5$
DSL 125 Heavy Duty Diesel Engine: Top End Service 4

| DSL 126 | Heavy Duty Diesel Engine: Bottom End Service | 4 |
| :--- | :--- | :--- |
| DSL 140 | Diesel Electrical Systems | 5 |


| DSL 140 | Diesel Electrical Systems |  | 5 |
| :--- | :--- | :--- | ---: |
|  |  | Total Units | 20.5 |

## Transport Refrigeration/Temperature Control Option Certificate (Untranscripted)

## Program code: sac.dsltr.cert

The certificate curriculum in transport refrigeration is designed to prepare students to enter the field as an apprentice or helper service technician. The course work provides training in the service, repair, and troubleshooting techniques of Carrier Transicold and Thermo King truck and trailer refrigeration units. The course work is made up of lecture and lab performances on current production units, covering the refrigeration and electrical systems used to control the unit's operation to maintain desired product temperature to protect the consumer's health. Employment opportunities for men and women exist in this rapidly expanding field.
Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses: Units

| DSL 121 | Mid-Range Diesel Engine Service | 4.5 |
| :--- | :--- | ---: |
|  | - or - |  |
| DSL 132 | Diesel Fuel Injection Systems Service |  |
| DSL 140 | Diesel Electrical Systems | 5 |
| DSL 160 | Foundations of Mobile Air Conditioning and <br> Refrigeration | 5 |
| DSL 165 | Transport Refrigeration | 5 |
|  | Total Units |  |
|  |  | $\mathbf{1 9 . 5 - 2 0}$ |

Heavy Duty Chassis Service Certificate (Untranscripted)

## Program code: sac.dslhd.cert

The Heavy Duty Chassis Service Certificate is designed to prepare the student for employment in the trucking industry. Within this certificate, there will be an emphasis on serviceability of suspension, steering, air brakes and chassis components. This program of study will also help prepare the student for national ASE T2 Brakes and T5 Suspension and Steering certification.

## Learning Outcome(s):

Students will demonstrate a working knowledge of modern heavy duty chassis systems. Students will be trained in correct use of heavy duty chassis repair equipment and maintenance procedures.

## Required Core Courses:

DSL 109 Truck Chassis: Brake and Suspension Service
DSL 110 Truck Chassis: Drive Train Service

## Total Units

## Heavy Duty Diesel Engine Service Certificate

(Untranscripted)

## Program code: sac.dslde.cert

The Heavy Duty Diesel Engine Service Certificate program prepares the student for employment in industry. The servicing of these modern engines includes training on safety, teardown and assembly procedures, measurement, and diagnosis. Hands-on practical experience is emphasized. This certificate would prepare the student for national ASE T2 certification.

Learning Outcome(s):
Students will demonstrate a working knowledge of modern heavy duty engine systems. Students will be trained in heavy duty engine teardown / assembly and measurement procedures.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| DSL 125 | Heavy Duty Diesel Engine: Top End Service | 4 |
| DSL 126 | Heavy Duty Diesel Engine: Bottom End Service | 4 |
|  | Total Units | $\mathbf{8}$ |

## Truck Air Conditioning Service Certificate (Untranscripted)

Program code: sac.dslac.cert
The Truck Air Conditioning Service Certificate is designed to prepare the student for employment in the trucking industry, servicing modern air conditioning and heating systems. Air conditioning theory, handling refrigerant on truck applications, and practical hands-on experience are emphasized. The student would be prepared for the national ASE T7 and EPA 609 certifications.
Learning Outcome(s):
Students will demonstrate a working knowledge of modern truck air conditioning systems. Students will be trained in correct use of truck air conditioning equipment and maintenance procedures.
Required Core Courses:
Units

| DSL 160 | Foundations of Mobile Air Conditioning and <br> Refrigeration | 5 |  |
| :--- | :--- | :--- | :--- |
| DSL 162 | Air Conditioning and Heating |  | 3 |
|  |  | Total Units | $\mathbf{8}$ |

## Alternative Fuels - Clean Diesel Certificate (Untranscripted) Program code: sac.afcd.cert

This certificate focuses on the safety, operation, and maintenance of clean diesel and alternative fueled modern vehicles. Hands-on on procedures are included. Clean diesel fuel systems as well as CNG (Compressed Natural Gas) are emphasized. Other alternative fuels are covered. Training includes light, medium, and heavy duty applications. Examples include automobiles, trucks, and transit buses.
Learning Outcome(s):

1. Learning about alternative fuels in the industry will enhance students' critical thinking and reasoning skills
2. Offer course content that assists students in obtaining careers in the diesel industry.
Required Core Courses: Units
DSL 132 Diesel Fuel Injection Systems Service 5
DSL 287 Alternative Fuels 3
DSL 288 Diesel Engines: Light-Medium Duty Systems 3
Total Units $\quad 11$

## Transit Bus Maintenance Certificate (Untranscripted)

Program code: sac.dsltb.cert
The Transit Bus Maintenance Certificate is designed to train students in the field of transit bus service, repair, and troubleshooting.
Completion of courses CERT1 through CERT10 prepares the student for industry. Safety, theory of operation, diagnosis, and service procedures are emphasized. The student must furnish approved safety equipment for the first meeting of the DSL 202 course. This equipment includes: Approved ANSI Safety Glasses, Reflective Safety Vest, and Steel-Toed Shoes.

## Learning Outcome(s):

1. Learning about Transit Bus Maintenance including coach operations and wheelchair lifts
2. Offer course content that assists students in obtaining their certification in Transit Bus Maintenance.
Required Core Courses: Units
DSL 202 Introduction to Coach Operations 1
DSL 203 Transit Vehicle Electrical Systems 2
DSL 204 Transit Vehicle Air Systems $\quad 0.5$

DSL 205 Transit Vehicle Air Brake Systems 1
DSL 206 Transit Vehicle Automatic Transmissions 1.5
DSL 207 Transit Vehicle Engines $\quad 2.5$

| DSL 208 | Transit Vehicle Heating, Ventilation, Air <br> Conditioning | 1.5 |
| :--- | :--- | :--- |

DSL 209 Transit Vehicle Drive Train Suspension 1

DSL 210 Transit Vehicle Wheelchair Lifts 0.5

## DRAFTING TECHNOLOGY

(See Engineering.)

## DRESSMAKING AND ALTERATIONS

(See Fashion Design and Custom Clothing.)

## EARTH SCIENCE

## Earth Science Degree

## Program code: sac.es.aa

The Associate degree curriculum in Earth Science prepares students to transfer to a four-year institution leading to a baccalaureate degree in Earth Sciences or Geology. Please consult a SAC counselor for information about course requirements for particular four-year institutions. A baccalaureate degree in Earth Sciences may provide the recommended content preparation for students interested in teaching science at the middle school level or are planning to go to law school in the area of Environmental Law or Public Policy. Students may also gain necessary opportunities with Geotechnical or Environmental consulting firms or with government agencies such as the National Park Service.

## Learning Outcome(s):

1. Students will demonstrate proficiency and knowledge with regards to the physical structure of the Earth through the paradigm of plate tectonics
2. Students will demonstrate proficiency and knowledge regarding the operations and interrelations of Earth systems.
Required Core Courses: Units

ASTR 110 Introduction to Stars and Galaxies 3
ASTR 140 Astronomy Laboratory 1

CHEM 209 Introduction to Chemistry 4

CHEM/
PSC 115 Concepts in Physical Science for Educators*
ERTH 115 Earth Science for Educators* 4
GEOL 101 Introduction to Geology 4

GEOL 101L Introduction to Geology Laboratory 4

| GEOL/ | Environmental Geology | 3 |
| :--- | :--- | :--- |

GEOL/ Introduction to Oceanography
ERTH 150

| GEOL/ | - or - |  |
| :--- | :--- | :--- |
| ERTH 150H | Honors Introduction to Oceanography | 3 |

GEOL 201 Introduction to Historical Geology 4

## Electives

GEOL 112 Earthquakes

| GEOL 162 | Geologic Field Studies of the Mojave Desert | 1 |
| :--- | :--- | :--- |
| GEOL 164 | Geologic Field Studies of the Eastern Sierra | 2 |


| GEOL 164 | Geologic <br> Nevada |
| :--- | :--- |


| GEOL 168 | Geologic Field Studies of the Owens Valley | 1 |
| :--- | :--- | :--- |
| GEOL 169 | Geogic Field Studies of San |  |


| GEOL 169 | Geologic Field Studies of San Diego County | 1 |
| :--- | :--- | :--- |
| GEOL 170 | Geologic Field Studies of the Anza-Borrego | 1 |


| GEOL 170 | Desert State Park | 1 |
| :--- | :--- | :--- |
| GEOL 171 | Geology Field Studies of Sequoia and Kings | 1 |


| GEOL 172 | Geologic Field Studies of the California Coast | 2 |
| :--- | :--- | :--- |

GEOL 173 Geologic Field Studies of Death Valley 1
GEOL 174 Geologic Field Studies of Joshua Tree National
Total Units 24

* Recommended courses for those preparing to teach middle school science.


## ECONOMICS

## Option 1

## Economics Degree

## Program code: sac.econ.aa

The associate degree curriculum in economics is a program of basic courses which enable students to move into a curriculum in a four-year institution leading to a baccalaureate degree. Economics prepares the student for a number of career opportunities such as accounting and marketing in the areas of business, government and teaching.

## Learning Outcome(s):

1. Students will communicate using basic economic terminology, interpret relevant economic data, and follow and construct fundamental economic arguments
2. Students will define and explain the fundamental economic problem of scarcity and its consequences relating to opportunity cost and marginal decision-making of individuals, firms, and society
3. Students will use the basic tools of economic modeling and graphing to evaluate the market system, to increase the efficiency of resource allocation, and to predict changes within the market and economy.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| ACCT 101 | Financial Accounting | 4 |
|  | - or - |  |
| ACCT 101H | Honors Financial Accounting | 4 |
| ACCT 102 | Managerial Accounting | 4 |
|  | - or - |  |
| ACCT 102H | Honors Managerial Accounting | 4 |
| ECON 120 | Principles/Macro | 3 |
| ECON 121 | Principles/Micro | 3 |
| **SOCS 219 | Statistics and Probability | 4 |
|  | - or - |  |
| $* * S O C S$$219 H$ | Honors Statistics and Probability | 4 |
|  |  |  |
| BUS 150 | Introduction to Information Systems and Applications | 4 |
|  | - or - |  |
| *MATH 145 | Finite Mathematics | 4 |
|  | Total Units | 22 |
| * Mathematics course chosen should be determined by the requirements of the intended upper-division school of the student's choice. |  |  |
| ** SOCS 219/219H is alternately listed as MATH 219/219H. |  |  |
| Recommended electives: BUS 101, 102, 120. |  |  |

## Option 2

## Associate in Arts in Economics for Transfer

## Program code: sac.econ.aat

The Associate in Arts in Economics for Transfer (AA-T in Economics) prepares students to move into the CSU system leading to a baccalaureate degree in Economics. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the Associate in Arts in Economics for Transfer (AA-T in Economics) also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AST) degrees. Upon completion of the Associate in Arts in Economics for Transfer (AA-T in Economics), students will have demonstrated a general understanding of the academic standards expected of majors in the economic discipline.
The program strives to motivate students to strengthen their problem solving, analytical reasoning, critical thinking and communication skills that will assist them in their further studies and careers. The program further aims to develop marketable students that are responsible citizens aware of and informed about the variety of differing views on current economic events and policy issues and how they impact our lives.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| ECON 120 | Principles/Macro | 3 |
| ECON 121 | Principles/Micro | 3 |
| MATH 219 | Statistics and Probability | 4 |
|  | - or - |  |
| MATH 219H | Honors Statistics and Probability | 4 |
|  | - or - |  |
| PSYC 210 | Statistics for the Behavioral Sciences | 4 |
| MATH 150 | Calculus for Biological, Management and Social Sciences | 4 |
|  | - or - |  |
| MATH 180 | Analytic Geometry and Calculus | 4 |
|  | - or - |  |
| MATH 180H | Honors Analytic Geometry and Calculus | 4 |
| List A: Select one (3-5 units) |  | Units |
| MATH 140 | College Algebra | 4 |
| MATH 145 | Finite Mathematics | 4 |
| MATH 160 | Trigonometry | 4 |
| MATH 170 | Pre-Calculus Mathematics | 4 |
| MATH 185 | Analytic Geometry and Calculus | 4 |
| MATH 287 | Introduction to Linear Algebra and Differential Equations | 5 |
| ENGL 102 | Literature and Composition | 4 |
| ENGL 102H | Honors Literature and Composition | 4 |
| ENGL 103 | Critical Thinking and Writing | 4 |
| ENGL 103H | Honors Critical Thinking and Writing | 4 |
| PHIL 110 | Critical Thinking | 4 |
| PHIL 110H | Honors Critical Thinking | 4 |
| BUS 105 | Legal Environment of Business | 3 |
| BUS 150 | Introduction to Information Systems and Applications | 3 |
| BUS 222 | Business Writing | 3 |
| ACCT 101 | Financial Accounting | 4 |
| ACCT 102 | Managerial Accounting | 4 |

List B: Select one course (3-5 units)
Units
Any course not used in list A

- or -

MATH 280 Intermediate Calculus
Total Units 20-24

## EDUCATION

## Option 1

## Elementary Education (Pre-Professional) Degree Program code: sac.educe.aa

The Associate of Arts degree in Elementary Education (Pre-
Professional) is designed to prepare students for transfer to a four-year university to obtain a bachelor's degree and multiple subject teaching credential. Completion of the courses in this degree will partially satisfy requirements for the California State University integrated and traditional teacher preparation programs. The courses are part of the curriculum that can be started at the community college and completed at the university. The curriculum is designed for students who seek the pre-professional subject matter preparation for elementary school teaching consistent with the standards established by the California Commission on Teacher Credentialing. Additionally, the degree curriculum may also serve as preparation for paraprofessional positions in the K-12 classroom setting by satisfying unit requirements as established by law.
Students interested in becoming a K-12 teacher should visit the Center for Teacher Education at SAC (Located in the Counseling Center Room S-110).
4 Learning Outcome(s):

1. Students will demonstrate a knowledge base of theory specific to childhood (1st-6th grade) education
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations.
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

## Required Core Courses: Units

EDUC 201 Introduction to Education 3
CDEV 107 Child Growth and Development (DS1) 3

- or -

PSYC 157 Introduction to Child Psychology 3
BIOL 115 Concepts in Biology for Educators 4
ERTH 115 Earth Science for Educators 4
PSC 115 Concepts in Physical Sciences for Educators 4

- or -
CHEM 115 Concepts in Physical Sciences for Educators 4

MATH 105 Mathematics for Liberal Arts Students 3

- or -

Mathematical Concepts for Elementary School 4

MATH 204 | Meachers |
| :--- |
| Teats |

ENGL 270 Children's Literature 3
HIST 120 The United States to 18653

- or -

HIST 120H Honors The United States to 18653

- or -

Social and Cultural History of the United States
3


Total Units 25-26

3 Option 2

## Associate in Arts in Elementary Teacher Education for 3 Transfer <br> Program code: sac.eted.aat

3 The Associate in Arts in Elementary Teacher Education for Transfer (AA-T in Elementary Teacher Education ) prepares students to transfer into the CSU system to complete a baccalaureate degree in Liberal Studies and into a multiple subject teaching credential program.
Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the Associate in Arts in Elementary Teacher Education for Transfer (AA-T in Elementary Teacher Educatio)ndegree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU, in the Liberal Studies major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Elementary Teacher Education, students will have a strong foundation in introductory content area subject matter requirements for teaching at the elementary school level. Students will also have the opportunity to participate in supervised fieldwork in $\mathrm{K}-12$ settings.

## Learning Outcome(s):

3 1. Students will demonstrate a knowledge base of theory specific to childhood (1st-6th grade) education
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.
Required Core Courses: Units
EDUC 201 Introduction to Education 3

| ERTH 115 | Earth Science for Educators | 4 |
| :--- | :--- | :--- |
| CMST 102 | Public Speaking | 3 |


| ENGL 101 | Freshman Composition | 3 |
| :--- | :--- | :--- |

## 

| MATH 204 | Mathematical Concepts for Elementary School <br> Teachers | 4 |
| :--- | :--- | :--- |
| HIST 101 | World Civilizations to the 16th Century | 3 |
|  | - or - |  |


| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| :--- | :--- | :--- |
| ENGL 102 | Literature and Composition | 4 |

- or -

ENGL 102H Honors Literature and Composition


## After School Program Assistant Certificate Untranscripted)

The After School Program Assistant Certificate is intended to prepare a student in the position requiring practical skills and knowledge to work with K-12 children in an after school care, tutoring, or mentoring so orient students toward further opportunities in

Contact Career Technical Education (CTE) or Center for Teacher Education counselors at SAC for additional assistance in planning your School-Age profession.
Learning Outcome(s):

1. Students will demonstrate a knowledge base of theory specific to childhood (1st-6th grade) education
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations

Students will understand and be conversant about the main phllusophical and sociologicalideas and trends that influenced education as well as be able to analyze their application and importance for teaching today.

## 112 INSTRUCTIONAL PROGRAMS

## After School Program Associate Teacher Certificate (Untranscripted)

## Program code: sac.educt.cert

The After School Program Associate Teacher Certificate is intended to provide students with skills necessary to work with K-12 students in an after-school setting, provide tutoring or homework assistance, or assist in academic enrichment programs.
Completion of the required courses for this certificate plus 50 days of field experience (minimum of 3 hours per day) can qualify you for the California Child Development Associate Teacher Permit with a schoolage emphasis.
Contact Career Education counselors at SAC for additional assistance in planning your School-Age profession (714-564-6254)

## Learning Outcome(s):

1. Students will demonstrate a knowledge base of theory specific to childhood (1st-6th grade) education
2. Students will apply the knowledge base of theory to practice through thoughtful reflections on classroom observations
3. Students will understand and be conversant about the main philosophical and sociological ideas and trends that have influenced education as well as be able to analyze their application and importance for teaching today.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| EDUC 113 | Tutoring Reading in Elementary Schools | 1 |
| CDEV 114 | Careers in Teaching | 1 |
|  | - or - | 1 |
| CNSL 114 | Careers in Teaching | 3 |
| CDEV 107 | Child Growth and Development (DS1) |  |
|  | - or - | 3 |
| PSYC 157 | Introduction to Child Psychology | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 120B | School-Age Child Care and Recreation Activities |  |
|  | (DS5) | 3 |
| EDUC 120B | School-Age Child Care and Recreation Activities | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| DNCE 102 | Introduction to Dance Forms | 3 |
|  | - or - | 3 |
| CMST 102 | Public Speaking | Total Units |
|  |  | 20 |

## ENGINEERING

## Engineering Degree

## Program code: sac.engr.as

The associate degree curriculum in the engineering program is primarily intended to provide a basic program of engineering courses for students planning to transfer to four-year college or university engineering programs.
The student should be aware the Santa Ana College associate degree requirements are less than full university lower-division engineering requirements and that additional coursework is required. See "Engineering Transfer," below.
Completion of the associate degree in engineering can also provide the necessary background for immediate employment as a designer technician, or engineering assistant. Job opportunities exist in both private industry and city, county, and state agencies. Students interested in the design or practical phases of the engineering profession should take the engineering sequence 122 , 124 and 228. These are transferable college or university level courses, giving students a comprehensive preparation in graphic communication and graphic solution of engineering problems. Students interested in the math and science-oriented engineering fields should take ENGR 125.

## Learning Outcome(s):

Students will develop the skills and knowledge necessary to select as well as develop engineering careers; produce engineering drawings that conform to industry standards; create engineering drawings in 2D CAD program; and solve problems of calculus, calculus-based physics, and chemistry.
For associate degree, students must also complete general education coursework from Plans A, B, or C per the college catalog.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100A | Introduction to Engineering | 2 |
| ENGR 122 | Engineering Drawing | 3 |
|  | - or - | 3 |
| ENGR 125 | Engineering Graphics | 3 |
| ENGR 183 | CAD I-Computer Aided Drafting | 3 |
| ENGR 235 | Statics | 4 |
| MATH 180 | Analytic Geometry and Calculus I | 4 |
| MATH 180H | Honors Analytic Geometry and Calculus | 4 |
| MATH 185 | Analytic Geometry and Calculus II | 4 |
| PHYS 217 | Engineering Physics I | 4 |
| PHYS 227 | Engineering Physics II | 4 |
| PHYS 237 | Engineering Physics III | 4 |
| CHEM 219 | General Chemistry | 5 |
| CHEM 219H | Honors General Chemistry | 5 |

## ENGINEERING TRANSFER

Santa Ana College offers a wide variety of lower-division engineering coursework for transfer to any four-year university or college in California.
Although lower-division engineering course requirements are similar at most universities, important differences do occur. These differences depend upon the university and the specific engineering option the student has selected. Engineering students planning to transfer with upper-division standing at a university should contact the Transfer Center for detailed information concerning specific lower-division course requirements for the various engineering options.

## Engineering Technology, Manufacturing Technology, and Industrial Technology Transfer

Technology programs are offered by most area universities. They are bachelor degree curriculums usually offered by the school's Engineering Department. Generally, technology degree programs are less rigorous than traditional engineering programs. Typically, they require one or two semesters of mathematics and one semester of physics. Upper division work is more practical application-oriented than traditional engineering programs.
Additional details concerning technology program transfer are available from the counseling and engineering offices.

## Engineering Civil Technology Degree

## Program code: sac.enrct.as

The associate degree curriculum provides a background for employment in a civil engineering office or for field work in support of and under the direction of a professional engineer or licensed surveyor. Typical employment is in a surveying office recording data, preparing subdivision maps, street and highway proposals, and grading maps. Employment opportunities exist in both private industry and local and county government agencies that employ engineering assistants

## Learning Outcome(s):

Students will be able to identify, analyze, and explain the basic parts of common land surveying instruments and their function by way of a multiple field exercises and cite how accurate surveys can be used to avoid or resolve property legal disputes.
For associate degree, students must also complete general education coursework from Plans A, B, or C per the college catalog.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100B | Introduction to Architecture/Civil Engineering/ | 2 |
| Construction (AEC) | 4 |  |
| ENGR 118 | Surveying | 3 |
| ENGR 183 | CAD I - Computer Aided Drafting | CAD II - Computer Aided Drafting |
| ENGR 187 | 3D CAD with Civil 3D | 3 |
| GEOL 101 | Introduction to Geology | 3.5 |
| GEOL 101L | Introduction to Geology Laboratory | 3 |
| MATH 160 | Trigonometry | 1 |

Select ONE of the Following: Units

| ENGR 122 | Engineering Drawing | 3 |
| :--- | :--- | :--- |
| ENGR 125 | Engineering Graphics | 3 |

Select ONE of the Following: Units

| ENGR 119 | Advanced Plane Surveying | 4 |
| :--- | :--- | :--- |
| ENGR 205 | Engineering Programming and Problem-Solving | 3 |

Total Units 29.5-30.5

## Engineering Civil Technology Certificate (Transcripted)

Program code: sac.enrct.ca
This certificate training provides a background for employment in a civil engineering office or for field work in support of and under the direction of a professional engineer or licensed surveyor. Typical employment is in a surveying office recording data, preparing subdivision maps, street and highway proposals, and grading maps. Employment opportunities exist in both private industry and local and county government agencies that employ engineering assistants.

## Learning Outcome(s):

Students will be able to identify, analyze, and explain the basic parts of common land surveying instruments and their function by way of a multiple field exercises and cite how accurate surveys can be used to avoid or resolve property legal disputes.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100B | Introduction to Architecture/Civil Engineering/ | 2 |
| Construction (AEC) | 4 |  |
| ENGR 118 | Surveying | 3 |
| ENGR 183 | CAD I - Computer Aided Drafting | 3 |
| ENGR 184 | CAD II - Computer Aided Drafting | 3.5 |
| ENGR 187 | 3D CAD with Civil 3D | 3 |
| GEOL 101 | Introduction to Geology | 1 |
| GEOL 101L | Introduction to Geology Laboratory | 4 |

Select ONE of the Following: Units
ENGR 122 Engineering Drawing

- or -

ENGR 125 Engineering Graphics 3
Select ONE of the Following: Units
ENGR 119 Advanced Plane Surveying 4

- or -

ENGR 205 Engineering Programming and Problem-Solving 3

$$
\text { Total Units } \quad 29.5-30.5
$$

## Engineering Computer Aided Drafting and Design Degree

 Program code: sac.enrca.asThe Engineering Computer Aided Drafting and Design degree program is for students who have or are working toward an engineering discipline background for transfer or employment and seek competency in Computer Aided parametric 2D and 3D drafting and design. Class problems and project work includes civil, surveying, mechanical, electronic, architecture, and other CADD applications.
Learning Outcome(s):
Students will produce a series of 2D and 3D Parametric CAD technical drawings using several industry CAD applications.
For associate degree, students must also complete general education coursework from Plans A, B, or C per the college catalog.

Required Core Courses: Units
ENGR 100A Introduction to Engineering 2

- or -

ENGR 100B Introduction to Architecture/Civil Engineering/ 2
Construction (AEC)
ENGR 122 Engineering Drawing 3

- or -

ENGR 125 Engineering Graphics 3

| ENGR 183 | CAD I - Computer Aided Drafting | 3 |
| :--- | :--- | :---: |
| ENGR 184 | CAD II - Computer Aided Drafting | 3 |
| ENGR 186 | AutoCAD 3-Dimensional Drawing | 3 |
| ENGR 154 | AEC BIM with Revit | 5 |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |

## 114 INSTRUCTIONAL PROGRAMS

| Students may also wish to take other ENGR courses from |  |  |
| :--- | :--- | ---: |
| the following recommended list: | Units |  |
| ENGR 012 | AEC Print Reading | 3 |
| ENGR 027 | Electronic Drafting | 3 |
| ENGR 051 | Basic Technical Drawing | 3 |
| ENGR 110 | Advanced CAD Applications | $0.5-4$ |
| ENGR 114 | Geometric Dimensioning and Tolerancing | 3 |
| ENGR 115 | Cooperative Work Experience Education- | $1-4$ |
| ENGR 124 | Accupational | 3 |
| ENGR 130A | CATIA Beginning Solid Modeling | 3 |
| ENGR 130B | CATIA Intermediate Solid Modeling | 3 |
| ENGR 142 | Architecture/Civil Engineering/Construction | 3 |
| ENGR 187 | 3D CAD with Civil 3D | 4 |
|  | AEC Drawing) | 3.5 |

## Computer Aided Drafting and Design Certificate (Transcripted)

## Program code: sac.enrca.ca

The certificate program is for students who have or are working toward an engineering discipline background, and seek competency in Computer Aided parametric 2D and 3D drafting and design. Class problems and project work include civil, surveying, mechanical, electronic, architecture, and other CADD applications.
Learning Outcome(s):
Students will produce a series of 2D and 3D Parametric CAD technical drawings using several industry CADD applications.
Required Core Courses:
Units
ENGR 100A Introduction to Engineering

- or -

| ENGR 100B | Introduction to Architecture/Civil Engineering/ <br> Construction (AEC) | 2 |
| :--- | :--- | :---: |
| ENGR 122 | Engineering Drawing <br> - or - | 3 |
| ENGR 125 | Engineering Graphics | 3 |
| ENGR 183 | CAD I - Computer Aided Drafting | 3 |
| ENGR 184 | CAD II - Computer Aided Drafting | 3 |
| ENGR 186 | AutoCAD 3-Dimensional Drawing | 3 |
| ENGR 154 | AEC BIM with Revit | 5 |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |

Students may also wish to take other engineering courses Units from the following recommended list:
ENGR 012 AEC Print Reading 3
ENGR 027 Electronic Drafting 3
ENGR 051 Basic Technical Drawing 3
ENR Advanced CAD Applications ..... 0.5-4

| ENGR 114 | Geometric Dimensioning and Tolerancing | 3 |
| :--- | :--- | ---: |
| ENGR 115 | Cooperative Work Experience Education- | $1-4$ |

Occupational

| ENGR 124 | Advanced Drawing | 3 |
| :--- | :--- | :--- |ENGR 130B CATIA Intermediate Solid Modeling3

ENGR 142 Architecture/Civil Engineering/Construction ..... 4

| (AEC) Drawing |  |  |  |
| :--- | :--- | :--- | ---: |
| ENGR 187 | Advanced 3-D Civil CAD |  | 3 |
|  | Total Units | $\mathbf{2 2}$ |  |

Engineering Drafting and Design Option I-Engineering Drafting and Design Degree

## Program code: sac.enrdd.as

The associate degeree curriculum in engineering drafting and design has two options to prepare a student for employment in an engineering, architectural, civil engineering, or a construction office as a drafter, designer, or an engineering technician. Actual work in this field for both options is similar. Job tasks include preparation of drawings and plans (board and computer), sketches, layouts, diagrams, schematics, illustrations, material lists, and size and material specifications. Opportunity for employment exists in both private industry and city and county government agencies which employ drafters, designers, and engineering technicians.

The Option I degree prepares the student for employment as a professional drafter or designer in the mechanical, aerospace, manufacturing, biomedical, or industrial engineering fields. Designer jobs may additionally require some industry experience. Many courses are applicable to lower-division preparation leading to a bachelor's degree in engineering technology at a four-year institution.
Learning Outcome(s):
Students will develop knowledge and skills necessary to select \& develop engineering careers; be able to produce engineering drawings that conform to industry standards; be able to create parts \& drawings using 3D solid modeling software; fabricate basic parts using standard machining equipment.
For associate degree, students must also complete general education coursework from plans A, B, or C per the college catalog.
Required Core Courses: Units
ENGR 100A Introduction to Engineering 2

| ENGR 103 | Solidworks Basic Solid Modeling | 3 |
| :--- | :--- | :--- |
| ENGR 122 |  |  |

ENGR 122 Engineering Drawing - or -
ENGR 125 Engineering Graphics 3
ENGR 124 Advanced Drawing 3

| ENGR 130A | CATIA Beginning Solid Modeling | 3 |
| :--- | :--- | ---: |
| ENGR 131 | Engineering Mechatronics Technology Survey | 0.5 |


| ENGR 158 | Basic Machining Concepts and Operations | 3 |
| :--- | ---: | ---: |
| Select six (6) additional units from the following list: | Units |  |


| ENGR 114 | Geometric Dimensioning and Tolerancing | 3 |
| :--- | :--- | :--- |
| ENGR $130 B$ | CATIA Intermediate Solid Modeling | 3 |


| ENGR 130B | CATIA Intermediate Solid Modeling | 3 |
| :--- | :--- | :--- |
| ENGR 133 | Basic Mechatronics Technology Survey | 3 |

ENGR 104 Solidworks Intermediate Solid Modeling $\quad 3$

MATH 160 Trigonometry $\quad 4$

Engineering Drafting and Design Option I-Engineering Drafting and Design Certificate (Transcripted)

## Program code: sac.enrdd.ca

The certificate curriculum in engineering drafting and design has two options to prepare a student for employment in an engineering, architectural, civil engineering, or a construction office as a drafter, designer, or an engineering technician. Actual work in this field for both options is similar. Job tasks include preparation of drawings and plans (board and computer), sketches, layouts, diagrams, schematics, illustrations, material lists, and size and material specifications. Opportunity for employment exists in both private industry and city and county government agencies which employ drafters, designers, and engineering technicians.
The Option I certificate prepares the student for employment as a professional drafter or designer in the mechanical, aerospace, manufacturing, biomedical, or industrial engineering fields. Designer jobs may additionally require some industry experience. Many courses are applicable to lower-division preparation leading to a bachelor's degree in engineering technology at a four-year institution.
Learning Outcome(s):
Students will develop knowledge and skills necessary to select \& develop engineering careers; be able to produce engineering drawings that conform to industry standards; be able to create parts \& drawings using 3D solid modeling software; fabricate basic parts using standard machining equipment.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100A | Introduction to Engineering | 2 |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |
| ENGR 122 | Engineering Drawing | 3 |
|  | -or- | 3 |
| ENGR 125 | Engineering Graphics | 3 |
| ENGR 124 | Advanced Drawing | 3 |
| ENGR 130A | CATIA Beginning Solid Modeling | 0.5 |
| ENGR 131 | Engineering Mechatronics Technology Survey | 3 |
| ENGR 158 | Basic Machining Concepts and Operations | Units |
| Select six (6) | additional units from the following list: | 3 |
| ENGR 114 | Geometric Dimensioning and Tolerancing | 3 |
| ENGR 130B | CATIA Beginning Solid Modeling | 3 |
| ENGR 133 | Basic Mechatronics Engineering Technology | 3 |
| ENGR 104 | Solidworks Intermediate Solid Modeling | 3 |
| MATH 160 | Trigonometry | 4 |

## Engineering Drafting and Design Option II-Architectural/ Civil Engineering/Construction Drafting and Design Degree Program code: sac.enrce.as

This option is designed specifically to prepare the student for employment as a professional drafter/designer in the Architectural, Civil Engineering and Construction fields (AEC). The drafter/designer works closely with the architect, developer and other professionals in the development and construction of AEC projects.
Students will acquire knowledge of AEC terms, abbreviations, graphics and standards for application and preparation of AEC drawings and plans.

## Learning Outcome(s):

Students will acquire knowledge of AEC terms, abbreviations, graphics and standards for application and preparation of AEC drawings and plans.

Required Core Courses:

| ENGR 100B | Introduction to Architecture/Civil Engineering/ <br> Construction (AEC) | 2 |
| :--- | :--- | ---: |
| ENGR 112 | Society and the Built Environment | 3 |
| ENGR 142 | Architecture/Civil Engineering/Construction <br> (AEC) Drawing | 4 |
| ENGR 154 | (AEC ) BIM with Revit | 5 |
| ENGR 183 | CAD I - Computer Aided Drafting | 3 |
| ENGR 184 | CAD II - Computer Aided Drafting | 3 |
| ENGR 186 | AutoCAD 3-Dimensional Drawing | 3 |
| ENGR 201 | Residential and Light Commercial Construction <br> Practices and Estimating | 4 |
|  |  | Total Units |

## Engineering Drafting and Design Option II-Architectural/ Civil Engineering/Construction Drafting and Design Certificate (Transcripted)

## Program code: sac.enrce.ca

This option is designed specifically to prepare the student for employment as a professional drafter/designer in the Architectural, Civil Engineering and Construction fields (AEC). The drafter/designer works closely with the architect, developer and other professionals in the development and construction of AEC projects.
Learning Outcome(s):
Students will acquire knowledge of AEC terms, abbreviations, graphics and standards for application and preparation of AEC drawings and plans.
For associate degree, students must also complete general education coursework from Plans A, B, or C per the college catalog.
Required Core Courses: Units
ENGR 100B Introduction to Architecture/Civil Engineering/ 2

|  | Construction (AEC) |  |
| :--- | :--- | :--- |
| ENGR 112 | Society and the Built Environment | 3 |


| ENGR 112 | Society and the Built Environment | 3 |
| :--- | :--- | :--- |
| ENGR 142 | ArchitecturdCivil Engineering/Construction | 4 |


| ENGR 142 | Architecture/Civil Engineering/Construction <br> (AEC) Drawing | 4 |
| :--- | :--- | :--- |


| ENGR 154 | (AEC) BIM with Revit | 5 |
| :--- | :--- | :--- |

ENGR 183 CAD I - Computer Aided Drafting 3
ENGR 184 CAD II - Computer Aided Drafting 3
ENGR 186 AutoCAD 3-Dimensional Drawing 3

ENGR 201 Residential and Light Commercial Construction 4
Practices and Estimating
Total Units

## Engineering Mechatronics Technology Degree

## Program code: sac.enmt.as

This associate degree has a strong emphasis on hands-on design, fabrication, and testing; and leads to employment as a mechanical, industrial, or manufacturing engineering technician. Opportunities for employment exist primarily in private manufacturing industries such as industrial, biomedical, or aerospace.

## Learning Outcome(s):

Students will know about engineering-related careers; be able to use 3D solid modeling CAD software to produce models and industrystandard drawings; and will be able to do hands-on mechatronics fabrication, including working with micro-controllers.
For associate degree, students must also complete general education coursework from plans $\mathrm{A}, \mathrm{B}$, or C per the college catalog.

## 116 INSTRUCTIONAL PROGRAMS

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100A | Introduction to Engineering | 2 |
| ENGR 122 | Engineering Drawing | 3 |
|  | - or - | 3 |
| ENGR 125 | Engineering Graphics | 3 |
| ENGR 103 | Solidworks Basic Solid Modeling |  |
|  | - or - | 3 |
| ENGR 130A | CATIA Beginning Solid Modeling | 0.5 |
| ENGR 131 | Engineering Mechatronics Technology Survey | 2.5 |
| ENGR 132 | Introduction to Robotics | 3 |
| ENGR 133 | Basic Mechatronics Engineering Technology | 3 |
| ENGR 134 | Intermediate Mechatronics Engineering | 3 |
| ENGR 135 | Technology | Advanced Mechatronics Engineering |
| Electives (select 3 units from the following list): | Units |  |
| ENGR 158 | Basic Machining Concepts and Operations | 3 |
| ENGR 240 | Dynamics | 3 |
| ENGR 250 | Electric Circuits | 3 |
| ENGR 250L | Electric Circuits Laboratory | 1 |
| ENGR 281 | Properties of Engineering Materials | 3 |
|  |  | Total Units |

## Engineering Mechatronics Technology Certificate (Transcripted)

## Program code: sac.enmt.ca

The certificate curriculum in Engineering Mechatronics Technology has a strong emphasis on hands-on design, fabrication, and testing; and leads to employment as a mechanical, industrial, or manufacturing engineering technician. Opportunities for employment exist primarily in private manufacturing industries such as industrial, biomedical, or aerospace.

## Learning Outcome(s):

Students will know about engineering-related careers; be able to use 3D solid modeling CAD software to produce models and industrystandard drawings; and will be able to do hands-on mechatronics fabrication, including working with micro-controllers.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100A | Introduction to Engineering | 2 |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |
|  | - or - | 3 |
| ENGR 130A | CATIA Beginning Solid Modeling | 3 |
| ENGR 122 | Engineering Drawing |  |
|  | - or - |  |
| ENGR 125 | Engineering Graphics | 3 |
| ENGR 131 | Engineering Mechatronics Technology Survey | 0.5 |
| ENGR 132 | Introduction to Robotics | 2.5 |
| ENGR 133 | Basic Mechatronics Engineering Technology | 3 |
| ENGR 134 | Intermediate Mechatronics Engineering <br> Technology | 3 |
| ENGR 135 | Advanced Mechatronics Engineering <br> Technology | 3 |
|  |  |  |


| Electives (select 3 units from the following list): | Units |  |
| :--- | :--- | ---: |
| ENGR 158 | Basic Machining Concepts and Operations | 3 |
| ENGR 240 | Dynamics | 3 |
| ENGR 250 | Electric Circuits | 3 |
| ENGR 250L | Electric Circuits Laboratory | 1 |
| ENGR 281 | Properties of Engineering Materials |  |
|  | Total Units | $\mathbf{2 3}$ |

## Energy Analysis Certificate (Untranscripted) <br> Program code: sac.enea.cert

This certificate program trains students for work in energy analysis and auditing. Students completing training will be prepared for work performing Title 24 energy calculations or for work in utility companies, or private companies that do energy analysis and auditing.
Learning Outcome(s):
Students will perform Title 24 energy calculations or work in utility companies or private companies that conduct energy analysis and auditing.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 012 | AECBlueprint Reading | 3 |
| ENGR 100B | Introduction to Architecture/Civil Engineering/ | 2 |
|  | Construction (AEC) | 3 |
| ENGR 183 | CAD I-Computer Aided Drafting | 3 |
| ENGR 184 | CAD II-Computer Aided Drafting | 3 |
| ENGR 165 | Introduction to Energy | $\mathbf{3}$ |
| ENGR 175 | Introduction to Energy Analysis |  |
|  |  | Total Units |

## AutoCAD 2D Basics Certificate (Untranscripted) <br> Program code: sac.cad2d.cert

2D Computer Drafting Basics is a program for learning to create and edit technical drawings, as well as annotate designs. 2D drawings are used in a wide variety of industries and applications for industrial design of products, architectural, civil and construction drafting to develop plans, shop drawings, permit and patent drawings.

## Learning Outcome(s):

Students will complete a set of basic 2D drawings that demonstrate their knowledge and skills with AutoCAD.

Required Core Courses: Units

Total Units

ENGR 100A Introduction to Engineering 2 - or -

ENGR 100B Introduction to Architecture/Civil Engineering/ 2 Construction (AEC)

| ENGR 183 | AutoCAD I-Computer Aided Drafting | 3 |
| :--- | :--- | :--- |
| ENGR 184 | AutoCAD II-Computer Aided Drafting | 3 |

## 3D CAD Skill Builder Certificate (Untranscripted)

## Program code: sac.3dcad.cert

This program is for students who have some amount of prior CAD experience and seek to learn 3D skills. Courses in this program prepare students for work in basic 3D or parametric 3D, or for further study in engineering majors.
Learning Outcome(s):
Students will complete a set of 3D drawings that demonstrate their knowledge and skills with Solidworks, Revit and AutoCAD.

| Required Core Courses: | Units |  |  |
| :--- | :--- | ---: | ---: |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |  |
| ENGR 154 | (AEC ) BIM with Revit | 5 |  |
| ENGR 186 | AutoCAD 3-Dimensional Drawing |  | 3 |
|  |  | Total Units | 11 |

## Civil 3D CAD Certificate (Untranscripted) <br> Program code:sac.c3cad.cert

This certificate includes 3D land development/site design software, environmental design, transportation design, and geospatial information. Students will be exposed to engineering design principles using various information modeling techniques and sustainable design methodologies.
Learning Outcome(s):
Students will complete a set of Civil 3D drawings that demonstrate their knowledge and skills for Civil 3D work using Bentley and AutoDesk software.

Required Core Courses:

| ENGR 100B | Introduction to Architecture/Civil Engineering/ <br> Construction (AEC) | 2 |  |
| :--- | :--- | ---: | ---: |
| ENGR 143 | Fundamentals of Construction |  |  |
| ENGR 187 | 3D CAD with Civil 3D |  | 3.5 |
|  |  | Total Units | $\mathbf{8 . 5}$ |

Engineering Mechanical 3D Solid Modeling CAD Certificate (Untranscripted)

## Program code: sac.engr3d.cert

Curriculum focuses on developing competency in parametric solid modeling CAD software that is used heavily in the mechanical, aerospace, industrial, \& biomedical engineering fields. Skillsets learned are applicable to drafters, designers, engineering technicians, and engineers in these fields.
Learning Outcome(s):
Students will produce engineering drawings that conform to industry standards and be able to create parts as well as drawings using 3D solid modeling thru intermediate level.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |
| ENGR 104 | Solidworks Intermediate Solid Modeling | 3 |
| ENGR 130A | CATIA Beginning Solid Modeling | 3 |
| ENGR 130B | CATIA Intermediate Solid Modeling | 3 |
| ENGR 122 | Engineering Drawing |  |
|  | - or - | 3 |
| ENGR 125 | Engineering Graphics |  |
| ENGR 131 | Engineering Mechatronics Technology Survey | 0.5 |
|  | Total Units | $\mathbf{1 5 . 5}$ |

## Sustainable Building Operations Management Degree Program code: sac.sbom.as

The Associate of Science degree in High Performance Building Operation Management is focused towards career education training of students in sustainable methods for improving the operational performance of offices, schools, hospitals, and other residential and commercial buildings while working as Building Commissioning Professionals, Operations Professionals, Facility Managers and supporting positions. It will provide needed skilled and qualified workers, particularly as building technologies become more advanced

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 100B | Introduction to Architecture/Civil Engineering/ |  |
|  | Construction (AEC) | 2 |
| ACCT 101 | Financial Accounting | 4 |
| ENGR 142 | Architecture/Civil Engineering/Construction <br> (AEC) Drawing | 4 |
| ENGR 143 | Fundamentals of Construction | 3 |
| ENGR 201 | Residential and Light Commercial Construction <br> Practices and Estimating | 4 |
| ENGR 203 | Sustainable Construction and Facilities <br> Management | 3 |
| ENGR 235 | Statics |  |
|  |  | Total Units |

## Sustainable Building Operations Management Certificate (Transcripted) <br> Program code: sac.sbom.ca

The certificate in High Performance Building Operation Management is focused towards career education training of students in sustainable methods for improving the operational performance of offices, schools, hospitals, and other residential and commercial buildings while working in Building Commissioning, Operations, Facility Manager and supporting positions. It will provide needed skilled and qualified workers, particularly as building technologies become more advanced.
Required Core Courses: Units
ENGR 100B Introduction to Architecture/Civil Engineering/ 2 Construction (AEC)
ENGR 112 Society and the Built Environment 3
ENGR 142 Architecture/Civil Engineering/Construction 4

|  | (AEC) Drawing | 3 |
| :--- | :--- | :--- |

ENGR 201 Residential and Light Commercial Construction 4 Practices and Estimating
ENGR 203 Sustainable Construction and Facilities 3 Management

Total Units

## Sustainable Facilities Management Certificate (Untranscripted) <br> Program code: sac.sufac.cert

The certificate in Sustainable Facilities Management is focused towards training the student in sustainable methods for improving the operational performance of offices, schools, hospitals, and other residential and commercial buildings. It will provide needed skilled and qualified workers, particularly as building technologies become more advanced.
Learning Outcome(s):
Students will use ecological terms, abbreviations, AEC graphics, codes, permits, construction accounting, and facility project procedures to allow work or continued study in sustainable facilities management.

## 118 INSTRUCTIONAL PROGRAMS

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ENGR 142 | Architecture/Civil Engineering/Construction <br> (AEC) Drawing | 4 |
| ENGR 143 | Fundamentals of Construction | 3 |
| ENGR 201 | Residential and Light Commercial Construction <br> Practices and Estimating | 4 |
| ENGR 202 | Cost Accounting for Construction Engineering <br> - or - | 3 |
| ACCT 202 | Cost Accounting for Construction Engineering | 3 |
| ENGR 203 | Sustainable Construction and Facilities <br> Management | 3 |
|  |  | Total Units |

## Sustainable Facility Skill Builder Certificate

 (Untranscripted)Program code: sac.sufsb.cert
This program of study introduces students to Renewables, Green HVAC and Building Automation Systems and Controls, which are fundamental building blocks of energy saving sustainable construction projects. It provides preparation for further study or for work or advancing career opportunities.
Career opportunities include employment in "green" building, design and construction, energy management, and sustainable public planning and policy development. Work is available in government agencies, consulting firms, construction, and non-profit organizations.

## Learning Outcome(s):

Students of the Sustainable Facilities Skill Builder will gain skills and knowledge for renewable energy technologies, green HVAC systems, as well as building automation systems and controls.

## Required Core Courses:

| ENGR 100B | Introduction to Architecture/Civil Engineering/ <br> Construction (AEC) | 2 |
| :--- | :--- | ---: |
| ENGR 177 | Green HVAC | 3 |
| ENGR 195 | Renewable Energy | 3 |
| ENGR 204 | Building Automation \& Controls | 3 |
|  |  | 11 |

Total Units

## Surveying Skill Builder Certificate (Untranscripted)

## Program code: sac.ssb.cert

This program of study includes basics for students or industry professionals who wish to learn surveying basics in a certificate program either to continue studies towards a more comprehensive Civil Technology certificate, or A.S. degree or transfer into a B.S. program.
Learning Outcome(s):
Students will complete a set of surveying drawings that demonstrate their knowledge and skills using industry methods, tools and software.

## Required Core Courses:

 UnitsENGR 100B Introduction to Architecture/Civil Engineering/ 2 Construction (AEC)

| ENGR 118 | Surveying | 4 |
| :--- | :--- | ---: |
| ENGR 183 | CAD I - Computer Aided Drafting | 3 |
| ENGR 184 | CAD II - Computer Aided Drafting | 3 |
| ENGR 187 | 3D CAD with Civil 3D | $\mathbf{3 . 5}$ |
|  | Total Units | $\mathbf{1 5 . 5}$ |

## ENGLISH

Option 1
English Degree
Program code: sac.engl.aa
The associate degree curriculum in English is designed to develop proficiency in written communication and in the understanding of human nature through the study of language and literature. Completion of the degree program prepares students to pursue a major in English leading to a baccalaureate degree.

## Learning Outcome(s):

1. Students will demonstrate the ability to read and analyze a text, not limited to written fiction
2. Students will produce a college-level essay addressing the concerns of a given assignment
3. Students will use appropriately chosen research material that is documented and cited correctly in MLA format.
Required Core Courses:
ENGL 102 Literature and Composition

ENGL 102H Honors Literature and Composition
Choose six units from these survey courses: Units
ENGL 231 Survey of English Literature I 3
ENGL 232 Survey of English Literature II 3
ENGL 241 Survey of American Literature 1600-1865 3
ENGL 242 Survey of American Literature, 1865-Present 3
ENGL 271 Survey of World Literature I 3

ENGL 272 Survey of World Literature II 3

- and -

Electives from list below
Total Units 22
12 units of electives to be selected from any 200 or above English language or literature class including those above not taken as part of the 6-unit requirement.
Note: Students planning to transfer to 4-year schools should consult with English departments at those institutions and/or www.assist.org regarding specific lower division requirements and unit limits.

## Option 2

## Associate in Arts in English for Transfer

## Program code: sac.engl.aat

Revisions to this degree are pending approval from the California Community College Chancellor's office. Please consult a counselor for the latest information.
The Associate in Arts in English for Transfer (AA-T in English) prepares students to move into the CSU system leading to a baccalaureate degree in English. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree in English also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in English, students will have demonstrated a general understanding of the academic standards expected of readers and writers of the English language. They will be able to apply critical thinking skills in order to evaluate literary works for their artistic and literary merits as well as analyze them according to various interpretive theories and for the use of literary devices. Students will be able to produce correctly formatted, documented, and cited academic essays that utilize appropriately chosen sources in support of their arguments.

## Learning Outcome(s):

1. Students will demonstrate the ability to read and analyze a text, not limited to written fiction
2. Students will produce a college-level essay addressing the concerns of a given assignment
3. Students will use appropriately chosen research material that is documented and cited correctly in MLA format.

## Required Core Courses: (4-8 units)

Units
Option 1: Select two (8 units)
ENGL 103 Critical Thinking and Writing
ENGL 103H Honors Critical Thinking and Writing 4
ENGL 102 Literature and Composition 4

- or -

ENGL 102H Honors Literature and Composition
Or
Option 2: Select one (4 units)
Units
ENGL 102 Literature and Composition

- or -

ENGL 102H Honors Literature and Composition
List A: Select two (6 units) Units

| ENGL 241 | Survey of American Literature 1600-1865 | 3 |
| :--- | :--- | ---: |
| ENGL 242 | Survey of American Literature, 1865-Present | 3 |
| ENGL 231 | Survey of English Literature I | 3 |
| ENGL 232 | Survey of English Literature II | 3 |
| ENGL 271 | Survey of World Literature I | 3 |
| ENGL 272 | Survey of World Literature II | 3 |
| List B: Select courses based on option chosen in | Units |  |
| Required Core Courses: |  |  |

## Required Core Courses:

Option 1: 3 units
Option 2: 6 units
Any courses from List A not already used.

| ENGL 213 | Creative Writing | 3 |
| :--- | :--- | :--- |
| ENGL 220 | Survey of the Bible as Literature | 3 |
| ENGL 233A | Shakespeare's Comedies and Romances | 3 |
| ENGL 233B | Shakespeare's Tragedies and History Plays | 3 |


| ENGL 233C | Shakespeare's Theatre | 3 |
| :--- | :--- | ---: |
| ENGL 243 | The Modern American Novel | 3 |
| ENGL 245 | The Image of African Americans in Literature <br> and Films | 3 |
| ENGL 246 | Survey of Chicano Literature | 3 |
| ENGL 270 | Children's Literature | 3 |
| ENGL 278 | Survey of Literature by Women | 3 |
| List C: Select one (3-5 units) | Units |  |

Any course from List A or B not already used.
ASL 110 American Sign Language I 3
ASL $111 \quad$ American Sign Language II $\quad 3$
ASL $210 \quad$ American Sign Language III $\quad 3$

| ENGL 206 | Introduction to Language Structure and Use | 3 |
| :--- | :--- | :--- |
| CHNS 101 | Elementary Chinese I | 5 |


| CHNS 102 | Elementary Chinese II | 5 |
| :--- | :--- | :--- |
| FREN 101 | Elementary French I | 5 |

FREN 102 Elementary French II $\quad 5$
FREN 201 Intermediate French I 5

- or -
FREN 201H Honors Intermediate French I $\quad 5$
FREN 202 Intermediate French II 5
- or -

FREN 202H Honors Intermediate French II 5
ITAL 120 Elementary Italian I 5

| ITAL 121 | Elementary Italian II | 5 |
| :--- | :--- | :--- |
| SPAN 101 | Elementary Spanish I | 5 |

- or -

| SPAN 101H | Honors Elementary Spanish I | 5 |
| :--- | :--- | :--- |
| SPAN 102 | Elementary Spanish II | 5 |

- or -
SPAN 102H Honors Elementary Spanish II 5
SPAN 201 Intermediate Spanish I 5
- or -
SPAN 201H Honors Intermediate Spanish I 5
SPAN 202 Intermediate Spanish II 5
- or -

SPAN 202H Honors Intermediate Spanish II 5
VIET 101 Elementary Vietnamese I 5
VIET 102 Elementary Vietnamese II $\quad 5$

CMSD 121 Introduction to Reporting and Newswriting 3

- or -

CMSD 110 Introduction to Creative Nonfiction 4
BUS 222 Business Writing $\quad 3$
CMST 152 Oral Interpretation 3
THEA 100 Introduction to Theatre $\quad 3$

120 INSTRUCTIONAL PROGRAMS

## ENTREPRENEURSHIP

## Entrepreneurship and Innovation Degree

## Program code: sac.entei.aa

The associate degree in Entrepreneurship and Innovation is designed to give students a thorough understanding of the process of entrepreneurship. It is designed for those who have thought about starting their own ventures, as well as for those new to business. Students learn to develop and commercialize ideas for new ventures. Small business owners learn to develop resources to be more profitable and sustainable. Classes are practical and hands on. They provide real-world exposure to cutting-edge innovation and entrepreneurship. Specialized topics include: building a team, bootstrap marketing, finances and resources, opportunity assessment, design techniques, powerful presentations and more. Many classes are taught in "short sequence formats" of $4-8$ weeks.

## Learning Outcome(s):

Students will acquire the necessary knowledge to start their own businesses either as entrepreneurs or freelance independent contractors.

| Required Core Courses:: | Units |  |
| :--- | :--- | ---: |
| ENTR 100 | Introduction to Innovation and Entrepreneurship | 3 |
| ENTR 101 | Entrepreneurs and Success | 1 |
| ENTR 102 | Entrepreneurial Ideas and Creativity | 1 |
| ENTR 103 | Innovations and Opportunities | 2 |
| ENTR 104 | Business Models | 2 |
| ENTR 105 | Social Media, Bootstrapping, and Market | 2 |
| ENTR 106 | Bailding an Entrepreneurial Team | 2 |
| ENTR 107 | Money, Finance and Accounting for | 2 |
| ENTR 108 | Business Plans for Entrepreneurs | 2 |
| ENTR 109 | Powerful Presentations | 2 |
| Choose 1 elective from the following list: | Units |  |
| ENTR 110 | Capstone Business Simulations | 3 |
| ENTR 111 | Capstone Entrepreneurial Case Studies | 3 |
| BUS 170 | Principles of Small Business Management | 3 |
|  |  | Total Units |

## Entrepreneurship and Innovation Certificate (Transcripted)

## Program code: sac.entei.ca

The certificate in Entrepreneurship and Innovation is designed to give students a thorough understanding of the process of entrepreneurship. It is designed for those who have thought about starting their own ventures, as well as for those new to business. Students learn to develop and commercialize ideas for new ventures. Small business owners learn to develop resources to be more profitable and sustainable. Classes are practical and hands on. They provide real-world exposure to cutting-edge innovation and entrepreneurship. Specialized topics include: building a team, bootstrap marketing, finances and resources, opportunity assessment, design techniques, powerful presentations and more. Many classes are taught in "short sequence formats" of 4-8 weeks.

## Learning Outcome(s):

Students will acquire the necessary knowledge to start their own businesses either as entrepreneurs or freelance independent contractors.
Required Core Courses: Units

| ENTR 100 | Introduction to Innovation and Entrepreneurship | 3 |
| :--- | :--- | :--- |
| ENTR 101 | Entrepreneurs and Success | 1 |
| ENTR 102 | Entrepreneurial Ideas and Creativity | 1 |
| ENTR 103 | Innovations and Opportunities | 2 |


| ENTR 104 | Business Models | 2 |
| :--- | :--- | ---: |
| ENTR 105 | Social Media, Bootstrapping, and Market | 2 |
| ENTR 106 | Validation | 2 |
| ENTR 107 | Money, Finance and Accounting for | 2 |
| ENTR 108 | Entrepreneurs | Business Plans for Entrepreneurs |
| ENTR 109 | Powerful Presentations | 2 |
| Choose 1 elective from the following list: | 2 |  |
| ENTR 110 | Capstone Business Simulations | Units |
| ENTR 111 | Capstone Entrepreneurial Case Studies | 3 |
| BUS 170 | Principles of Small Business Management | 3 |
|  |  | Total Units |

## Freelancer Certificate (Untranscripted)

## Program code: sac.frlan.cert

The Freelancer certificate is designed to give all students, but especially non-business majors, a boot-camp understanding of business as applied to a freelance independent contractor. It is designed for new grads who want to freelance to start their careers, full-time workers who want to freelance to earn extra money or transition to a new career, laid-off workers, workers leaving full-time jobs, parents who want to freelance for a flexible schedule, people who want turn their hobbies into profitable freelance ventures, and seniors who freelance to supplement their incomes.
In the classes students learn how to plan and get started, personal and people skills, different business trades and industries, networking and opportunities, how to get and develop customers, where to get money, how to get paid and how to launch a new freelance business. Classes are short one-unit classes. The goal of the certificate is to teach, as quickly as possible, just what someone needs to know to survive in business as a freelancer.

## Learning Outcome(s):

Students will demonstrate an understanding of the basic requirements to successfully start and run a small business as well as the ability to apply planning methods to business and entrepreneurial situations.
Required Core Courses:

| ENTR 121 | People Skills for the Freelancer | 1 |
| :--- | :--- | ---: |
| ENTR 122 | Opportunities in Freelance Industries and <br> Trades | 1 |
| ENTR 123 | Marketing to Attract Customers and Grow Your <br> Freelance Business | 1 |
| ENTR 124 | Survival Finance and Accounting for the <br> Freelancer-Show Me the Money | 1 |
| ENTR 125 | Launch Your Freelance Business |  |
|  | Total Units | $\mathbf{6}$ |

## ETHNIC STUDIES

## Ethnic Studies Degree

## Program code: sac.ethn.aa

The associate degree curriculum in ethnic studies is designed to foster individual cultural identity and cross-cultural communication, develop a consciousness about the American pluralistic society and its origins, and provide basic education regarding professional careers involving intercultural relations in fields such as arts, business education, government, health, law, public relations, and public service. Emphasis will be on a cultural survey of Native Americans, Asian Americans, African Americans and Mexican Americans/Latinos from the Pre-Columbian period to the present and the contributions of these ethnic groups to U.S. society. Enrichment and global perspective will be added to majors such as Art, Anthropology, Child Development, Dance, Education, English, Foreign Language, History, Music, Psychology and Sociology. Completion of the degree program prepares students to pursue a major leading to a baccalaureate degree.

## Learning Outcome(s):

1. Students will meet requirements in preparation for transfer to a four-year institution
2. Students will interact positively with others in a multicultural society, both professionally personally
3. Students will help to promote an understanding of our nation's multi-cultural history and promotes student leaders in our community.
Required Core Courses: Units
ANTH 100 Introduction to Cultural Anthropology

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
ASIA 101 Introduction to Asian American Studies 3
BLST 101 Introduction to Black Studies $\quad 3$

| CHST 101 | Introduction to CHST | 3 |
| :--- | :--- | :--- |

ETHN 101 Introduction to Ethnic Studies 3

|  | - or - |  |
| :--- | :--- | :--- |
| ETHN 101H | Honors Introduction to Ethnic Studies | 3 |
| ETHN 102 | The Borderlands: Cultural Context and | 3 | Intercultural Relations

- or -

ETHN 102H Honors The Borderlands: Cultural Context and Intercultural Relations
PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H Honors Introduction to Psychology 3
(some sections of interest to Black, Asian American, and Chicano Studies)
Electives: A minimum of six (6) units (but, no more than three, 3 units from any one discipline) taken from the following list:
ANTH 104 Language and Culture

- or -

| ANTH 104H | Honors Language and Culture | 3 |
| :--- | :--- | ---: |
| ANTH 105 | Ancient Mesoamerican Civilization | 3 |
| ANTH 125 | Native Americans in the U.S. | 3 |
| ART 103 | Arts of Africa, Oceania, and Indigenous North <br> America | 3 |
| ART 104 | Mexican and Chicano Art History | 3 |
| ART 106 | Asian Art History | 3 |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| DNCE 105 | World Dance and Cultures | 3 |


| DNCE 112 | Ethnic Dance | 1 |
| :---: | :---: | :---: |
| ENGL 104 | Language and Culture | 3 |
|  | - or- |  |
| ENGL 104H | Honors Language and Culture | 3 |
| ENGL 245 | The Image of African Americans in Literature and Films | 3 |
| ENGL 246 | Survey of Chicano Literature | 3 |
| HIST 101 | World Civilizations to the 16th Century | 3 |
|  | - or- |  |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century | 3 |
|  | - or- |  |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| HIST 105 | Ancient Mesoamerican Civilization | 3 |
| HIST 123 | African American History to 1865 | 3 |
| HIST 124 | Mexican American History in the United States | 3 |
|  | - or- |  |
| HIST 124H | Honors Mexican American History in the United States | 3 |
| HIST 125 | Native Americans in the U.S. | 3 |
| HIST 146 | African American History from 1863 to the Present | 3 |
| HIST 150 | Latin American Civilization to Independence | 3 |
| HIST 151 | Modern Latin American Civilization | 3 |
| HIST 153 | History of Mexico | 3 |
| HIST 160 | East Asian Civilization to 1700 | 3 |
| HIST 161 | East Asian Civilization Since 1700 | 3 |
| HIST 181 | Survey of Chicana/Latina Women's History | 3 |
| MUS 102 | World Music | 3 |
|  | - or- |  |
| MUS 102H | Honors World Music | 3 |
| MUS 103 | Jazz in America | 3 |
| SOC 100 | Introduction to Sociology | 3 |
|  | - or - |  |
| SOC 100H | Honors Introduction to Sociology | 3 |
|  | Total Units | 27 |

## 122 INSTRUCTIONAL PROGRAMS

## FASHION DESIGN MERCHANDISING

## Fashion Design Degree

## Program code: sac.fdc.aa

In addition to the general education requirements, the associate degree curriculum in fashion design provides the basic aesthetic concepts and technical skills necessary for immediate employment in the fashion related fields of design or to transfer to a university program.
The program prepares students for entry-level positions in apparel design for custom clients, theater costuming, and manufacturer's operations.
Completion of the degree enhances ability to obtain a position and advance in the fashion design field.

## Learning Outcome(s):

Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FDM 080 | Embroidery | 1.5 |
| FDM 081 | Fabric Printing | 1.5 |
| FDM 100 | Introduction to Fashion | 3 |
| FDM 103 | Fashion Selection | 3 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 109 | Flat Pattern Techniques | 3.5 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 113 | Fashion Draping | 3.5 |
| FDM 213 | Apparel Line Production | 3 |
| FDM 214 | Tech-Packs for Manufactured Apparel | 3 |
| FDM 215 | Computer Fashion Illustration | 3 |
| FDM 299 | Cooperative Work Experience Education | $1-6$ |

Select six (6) units from the following elective courses: Units
FDM 052 Knit and Swim Suit Sewing 3
FDM 055 Children's Clothing $\quad 2$

| FDM 056 | Basic Sewing and Alternations | 1 |
| :--- | :--- | :--- |


| FDM 058 | Decorative Apparel | 0.5 |
| :--- | :--- | ---: |
| FDM 101 | Buying and Merchandising | 3 |


| FDM 101 | Buying and Merchandising | 3 |
| :--- | :--- | :--- |
| FDM 102 | Promotion and Coordination | 3 |

FDM 105B Intermediate Sewing 2
FDM 106 Advanced Sewing 3

| FDM 107 | Custom Tailoring | 2 |
| :--- | :--- | :--- |


| FDM 110 | Corset Construction | 3 |
| :--- | :--- | :--- |


| FDM 125 | Display Merchandising | 3 |
| :--- | :--- | :--- |
| FDM 140 | Fashion E-Commerce | 3 |


| FDM 140 | Fashion E-Commerce | 3 |
| :--- | :--- | :--- |
| FDM 216 | Computer Flat Pattern Design, Grading and | 3 |


| ENTR 120 | Marking | 1 |
| :--- | :--- | :--- |


| ENTR 121 | People Skills for the Freelancer | 1 |
| :--- | :--- | :--- |


| ENTR 122 | Opportunities in Freelance Industries and <br> Trades | 1 |
| :--- | :--- | :--- |


| ENTR 123 | Marketing to Attract Customers and Grow Your | 1 |
| :--- | :--- | :--- |

ENTR $124 \quad$ Survival Finance and Accounting for the 1

|  | Freelancer-Show Me the Money |  |
| :--- | :--- | :--- |
| ENTR 125 | Launch Your Freelance Business | 1 |

## Fashion Design Certificate (Transcripted)

## Program code: sac.fdc.ca

The certificate curriculum in fashion design provides the basic aesthetic concepts and technical skills necessary for immediate employment in the fashion related fields of design.
The program prepares students for entry-level positions in apparel design for custom clients, theater costuming, and manufacturer's operations.
Completion of the certificate enhances ability to obtain a position and advance in the fashion design field.

## Learning Outcome(s):

Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field.
Required Core Courses: Units
FDM 080 Embroidery 1.5
FDM 081 Fabric Printing $\quad 1.5$
FDM 100 Introduction to Fashion 3
FDM 103 Fashion Selection 3
FDM 104 Textile Fibers and Fabrics $\quad 3$
FDM 105A Beginning Sewing 3

| FDM 109 | Flat Pattern Techniques | 3.5 |
| :--- | :--- | :--- |

FDM 111A Fashion Illustration Techniques 3

| FDM 113 | Fashion Draping | 3.5 |
| :--- | :--- | :--- |

FDM 213 Apparel Line Production 3
FDM 214 Tech-Packs for Manufactured Apparel 3
FDM 215 Computer Fashion Illustration 3
FDM 299 Cooperative Work Experience Education 1-6
Select six (6) units from the following elective courses: Units
FDM 052 Knit and Swim Suit Sewing 3
FDM 055 Children's Clothing $\quad 2$
FDM 056 Basic Sewing and Alternations $\quad 1$

| FDM 058 | Decorative Apparel | 0.5 |
| :--- | :--- | :--- |


| FDM 101 | Buying and Merchandising | 3 |
| :--- | :--- | :--- |

FDM 102 Promotion and Coordination 3

FDM 105B Intermediate Sewing 2
FDM 106 Advanced Sewing 3
FDM 107 Custom Tailoring 2
FDM 110 Corset Construction 3

| FDM 125 | Display Merchandising | 3 |
| :--- | :--- | :--- |

FDM 140 Fashion E-Commerce 3
FDM 216 Computer Flat Pattern Design, Grading and 3

|  | Marking |  |
| :--- | :--- | :--- |
| ENTR 120 | Introduction to Working as a Freelance |  |


| ENTR 120 | Introduction to Working as a Freelance <br> Independent Contractor | 1 |
| :--- | :--- | :--- |


| ENTR 121 | People Skills for the Freelancer | 1 |
| :--- | :--- | :--- |

ENTR 122 Opportunities in Freelance Industries and 1

|  | Trades |  |
| :--- | :--- | :--- |
| ENTR 123 | Marketing to Attract Customers and Grow Your | 1 |


|  | Freelance Business | 1 |
| :--- | :--- | :--- |


|  | Freelancer-Show Me the Money |  |
| :--- | :--- | :--- |
| ENTR 125 | Launch Your Freelance Business | 1 |

Total Units 41-46

## Fashion Merchandising Degree

## Program code: sac.fdm.aa

In addition to the general education requirements, the associate degree curriculum in fashion merchandising is designed to prepare students for a career in the fashion industry or to transfer to a university program.
The program places emphasis on preparing students for entry-level positions in such areas as sales, buying, merchandising, promotion, retail management, styling, and fashion forecasting.
Learning Outcome(s):
Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FDM 100 | Introduction to Fashion | 3 |
| FDM 101 | Buying and Merchandising | 3 |
| FDM 102 | Promotion and Coordination | 3 |
| FDM 103 | Fashion Selection | 3 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 125 | Display Merchandising | 3 |
| FDM 140 | Fashion E-Commerce | 3 |
| FDM 214 | Tech-Packs for Manufactured Apparel | 3 |
| FDM 299 | Cooperative Work Experience Education | $1-6$ |
| BA 188 | Microsoft Excel | 2 |

Select six (6) units from the following electives: Units

| FDM 108 | RTW Quality Analysis | 3 |
| :--- | :--- | ---: |
| FDM 109 | Flat Pattern Techniques | 3.5 |
| FDM 113 | Fashion Draping | 3.5 |
| ENTR 120 | Introduction to Working as a Freelance <br> Independent Contractor | 1 |
| ENTR 121 | People Skills for the Freelancer | 1 |
| ENTR 122 | Opportunities in Freelance Industries and | 1 |
| ENTR 123 | Marketing to Attract Customers and Grow Your <br>  <br> Freelance Business | 1 |
| ENTR 124 | Survival Finance and Accounting for the <br> Freelancer-Show Me the Money | 1 |
| ENTR 125 | Launch Your Freelance Business | 1 |
| BA 189 | Excel Application Projects |  |

## Fashion Merchandising Certificate (Transcripted)

## Program code: sac.fdm.ca

The certificate curriculum in fashion merchandising is designed to prepare students for a career in the fashion industry. The program places emphasis on preparing students to enter entry level positions in such areas as sales, buying, merchandising, promotion, retail management, styling, and fashion forecasting.
Learning Outcome(s):
Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field.
Required Core Courses: Units

| FDM 100 | Introduction to Fashion | 3 |
| :--- | :--- | :---: |
| FDM 101 | Buying and Merchandising | 3 |
| FDM 102 | Promotion and Coordination | 3 |
| FDM 103 | Fashion Selection | 3 |
| FDM 104 | Textile Fibers and Fabrics | 3 |


| FDM 105A | Beginning Sewing | 3 |
| :---: | :---: | :---: |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 125 | Display Merchandising | 3 |
| FDM 140 | Fashion E-Commerce | 3 |
| FDM 214 | Tech-Packs for Manufactured Apparel | 3 |
| FDM 299 | Cooperative Work Experience Education | 1-6 |
| BA 188 | Microsoft Excel | 2 |
| Select six (6) units from the following electives: |  | Units |
| FDM 108 | RTW Quality Analysis | 3 |
| FDM 109 | Flat Pattern Techniques | 3.5 |
| FDM 113 | Fashion Draping | 3.5 |
| ENTR 120 | Introduction to Working as a Freelance Independent Contractor | 1 |
| ENTR 121 | People Skills for the Freelancer | 1 |
| ENTR 122 | Opportunities in Freelance Industries and Trades | 1 |
| ENTR 123 | Marketing to Attract Customers and Grow Your Freelance Business | 1 |
| ENTR 124 | Survival Finance and Accounting for the Freelancer-Show Me the Money | 1 |
| ENTR 125 | Launch Your Freelance Business | 1 |
| BA 189 | Excel Application Projects | 2 |
| Total Units 39-45 |  |  |
| Apparel Product Development and Technical Design Degree |  |  |
| Program code: sac.fdcap.aa |  |  |
| In addition to the general education requirements, this vocational program provides the technical skills and product background necessary to work in apparel jobs such as pattern making, product development, and technical design in ready-to-wear or theater costumes. |  |  |
| Emphasis is placed on developing vocational skills including computer applications current to fashion design manufacturing. |  |  |
| Learning Outcome(s): |  |  |
| Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field. |  |  |
| Required C | Courses: | Units |
| FDM 100 | Introduction to Fashion | 3 |
| FDM 103 | Fashion Selection | 3 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 109 | Flat Pattern Techniques | 3.5 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 113 | Fashion Draping | 3.5 |
| FDM 214 | Tech-Packs for Manufactured Apparel | 3 |
| FDM 215 | Computer Fashion Illustration | 3 |
| FDM 216 | Computer Flat Pattern Design, Grading and Marking | 3 |
| FDM 299 | Cooperative Work Experience Education | 1-6 |
| Select six (6) units from the following elective courses: |  | Units |
| FDM 052 | Knit and Swim Suit Sewing | 3 |
| FDM 055 | Children's Clothing | 2 |
| FDM 056 | Basic Sewing and Alternations | 1 |
| FDM 058 | Decorative Apparel | 0.5 |
| FDM 080 | Embroidery | 1.5 |
| FDM 081 | Fabric Printing | 1.5 |
| FDM 101 | Buying and Merchandising | 3 |

## 124 INSTRUCTIONAL PROGRAMS

| FDM 102 | Promotion and Coordination | 3 |
| :---: | :---: | :---: |
| FDM 105B | Intermediate Sewing | 2 |
| FDM 106 | Advanced Sewing | 3 |
| FDM 107 | Custom Tailoring | 2 |
| FDM 125 | Display Merchandising | 3 |
| FDM 213 | Apparel Line Production | 3 |
| ENTR 120 | Introduction to Working as a Freelance Independent Contractor | 1 |
| ENTR 121 | People Skills for the Freelancer | 1 |
| ENTR 122 | Opportunities in Freelance Industries and Trades | 1 |
| ENTR 123 | Marketing to Attract Customers and Grow Your Freelance Business | 1 |
| ENTR 124 | Survival Finance and Accounting for the Freelancer-Show Me the Money | 1 |
| ENTR 125 | Launch Your Freelance Business | 1 |
|  | Total Units | 8-43 |
| Apparel Product Development and Technical Design Certificate (Transcripted) |  |  |
|  |  |  |
| Program code: sac.fdcap.ca |  |  |
| This certificate program provides the technical skills and product background necessary to work in apparel jobs such as pattern making, product development, and technical design in ready-to-wear or theater costumes. |  |  |
| Emphasis is placed on developing vocational skills including computer applications current to fashion design manufacturing. |  |  |
| Learning Outcome(s): |  |  |
| Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field. |  |  |
| Required Core Courses: |  | Units |
| FDM 100 | Introduction to Fashion | 3 |
| FDM 103 | Fashion Selection | 3 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 109 | Flat Pattern Techniques | 3.5 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 113 | Fashion Draping | 3.5 |
| FDM 214 | Tech-Packs for Manufactured Apparel | 3 |
| FDM 215 | Computer Fashion Illustration | 3 |
| FDM 216 | Computer Flat Pattern Design, Grading and Marking | 3 |
| FDM 299 | Cooperative Work Experience Education | 1-6 |
| Select six (6) units from the following elective courses: |  | Units |
| FDM 052 | Knit and Swim Suit Sewing | 3 |
| FDM 055 | Children's Clothing | 2 |
| FDM 056 | Basic Sewing and Alternations | 1 |
| FDM 058 | Decorative Apparel | 0.5 |
| FDM 080 | Embroidery | 1.5 |
| FDM 081 | Fabric Printing | 1.5 |
| FDM 101 | Buying and Merchandising | 3 |
| FDM 102 | Promotion and Coordination | 3 |
| FDM 105B | Intermediate Sewing | 2 |
| FDM 106B | Advanced Sewing II | 1.5 |
| FDM 107 | Custom Tailoring | 2 |
| FDM 125 | Display Merchandising | 3 |
| FDM 213 | Apparel Line Production | 3 |

 3 .

## Learning Outcome(s):

Students will function knowledgeably and effectively in positions within the design and apparel manufacturing field.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| FDM 052 | Knit and Swim Suit Sewing | 3 |
|  | - or - |  |
| FDM 055 | Children's Clothing | 2 |
| FDM 056 | Basic Sewing and Alterations | 1 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 105B | Intermediate Sewing | 2 |
| FDM 106 | Advanced Sewing | 3 |
| FDM 107 | Custom Tailoring | 2 |
| FDM 109 | Flat Pattern Techniques | 3.5 |
| FDM 110 | Corset Construction | 3 |
| FDM 112 | Advanced Flat PatternMaking | 3 |
| FDM 113 | Fashion Draping | 3.5 |
| FDM 212 | Advanced Draping | 2 |
| FDM 213 | Apparel Line Production | 3 |
| Select 3 or more units from the following: |  | Units |
| FDM 005 | Fashion Laboratory | 0.5-1 |
| FDM 058 | Decorative Apparel | 0.5 |
| FDM 080 | Embroidery | 1.5 |
| FDM 081 | Fabric Printing | 1.5 |
| FDM 102 | Promotion and Coordination | 3 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 140 | Fashion E-Commerce | 3 |
| FDM 216 | Computer Flat Pattern Design, Grading and Marking | 3 |
| FDM 299 | Cooperative Work Experience Education | 1-6 |
| ENTR 120 | Introduction to Working as a Freelance Independent Contractor | 1 |
| ENTR 121 | People Skills for the Freelancer | 1 |
| ENTR 122 | Opportunities in Freelance Industries and Trades | 1 |
| ENTR 123 | Marketing to Attract Customers and Grow Your Freelance Business | 1 |
| ENTR 124 | Survival Finance and Accounting for the Freelancer-Show Me the Money | 1 |
| ENTR 125 | Launch Your Freelance Business | 1 |

## Fashion Assistant Certificate (Untranscripted)

Program code: sac.fdfa.cert
This certificate curriculum is designed to prepare students for entry level design assistant positions in the apparel industry. All classes offer sections availble online.
Learning Outcome(s):
Students who complete the Fashion Assistant Certificate will be able to function knowledgeably and effectively in entry level positions in the design and apparel manufacturing field.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FDM 100 | Introduction to Fashion | 3 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 215 | Computer Fashion Illustration | 3 |
| FDM 299 | Cooperative Work Experience Education | $1-6$ |

Total Units 16-21

## Quinceañera Dress Design Certificate (Untranscripted)

Program code: sac.fdqdd.cert
The certificate curriculum prepares students for entry level careers in designing and constructing Quinceañera dresses.
Learning Outcome(s):
Students who complete the Quinceañera Dress Design Certificate will be able to design and create formal dresses.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FDM 058 | Decorative Apparel | 0.5 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 110 | Corset Construction |  |
| FDM 109 | Flat Pattern Techniques |  |
| FDM 113 | Fashion Draping | 3.5 |
| FDM 213 | Apparel Line Production |  |
|  |  | Total Units |

## Screen Printing and Embroidery Certificate <br> (Untranscripted)

Program code: sac.fdspe.cert
This certificate curriculum is designed to prepare students for entry level positions in screen printing and embroidery shops.
Learning Outcome(s):
Screen Printing and Embroidery Certificate of Proficiency- Students who complete the Screen Printing and Embroidery Certificate will be able to function knowledgeably and effectively in entry level positions in the apparel screen printing and embroidery industry.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FDM 080 | Embroidery | 1.5 |
| FDM 081 | Fabric Printing | 1.5 |
| FDM 104 | Textile Fibers and Fabrics | 3 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 213 | Apparel Line Production | 3 |
| FDM 215 | Computer Fashion Illustration | 3 |
| FDM 299 | Cooperative Work Experience Education | $\mathbf{1 - 6}$ |
|  | Total Units | $\mathbf{1 6 - 2 1}$ |

## Swimwear Design Certificate (Untranscripted)

## Program code: sac.fdsd.cert

This certificate curriculum is designed to prepare students for entry level design and product development positions in southern Califoria's swimwear industry

## Learning Outcome(s):

Will be able to function knowledgeably and effectively in entry level positions in the design and apparel manufacturing field.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FDM 052 | Knit and Swim Suit Sewing | 3 |
| FDM 105A | Beginning Sewing | 3 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 214 | Tech-Packs for Manufactured Apparel | 3 |
| FDM 213 | Apparel Line Production | 3 |
| FDM 299 | Cooperative Work Experience Education | $1-6$ |
|  | Total Units | $16-21$ |

## Visual Merchandising Certificate (Untranscripted)

## Program code: sac.fdvm.cert

This certificate curriculum is designed to prepare students for visual merchandising positions at fashion retail stores
Learning Outcome(s):
will be able to function knowledgeably and effectively in entry level positions in the retail merchandising field.
Required Core Courses: Units

$$
\text { FDM } 100 \quad \text { Introduction to Fashion } 3
$$

FDM 101 Buying and Merchandising 3
FDM 102 Promotion and Coordination 3
FDM 125 Display Merchandising 3
FDM 140 Fashion E-Commerce 3
FDM 299 Cooperative Work Experience Education $\quad 1-6$

Total Units $\quad 16-21$

## FIRE TECHNOLOGY

## Administrative Fire Services Chief Officer Degree <br> Program code: sac.ftco.as

The Administrative Fire Services Chief Officer Degree is designed to prepare students for careers as chief officers. This program meets the requirements of the California Fire Chiefs' Association and the Chief Fire Officer Certification track of the California State Fire Marshal. Transcript evaluation may allow up to a maximum of 18 units of credit for previous fire service education. If Fire Technology 121 is completed as an elective with a "C" or better grade and Fire Technology 121L is completed with a "pass," it may be used to satisfy the requirements for section F of the general education requirements for graduation Student must complete the general education requirements as outlined in the appropriate catalog.
Learning Outcome(s):

1. Students will demonstrate skills and knowledge expected in upper-level management positions within the fire service through the application of leadership, management, and ethical decisionmaking models
2. Students will develop mission-specific goals and strategies to support executive leadership in fire department daily operations as well as all-risk emergency situations
3. Students will analyze intergovernmental and public relationships between city, county, state and federal agencies and how they relate to emergency and non-emergency public safety coordination.
4. Student must complete the general education requirements as outlined in the appropriate catalog.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FOT 032 | ICS-300 Intermediate ICS | 0.5 |
| FOT 150A | Company Officer 2A: Human Resource <br> Management for Company Officers | 1.5 |
| FOT 150B | Company Officer 2B: General Administration <br> Functions for Company Officers | 0.5 |
| FOT 150C | Company Officer 2C: Fire Inspections and <br> Investigations | 1.5 |
| FOT 150D | Company Officer 2D: All-Risk Command <br> Operations for Company Officers | 1.5 |
| FOT 150E | Company Officer 2E: Wildland Incident <br> Operations for Company Officers | 1.5 |
| FOT 205 | Instructor I: Instructional Methodology | 1.5 |
| FOT 273B | Chief Fire Officer 3A: Human Resource <br> Management for Chief Fire Officers | 1 |
| COTief Fire Officer 3B: Budget and Fiscal |  |  |
| Responsibilities for Chief Fire Officers |  |  |

Delivery Responsibilities for Chief Fire Officers

In addition, select a minimum of 3.5 units from the following list (classes in this area may be substituted with similar classes):
Core Electives
Units
FOT 008A S-339 Division/Group Supervisor All Risk 0.5

| FOT 033 | ICS-400 Incident Command | 0.5 |
| :--- | :--- | :--- |

FOT 020A Hazardous Materials 1A $\quad 1$

| FOT 020B | Hazardous Materials 1B | 1 |
| :--- | :--- | :--- |
| FOT 020C | Hazardous Materials 1C | 1 |


| FOT 020C | Hazardous Materials 1C | 1 |
| :--- | :--- | ---: |
| FOT 044 | Fire Investigation 1A: Fire Origin and Cause | 0.5 |


|  | Determination |  |
| :--- | :--- | :--- |
| FAC 060 | Basic Fire Academy | 12 |

FTC $102 \quad$ Fire Behavior and Combustion $\quad 3$

| FTC 103 | Principles of Fire and Emergency Services <br> Safety and Survival | 3 |
| :--- | :--- | :--- |


| FTC 104 | Fire Prevention | 3 |
| :--- | :--- | :--- |
| FTC 105 | Buiding Construction for Fire Protection |  |


| FTC 105 | Building Construction for Fire Protection | 3 |
| :--- | :--- | :--- |


| FTC 106 | Fire Protection Systems | 3 |
| :--- | :--- | :--- |


| FTC 121L | Physical Fitness for Public Safety Personnel - <br> Performance and Assessment | 0.3 |
| :--- | :--- | :--- |


| FTC 121 | Physical Fitness for Public Safety Personnel | 3 |
| :--- | :--- | ---: |
| FOT 130B | Fire Inspector 1B: Introduction to Fire and Life | 1.5 |


|  | Safety |  |
| :--- | :--- | :--- |
| FOT 130A | Fire Inspector 1A: Duties and Administration | 1.5 |


| FOT 130C | Fire Inspector 1C: Field Inspection | 1.5 |
| :--- | :--- | :--- |
| FOT 206 | Instructor II: Instructional Development | 1.5 |

Total Units $\quad 15.5$

## Administrative Fire Services Chief Officer Certificate (Transcripted) <br> Program code: sac.ftco.ca

The Administrative Fire Services, Chief Officer Certificate is designed to prepare students for careers as chief officers. This program meets the requirements of the California Fire Chiefs' Association and the Chief Officer Certification track of the California State Fire Marshall.

## Learning Outcome(s):

1. Students will demonstrate skills and knowledge expected in upper-level management positions within the fire service through the application of leadership, management, and ethical decisionmaking models
2. Students will develop mission-specific goals and strategies to support executive leadership in fire department daily operations as well as all-risk emergency situations
3. Students will analyze intergovernmental and public relationships between city, county, state and federal agencies and how they relate to emergency and non-emergency public safety coordination.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FOT 146 | Fire Management 2A: Organizational <br> Development and Human Relations | 0.5 |
| FOT 147 | Fire Management 2B: Fire Service Financial <br> Management | 0.5 |
| FOT 148 | Fire Management Personnel and Labor <br> Relations 2C: | 0.5 |
| FOT 149 | Fire Management 2D: Strategic Planning | 0.5 |
| FOT 150 | Fire Management 2E: Ethics and the Challenge <br> of Leadership | 0.8 |
| FOT 151 | Fire Command 2A: Command Tactics at Major <br> Fires | 0.8 |
| FOT 152 | Fire Command 2B:Management of Major <br> Hazardous Materials Incidents | 0.8 |
| FOT 153 | Fire Command 2C: High-Rise Fire Fighting <br> Tactics | 0.5 |
| FOT 154 | Fire Command 2D: Planning for Large Scale <br> Disasters | 0.8 |
| FOT 155 | Fire Command 2E: Wildland Fire Fighting <br> Tactics | 0.8 |

In addition, select a minimum of 9 units from the following
list (classes in this area may be substituted with similar Units classes):

| FTC 101 | Fire Protection Organization | 3 |
| :--- | :--- | ---: |
| FTC 102 | Fire Behavior and Combustion | 3 |
| FTC 103 | Principles of Fire and Emergency Services <br> Safety and Survival | 3 |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems | 3 |
| FTC 121 | Physical Fitness for Public Safety Personnel | 3 |
| FTC 121L | Physical Fitness for Public Safety Personnel - <br> Performance and Assessment | 0.3 |
| FAC 060 | Basic Fire Academy | 12 |
|  |  | Total Units |

## Fire Administration Option Degree

## Program code: sac.ftfa.as

The degree program in fire administration is designed to prepare students for careers as fire service officers. The program meets requirements of the California State Board of Fire Services Certified Company Officer and college or university preparation. Transcript evaluation may allow up to a maximum of 18 units of credit for previous fire service education. If FTC 121 is completed as an elective with a "C" or better grade and FTC 121 L is completed with a "pass" it may be used to satisfy the requirements of section $F$ of the general education requirements for graduation.

## Learning Outcome(s):

1. Students will demonstrate the ability to manage all-risk emergency incidents at the Fire Officer level
2. Students will competently apply leadership and management theories and decision-making models as they relate to the local, state and federal standards and practices
3. Students will analyze complex emergency response scenarios and effectively identify strategies and tactics for successful mitigation.
4. Student must complete the general education requirements as outlined in the appropriate catalog.

| Required Core Courses: <br> FOT 016 | CSFA Terrorism | Units |
| :--- | :--- | ---: |
| FOT 032 | ICS-300 Intermediate ICS | 0.3 |
| FOT 033 | ICS-400 Incident Command | 0.5 |
| FOT 150A | Company Officer 2A: Human Resource <br> Management for Company Officers | 1.5 |
| FOT 150B | Company Officer 2B: General Administration <br> Functions for Company Officers | 0.5 |
| FOT 150C | Company Officer 2C: Fire Inspections and <br> Investigations | 1.5 |
| FOT 150D | Company Officer 2D: All-Risk Command <br> Operations for Company Officers | 1.5 |
| FOT 150E | Company Officer 2E: Wildland Incident <br> Operations for Company Officers | 1.5 |
| FOT 205 | Instructor I: Instructional Methodology | 1.5 |
| FOT 273A | Chief Fire Officer 3A: Human Resource <br> Management for Chief Fire Officers | 1 |
| FOT 273B | Chief Fire Officer 3B: Budget and Fiscal <br> Responsibilities for Chief Fire Officers | 0.5 |
| FOT 273C | Chief Fire Officer 3C: General Administration <br> Functions | 1 |
| FOT 273D | Chf Fire Officer 3D: Emergey Service |  |

FOT 273D Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers
In addition, select a minimum of 9 units from the following list (classes in this area may be substituted with similar classes):
Core Electives Units
FAC 060 Basic Fire Academy 12
FTC 102 Fire Behavior and Combustion 3

| FTC 103 | Principles of Fire and Emergency Services <br> Safety and Survival | 3 |
| :--- | :--- | :--- |

FTC 104 Fire Prevention $\quad 3$
FTC 105 Building Construction for Fire Protection 3
FTC 106 Fire Protection Systems 3

| FTC 121 | Physical Fitness for Public Safety Personnel | 3 |
| :--- | :--- | ---: |
| FTC 121L | Physical Fitness for Public Safety Personnel - | 0.3 |

Total Units
21.8

## Fire Administration Option Certificate (Transcripted)

 Program code: sac.ftfa.caThe certificate program in fire administration is designed to prepare students for careers as fire service officers. The program meets requirements of the California State Board of Fire Services Company Officer and college or university preparation. Transcript evaluation may allow up to a maximum of 18 units of credit for previous fire service education.
Learning Outcome(s):

1. Students will demonstrate the ability to manage all-risk emergency incidents at the Fire Officer level
2. Students will competently apply leadership and management theories and decision-making models as they relate to the local, state and federal standards and practices
3. Students will analyze complex emergency response scenarios and effectively identify strategies and tactics for successful mitigation.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FOT 150A | Company Officer 2A: Human Resource <br> Management for Company Officers | 1.5 |
| FOT 150B | Company Officer 2B: General Administration <br> Functions for Company Officers | 0.5 |
| FOT 150C | Company Officer 2C: Fire Inspections and <br> Investigations | 1.5 |
| FOT 150D | Company Officer 2D: All-Risk Command <br> Operations for Company Officers | 1.5 |
| FOT 150E | Company Officer 2E: Wildland Incident <br> Operations for Company Officers | 1.5 |
| FOT 205 | Instructor I: Instructional Methodology | 1.5 |

Select a minimum of 9 units from the following list (classes in this area may be substituted with similar classes):
Core Electives Units
FTC 102 Fire Behavior and Combustion 3
FTC 103 Principles of Fire and Emergency Services 3

| Safety and Survival |  |  |
| :--- | :--- | ---: |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems | 3 |
| FTC 121 | Physical Fitness for Public Safety Personnel | 3 |
| FTC 121L | Physical Fitness for Public Safety Personnel - <br> Performance and Assessment | 0.3 |
| FAC 060 | Basic Fire Academy | 12 |

Select a minimum of 4.8 units from the courses listed below.

| Electives |  | Units |
| :--- | :--- | ---: |
| FOT 008A | S-339 Division/Group Supervisor All Risk | 0.5 |
| FOT 016 | CSFA Terrorism | 0.3 |
| FOT 020A | Hazardous Materials 1A | 1 |
| FOT 020B | Hazardous Materials 1B | 1 |
| FOT 020C | Hazardous Materials 1C | 1 |
| FOT 020D | Hazardous Materials 1D | 1 |
| FOT 021A | Hazardous Materials 1E | 1 |
| FOT 021C | Hazardous Materials 1G | 1 |
| FOT 032 | ICS-300 Intermediate ICS | 0.5 |
| FOT 033 | ICS-400 Incident Command | 0.5 |
| FOT 044 | Fire Investigation 1A: Fire Origin and Cause | 0.5 |
| FOT 045 | Determination <br> FAC Investigation 1B: Techniques of Fire | 0.5 |
| Investigation | Bas2 | Basic Incident Command Systems |


| FOT 078 | S-230 Crew Boss (Single Resource) | 0.5 |
| :--- | :--- | ---: |
| FOT 079 | S-404 Safety Officer | 0.5 |
| FAC 079B | S-330 Task Force-Strike Leader | 0.5 |
| FAC 079D | S-440 Planning Section Chief | 0.5 |
| FAC 084A | Hazardous Materials First Responder <br> Operational, Decontamination | 0.3 |
| FOT 130A | Fire Inspector 1A: Duties and Administration | 1.5 |
| FOT 130B | Fire Inspector 1B: Introduction to Fire and Life | 1.5 |
| FOT 130C | Fafety |  |
| FOT 130D | Fire Inspector 1C: Field Inspector 1D: Field Inspector | 1.5 |
| FOT 206 | Instructor II: Instructional Development | 1 |
| FOT 210 | Community Risk Educator | 1.5 |
|  |  | 1 |

## Fire Prevention Officer Degree

## Program code: sac.ftpo.as

The Fire Prevention Officer Degree is designed to prepare students as Fire Protection Engineering Technicians and as staff assistants to Fire Protection Engineers; to enable fire department personnel to upgrade skills in the area of fire prevention; to give architects, engineers and persons from other disciplines an opportunity to expand their knowledge of building, life safety and fire protection. This program meets the requirements of the California State Board of Fire Services Certified Firefighter I and college or university preparation. This degree option does not include FTC 121 and 121L in the program. Therefore, students must complete Area F of the Associate Degree general education requirements.
Student must complete the general education requirements as outlined in the appropriate catalog.

## Learning Outcome(s):

1. Students will demonstrate written and verbal communication skills, basic math skills, public relations skills and ethical decision making skills required for the occupation of Fire Inspector
2. Students will perform skills that meet National Fire Protection Association Standard 1031 for Fire Inspector I, California State Fire Marshal Standards for Fire Inspector I and International Code Council Fire Inspector I
3. Students will analyze, evaluate, and develop mitigation plans for emergency and hazardous conditions that are inherent to Fire Prevention.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FOT 026 | Fire Inspector 1A | 1.5 |
| FOT 130B | Fire Inspector 1B: Introduction to Fire and Life | 1.5 |
| FOT 130C | Fafety | Fire Inspector 1C: Field Inspection |
| FOT 130D | Fire Inspector 1D:Field Inspector | 1.5 |
| FTC 101 | Fire Protection Organization | 1 |
| FTC 102 | Fire Behavior and Combustion | 3 |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems | 3 |
| FOT 136 | Fire Inspector 2A: Fire Prevention Administration | 1 |
| FOT 137 | Fire Inspector 2B: Fire and Life Safety | 1.5 |
| FOT 138 | Requirements | Fire Inspector 2C: Inspecting New and Existing |
| FOT 139 | Fire \& Life Safety Systems and Equipment | 1 |

## Fire Prevention Officer Certificate (Transcripted) <br> Program code: sac.ftpo.ca

The Fire Prevention Officer Certificate is designed to prepare students as Fire Protection Engineering Technicians and as staff assistants to Fire Protection Engineers; to enable fire department personnel to upgrade skills in the area of prevention; and to give architects, engineers and persons from other disciplines an opportunity to expand their knowledge of building, life safety, and fire protection. This certificate program meets the requirements of the California State Board of Fire Services Certified Firefighter I and college or university preparation.

## Learning Outcome(s):

1. Students will demonstrate written and verbal communication skills required for entry-level Fire Inspector positions
2. Students will demonstrate requisite knowledge and skills that meet the National Fire Protection Association Standard 1031 for Fire Inspector I
3. Students will identify and evaluate hazardous conditions that are inherent to Fire Prevention

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FOT 026 | Fire Inspector 1A | 1.5 |
| FOT 027 | Fire Inspector 1B: Introduction to Fire and Life | 1.5 |
| FOT 028 | Safety | Fire Inspector 1C: Field Inspection |
| FOT 029 | Fire Inspector 1D: Field Inspector | 1.5 |
| FTC 101 | Fire Protection Organization | 1 |
| FTC 102 | Fire Behavior and Combustion | 3 |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems | 3 |
|  |  | Total Units |

## Public Fire Service Option Degree

## Program code: sac.ftpfs.as

The public fire service program is designed to provide occupational preparation in federal, state, local and private fire protection agencies and for those desiring to enter fire service work in such areas as firefighting with emphasis in fire prevention, inspection and safety practices. Completion of t , ademy 060 course is recognized by the California State Board of Fire Services as meeting the requirements for Certified Firefighter 1 Training Academy and college and university preparation. The units earned in Fire Academy 060 are nontransferable. Prerequisites to the Basic Fire Academy include: All Fire Technology core courses, meeting the NFPA 1582 medical standards, passing the physical ability test and completing Emergency Medical Technician I course, taking and passing the National EMT Certification Exam and receiving certification in the State of California.
Student must complete the general education requirements as outlined in the appropriate catalog

## Learning Outcome(s):

1. Students will demonstrate written and verbal communication skills required for entry-level Firefighter positions
2. Students will demonstrate skills that meet the National Fire Protection Association Standard 1001 for Fire Fighter I; California State Fire Marshal standards for Firefighter I Trained and the recommendations of the Fire Technology Dept. Advisory Board
3. Students will analyze emergency and hazardous conditions that are inherent to the firefighting profession.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FAC 007 | Orientation and Physical Fitness | 2.5 |
| FAC 008 | Firefighter I Physical Ability Examination | 0.1 |
| FAC 060 | Basic Fire Academy | 12 |
| FTC 101 | Fire Protection Organization | 3 |
| FTC 102 | Fire Behavior and Combustion | 3 |
| FTC 103 | Principles of Fire and Emergency Services <br>  <br> Safety and Survival | 3 |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems | 3 |
| FTC 121 | Physical Fitness for Public Safety Personnel | 3 |
| FTC 121L | Physical Fitness for Public Safety Personnel - <br> Performance and Assessment | 0.3 |
|  |  | Total Units |

## Public Fire Service Option Certificate (Transcripted)

## Program code: sac.ftpfs.ca

The public fire service program is designed to provide occupational preparation in federal, state, local, and private fire protection agencies and for those desiring to enter fire service work in such areas as firefighting with emphasis in fire prevention, inspection, and safety practices. Completion of the Fire Academy 060 course is recognized by the California State Board of Fire Services as meeting the requirements for Certified Firefighter 1 Training Academy and college and university preparation. The units earned in The Fire Academy 060 are nontransferable. Prerequisites to the Basic Fire Academy include All Fire Technology core courses, meeting the NFPA 1582 medical standards, passing the physical ability test and completing Emergency Medical Technician I course, taking and passing the National EMT Certification Exam, and receiving certification in the State of California.

## Learning Outcome(s):

1. Students will demonstrate written and verbal communication skills required for entry-level Firefighter positions
2. Students will demonstrate skills that meet the National Fire Protection Standard 1001 for Fire Fighter; California State Fire Marshal standards for Firefighter I Trained and the recommendations of the Fire Technology Dept. Advisory Board
3. Students will analyze emergency and hazardous conditions that are inherent to the firefighting profession.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| FAC 007 | Orientation and Physical Fitness | 2.5 |
| FAC 008 | Firefighter I Physical Ability Examination | 0.1 |
| FAC 060 | Basic Fire Academy | 12 |
| FTC 101 | Fire Protection Organization | 3 |
| FTC 102 | Fire Behavior and Combustion | 3 |
| FTC 103 | Principles of Fire and Emergency Services <br> Safety and Survival | 3 |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems | 3 |
| FTC 121 | Physical Fitness for Public Safety Personnel | 3 |
| FTC 121L | Physical Fitness for Public Safety Personnel - <br> Performance and Assessment | 0.3 |

Fire Service Core Competencies Certificate (Untranscripted)

## Program code: sac.fifs.cert

This certificate documents extensive coursework on the part of the recipient in fire and emergency services organization, fire behavior, fire prevention, building construction, and fire protection systems and equipment. Completion of this curriculum provides students with fundamental knowledge of fire department operations, organization and basic fire prevention methods and techniques.
Learning Outcome(s):

1. Define fire department organization, culture, and methods of communication of entry level fire department personnel.
2. Describe fire chemistry and behavior for the purpose of predicting fire dynamics and flame spread characteristics.
3. Demonstrate knowledge of the types of construction. Identify the components and hazards related to each type.
4. Identify components of built-in and portable fire protections systems and alarm and notification devises.
5. Demonstrate knowledge of fire prevention codes and standards, fire safety protection system methods, procedures and building codes, and fire code requirements as they relate to construction for fire protection and fire apparatus access.
Required Core Courses: Units

| FTC 101 | Fire Protection Organization | 3 |
| :--- | :--- | ---: |
| FTC 102 | Fire Behavior and Combustion | 3 |
| FTC 104 | Fire Prevention | 3 |
| FTC 105 | Building Construction for Fire Protection | 3 |
| FTC 106 | Fire Protection Systems |  |
|  |  | Total Units |

## FOREIGN LANGUAGES

(See Modern Languages)

## GEOGRAPHY

## Option 1

Geography Degree

## Program code: sac.geog.aa

The associate degree curriculum in geography provides students with an interdisciplinary background for entry into a curriculum at a four-year institution leading to a baccalaureate degree with career opportunities in a wide range of jobs in government such as Bureau of Census, C.I.A., D.E.A., U.S.G.S., Department of Immigration and Naturalization, Department of State; and in private industry, such as planning market research, land use analysis, transportation, travel and tourism, and education.

## Learning Outcome(s):

Students will recognize the interrelatedness of the components of the earth system, processes, and human characteristics found on the planet and analyze these from a spatial perspective and through the use of the scientific method.
Required Core Courses: Units

GEOG 100 World Regional Geography 3

- or -

GEOG 100H Honors World Regional Geography 3
GEOG 101 Physical Geography 3
GEOG 130 Intruduction to Weather and Climate 3

GEOG 102 Cultural Geography 3

- or -

GEOG 102H Honors Cultural Geography 3

- or -

GEOG 140 California Geography

- or -

GEOG 155 Introduction to Geographic Information Systems 3
GEOG 101L Physical Geography Lab

Plus 9 units from electives below, with a minimum of 3 units from Category " $A$ " and 3 units from Category " $B$ ".
Category A
ANTH 100 Introduction to Cultural Anthropology - or -

| ANTH 100H | Honors Introduction to Cultural Anthropology | 3 |
| :--- | :--- | :--- |
| ANTH 103 | Introduction to Archaeology | 3 |


| ECON 120 | Principles/Macro | 3 |
| :---: | :---: | :---: |
| ECON 121 | Principles/Micro | 3 |
| HIST 101 | World Civilizations to the 16th Century - or - | 3 |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century - or - | 3 |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| HIST 105 | Ancient Mesoamerican Civilization | 3 |
| HIST 133 | History of California | 3 |
| HIST 150 | Latin American Civilization to Independence | 3 |
| HIST 151 | Modern Latin American Civilization | 3 |
| HIST 153 | History of Mexico | 3 |
| IDS 117H | Honors Introduction to Global Studies | 3 |
| POLT 201 | Introduction to Comparative Politics | 3 |
| POLT 220 | International Politics |  |

Category B Units
ANTH 101 Introduction to Physical Anthropology 3

| ASTR 109 | Introduction to the Solar System | 3 |
| :--- | :--- | :--- |
| BIOL 109 | Fundamentals of Biology | 3 |


|  | - or - |  |
| :--- | :--- | :---: |
| BIOL 109H | Honors Fundamentals of Biology | 3 |
| BIOL 259 | Environmental Biology | 4 |
| ENVR 140 | Environmental Geology | 3 |
| ENVR 259 | Environmental Biology | 4 |
| GEOL 101 | Introduction to Geology | 3 |
| GEOL 101L | Introduction to Geology Laboratory | 3 |
| GEOL 140 | Environmental Geology | 3 |
| GEOL 150 | Introduction to Oceanography | 3 |
| GEOL 150H | - or - |  |
| HEOnors Introduction to Oceanography | 3 |  |
| BUS 150 | Introduction to Historical Geology | 4 |
|  | Introduction to Information Systems and | 3 |

It is strongly recommended that geography majors transferring to the
CSU or UC system complete Foreign Language courses at the 201 and 202 level, and/or MATH 219/219H.

Total Units

## Option 2

## Associate in Arts in Geography for Transfer Program code: sac.geog.aat

The Associate in Arts in Geography for Transfer (AA-T) prepares students to move into a curriculum at a 4 -year institution leading to a baccalaureate degree in Geography. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Geography, students will have an understanding of both the breadth and depth of the spatial perspective that is central to geographic study. This knowledge will be grounded in the comprehension of geographic principles, concepts, ideas, theories, research, terminology, and relationships.
Students will also have the capacity to write and think in a critical and analytical way about issues pertaining to earth surface study, human/ environment interaction and impact, and local, regional, and global relationships and associations.

## Learning Outcome(s):

Students will recognize the interrelatedness of the components of the earth system, processes, and human characteristics found on the planet and analyze these from a spatial perspective and through the use of the scientific method.

Required Core (6 units)
Units
GEOG 102 Cultural Geography 3
GEOG 101 Physical Geography 3

List A - select 6-7 Units Units
GEOG 101L Physical Geography Laboratory 1
GEOG 100 World Regional Geography 3
GEOG 130 Introduction to Weather and Climate 3
GEOG 140 California Geography 3

GEOG 155 Introduction to Geographic Information Systems 3
List B - select 6 units
Any course not selected in list A above Units
ANTH 100 Introduction to Cultural Anthropology 3

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
GEOL 101 Introduction to Geology 3

Total Units 18-19

## GEOLOGY

## Option 1

Geology Degree

## Program code: sac.geol.as

The associate degree curriculum in geology prepares students for transfer to a four-year institution leading to a baccalaureate degree in geoscience majors. Geoscientists find employment with environmental companies that clean up and monitor pollution problems. Geotechnical companies also employ geoscientists to evaluate risk from earthquakes, landslides, and other geological hazards. Oil and mining companies employ geoscientists to find new resources. The federal, state, county, and city governments also employ geoscientists for many of the same functions, as well as geoscience research, and to monitor compliance with environmental regulations. Universities, colleges, and museums offer opportunities for teaching and/or research.
Please see a counselor for specific course requirements for your transfer university.

## Learning Outcome(s):

Students will demonstrate proficiency and knowledge with regards to the physical structure of the Earth and the materials that make up the Earth through the paradigm of plate tectonics.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| GEOL 101 | Introduction to Geology | 3 |
| GEOL 101L | Introduction to Geology Laboratory |  |
| GEOL/ENVR 140 | Environmental Geology | 3 |
|  | - or - |  |
| GEOL/ERTH 150 | Introduction to Oceanography | 3 |
|  | - or |  |
| GEOL/ERTH 150H | Honors Introduction to Oceanography | 3 |
| GEOL 201 | Introduction to Historical Geology |  |
| CHEM 219 | General Chemistry | 5 |
| Electives: Select a minimum of 8 units from the courses below: |  | Units |
| BIOL 211 | Cellular and Molecular Biology |  |
| BIOL 212 | Animal Diversity and Ecology |  |
| BIOL 214 | Plant Diversity and Evolution |  |
| CHEM 229 | General Chemistry and Qualitative Analysis |  |
| MATH 180 | Analytic Geometry and Calculus I |  |
|  | - or - |  |
| MATH 180H | Honors Analytic Geometry and Calculus | 4 |
| MATH 185 | Analytic Geometry and Calculus II |  |
| and any course numbered 100 or higher in Earth Science, Geology, or Physics, except ERTH 110 and 115 or PHYS 109. |  |  |
|  | Total Units | 24 |

## Option 2

## Associate in Science in Geology for Transfer Program code: sac.geol.ast

The Associate in Science in Geology for Transfer (AS-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in Geology. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AS-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Geology major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AS-T in Geology students will have a foundation necessary for continued training at the upper division level for geology majors. It is a starting point for students who are preparing for careers in education, geoscience research, and government, where scientific and technical skills are in great demand.

## Learning Outcome(s):

Students will demonstrate proficiency and knowledge with regards to the physical structure of the Earth and the materials that make up the Earth through the paradigm of plate tectonics.
Required Core Courses: Units
GEOL 101 Introduction to Geology 3
GEOL 101L Introduction to Geology Laboratory 1

GEOL 201 Introduction to Historical Geology 4
CHEM 219 General Chemistry 5

- or -

CHEM 219H Honors General Chemistry 5
CHEM 229 General Chemistry and Qualitative Analysis 5

MATH 180 Analytic Geometry and Calculus I 4

- or -

MATH 180H Honors Analytic Geometry and Calculus 4

| MATH 185 Analytic Geometry and Calculus II |  | 4 |
| :--- | :--- | :--- | ---: |
|  | Total Units | 26 |

## 132 INSTRUCTIONAL PROGRAMS

## HISTORY

## Option 1

## History Degree

## Program code: sac.hist.aa

The associate degree curriculum in history provides a basic program to aid students in thinking critically about one's self, one's cultural heritage, social and economic processes, and national and international affairs. Completion of the degree prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree and eventually into careers with government agencies, libraries or museums, research programs in business, journalism, international organizations, archival work, and work in law, international relations, and business. Consult a counselor for information about course requirements for specific universities.

## Learning Outcome(s):

1. Students will complete necessary requirements to complete their academic degrees or transfer to a 4-year institution, while simultaneously acquiring knowledge and skills that will help them participate more fully in their workplace and in their community
2. Students in SAC's History Program will gain an understanding of social, historical, and political situations of the past in order to place current local, national, and international events in an historical context
3. Students will apply critical thinking in the creation, analysis and interpretation of past and current events, and will demonstrate their thinking and reasoning skills by completing a variety of assigned exercises.
Required Core Courses:

| HIST 101 | World Civilizations to the 16th Century - or - | 3 |
| :---: | :---: | :---: |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century - or - | 3 |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| HIST 120 | United States to 1865 | 3 |
|  | - or - |  |
| HIST 120H | Honors United States to 1865 | 3 |
| HIST 121 | United States Since 1865 | 3 |
|  | - or - |  |
| HIST 121H | Honors United States Since 1865 | 3 |

Required Electives: Choose 3 electives from the following Units

## group.

Must include at least one History class.
ECON 120 Principles/Macro 3
GEOG 100 World Regional Geography 3

- or -

GEOG 100H Honors World Regional Geography
HIST 123 African American History to 1865
HIST 124 Mexican American History in the United States 3

| HIST 124H | Honors Mexican American History in the United <br> States |
| :--- | :--- |

HIST 127 Women in U.S. History 3
HIST 133 History of California 3

| HIST 146 | African American History from 1863 to the <br> Present | 3 |
| :--- | :--- | :--- |


| HIST 150 | Latin American Civilization to Independence | 3 |
| :--- | :--- | :--- |
| HIST 163 | Introduction to Southeast Asian History | 3 |


| PHIL 112 | World Religions | 3 |
| :--- | :--- | :---: |
| PHIL 118 | History of Philosophy | 3 |
| POLT 101 | American Government and Politics | 3 |
|  | - or - | 3 |
| POLT 101H | Honors American Government and Politics | 3 |
| POLT 200 | American Political Thought |  |
|  | - or - | 3 |
| POLT 200H | Honors American Political Thought | 3 |
| POLT 201 | Introduction to Comparative Politics | 3 |

## Option 2

## Associate in Arts in History for Transfer

## Program code: sac.hist.aat

The Associate in Arts in History for Transfer (AA-T in History) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in History. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T in History also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the History major. See
page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in History students will have an understanding of both the breadth and depth of the history discipline. This knowledge will be grounded in the comprehension of history principles, concepts, ideas, theories, research, and terminology. Students will also have the capacity to write and think in a critical and analytical way about issues pertaining to history, economics, politics, culture, and understanding the relationship between the social sciences and humanities.

## Learning Outcome(s):

1. Students will complete necessary requirements to complete their academic degrees or transfer to a 4-year institution, while simultaneously acquiring knowledge and skills that will help them participate more fully in their workplace and in their community
2. Students in SAC's History Program will gain an understanding of social, historical, and political situations of the past in order to place current local, national, and international events in an historical context
3. Students will apply critical thinking in the creation, analysis and interpretation of past and current events, and will demonstrate their thinking and reasoning skills by completing a variety of assigned exercises.
Required Core (6 units) Units

HIST 120 The United States to 18653

- or -

HIST 120H Honors The United States to 1865
3
HIST 121 The United States since 1865

- or -

HIST 121H Honors The United States since 1865
List A - select 2 courses: 6 units
HIST 101 World Civilizations to the 16th Century 3

- or -

HIST 101H Honors World Civilizations to the 16th Century 3
HIST 102 World Civilizations Since the 16th Century 3

- or -

Honors World Civilizations Since the 16th
Century 3

HIST 102H

List B - select 1 course from each area: 6 units
Area 1: 3-5 units

| HIST 150 | Latin American Civilization to Independence | 3 |
| :--- | :--- | :--- |
| HIST 151 | Modern Latin American Civilization | 3 |
| HIST 153 | History of Mexico | 3 |
| HIST 163 | Introduction to Southeast Asian History | 3 |
| HIST 124 | Mexican American History in the United States | 3 |


| HIST 124H | Hon - <br> Hons Mexican American History in the United | 3 |
| :--- | :--- | ---: |
| HIST 125 | Native Americans in the U.S. | 3 |
| HIST 127 | Women in U.S. History | 3 |
| HIST 146 | African American History from 1863 to the <br> Present | 3 |
| HIST 181 | Survey of Chicana/Latina Women's History | 3 |
| SPAN 102 | Elementary Spanish II | 5 |

SPAN 102H Honors Elementary Spanish II

| Area 2: 3 units |  |  |
| :--- | :--- | ---: |
| HIST 118 | Social and Cultural History of the United States | 3 |
| HIST 133 | History of California | 3 |
| GEOG 100 | World Regional Geography <br>  <br> - or - | 3 |
| GEOG 100H | Honors World Regional Geography |  |
|  | Total Units | $18-\mathbf{1 0}$ |

## HOME ECONOMICS

(See Fashion Design Merchandising, or Nutrition and Food)
HOSPITAL PHARMACY TECHNOLOGY
(See Pharmacy Technology)
HUMAN DEVELOPMENT
(See Child Development)
INDUSTRIAL TECHNOLOGY
(See Engineering)

## Units

3
3Students will be prepared to enter the field of International Businessand obtain the Certified Global Business Professional Credential.

Required Core Courses: Units
B

| BUS 100 | Fundamentals of Business | 3 |
| :--- | :--- | :---: |
| ENTR 100 | or - <br> Introduction to Innovation and Entrepreneurship | 3 |
| BUS 106 | Culture and International Business - Kiss, Bow <br> or Shake Hands | 3 |
| BUS 125 | Introduction to International Business | 3 |
| BUS 222 | Business Writing | 3 |

## INTERNATIONAL BUSINESS

## International Business Degree

Program code: sac.ib.aa
The Associate Degree in International Business is designed to provide students and business practitioners, including those already involved in International Business, with practical "hands' on" exposure to the world of international business. Classes focus on businesses that import and export. Students learn the fundamentals of international business, culture, marketing, finance, law and logistics. Different countries and cultures are explored. Specialized topic areas (for example, marketing, financing, law and logistics) are a sequence of short classes that should be taken in order. The program prepares students to take the NASBITE Certified Global Business (CGBP) Credential Exam.
Learning Outcome(s):
Students will be prepared to enter the field of International Business

MGMT 122 Business Communications
Sequence Courses
(All courses in all sequences must be completed to earn this degree.)
Marketing Sequence: Units
BUS 141 The Globalization of Marketing 1
BUS $142 \quad$ International Market Research and Planning $\quad 1$
BUS 143 Packaging, Pricing and Promoting Products/ 1

BUS 145 Channels of Distribution in International 1 Markets
Finance Sequence: Units

| BUS 163 | International Methods of Payment and Letters <br> of Credit | 1 |
| :--- | :--- | ---: |
| BUS 164 | Alternative Financing Techniques for <br> International Trade | 1 |
| BUS 165 | International Trade Finance and Insurance | 1 |
| BUS 166 | Financing an Import/Export Business | 1 |

Law Sequence: Units

| BUS 147 | $\begin{array}{l}\text { International Commercial Agreements and } \\ \text { Distribution Law }\end{array}$ | 1 |
| :--- | :--- | :--- |


| BUS 148 | International Intellectual Property Law | 1 |
| :--- | :--- | :--- |
| BUS 149 | The Law of Glal Commerce |  |

Logistics Sequence: Units

| BUS 110 | Export Pricing, Quotations and Terms of Trade | 1 |
| :--- | :--- | :--- |
| BUS 111 | International Business Documentation- | 1 |
| BUS 113 | Beginning | International Transportation |
| BUS 114 | International Documentation and Supply Chain | 1 |
|  | Management |  |

Import Sequence: Units
BUS 180 Finding and Evaluating Products for Import 1
BUS 182 Classifying Imports and Clearing U.S. Customs 1

| Select ONE course from the following: |  | Units |
| :---: | :---: | :---: |
| ACCT 101 | Financial Accounting | 4 |
| BUS 120 | Principles of Management | 3 |
| MGMT 120 | Principles of Management | 3 |
| MKTG 113 | Principles of Marketing | 3 |
|  |  | 32-33 |

## International Business Certificate (Transcripted)

## Program code: sac.ib.ca

The certificate in international business is designed to provide students and business practitioners, including
those already involved in International Business, with practical "hands' on" exposure to the world of international business.
Classes focus on businesses that import and export. Students learn the fundamentals of international business, culture, marketing, finance, law and logistics. Different countries and cultures are explored. Specialized topic areas (for example, marketing, financing, law and logistics) are a sequence of short classes that should be taken in order. The program prepares students to take the NASBITE Certified Global Business (CGBP) Credential Exam. Learning Outcome(s):
Students will be prepared to enter the field of International Business and obtain the Certified Global Business Professional Credential.

## Required Core Courses:

| BUS 106 | $\begin{array}{l}\text { Culture and International Business -Kiss, Bow or } \\ \text { Shake Hands }\end{array}$ |
| :--- | :--- |
| BUS 125 | $\begin{array}{l}\text { Introduction to International Business }\end{array}$ |

Units
3
3

## Sequence Requirements

(All sequence courses must be completed to earn this certificate.)

## Marketing Sequence: <br> Units

| BUS 141 | The Globalization of Marketing | 1 |
| :--- | :--- | :--- |
| BUS 142 | International Market Research and Planning | 1 |
| BUS 143 | Packaging, Pricing and Promoting Products/ <br> Services for Export | 1 |

$\begin{array}{lll}\text { BUS } 145 & \text { Channels of Distribution in International } & 1\end{array}$ Markets
Financial Sequence: Units

| BUS 163 | International Methods of Payment and Letters <br> of Credit | 1 |
| :--- | :--- | ---: |
| BUS 164 | Alternative Financing Techniques for <br> International Trade | 1 |
| BUS 165 | International Trade Finance and Insurance | 1 |
| BUS 166 | Financing an Import/Export Business | 1 |

Law Sequence:
BUS 147 International Commercial Agreements and 1

|  | Distribution Law |  |
| :--- | :--- | :--- |
| BUS 148 | International Intellectual Property Law | 1 |
| BUS 149 | The Law of Global Commerce | 1 |

Logistics Sequence: Units

| BUS 110 | Export Pricing, Quotations and Terms of Trade | 1 |
| :--- | :--- | :--- |
| BUS 111 | International Business Documentation- | 1 |


|  | Beginning | 1 |
| :--- | :--- | :--- |
| BUS 113 | International Transportation | 1 |
| BUS 114 | International Documentation and Supply Chain | 1 |
|  | Management |  |

Global Trade Skills Certificate (Untranscripted)

## Program code: sac.gltra.cert

The Global Trade Skills Certificate teaches students the transaction level basics of global trade: international logistics, international marketing, international finance, international law and importing. This stackable certificate is the first step in achieving the International Business Certificate and preparing for the NASBITE Certified Global Business Professional (CGBP) credential exam.

## Learning Outcome(s):

Students will demonstrate an understanding of the core subject delineation in International Law, Global Logistics, International Marketing and International Finance in order to sit for the Certified Global Business Professional exam administered by NASBITE.
Complete all courses listed below:
Required Core Courses: Units International Logistics Sequence:

| BUS 110 | Export Pricing, Quotations and Terms of Trade | 1 |
| :--- | :--- | :---: |
| BUS 111 | International Business Documentation - <br> Beginning | 1 |
| BUS 113 | International Transportation | 1 |
| BUS 114 | International Documentation and Supply Chain | 1 | Management

International Marketing Sequence: Units
BUS 141 The Globalization of Marketing 1

| BUS 142 | International Market Research and Planning | 1 |
| :--- | :--- | :--- |
| BUS 143 | Packaging, Pricing and Promoting Products/ | 1 |


|  | Services for Export |  |
| :--- | :--- | :--- |
| BUS 145 | Channels of Distribution in International | 1 | Markets

International Law Sequence: Units
BUS 147 International Commercial Agreements and

|  | Distribution Law |  |
| :--- | :--- | :--- |
| BUS 148 | International Intellectual Property Law | 1 |
| BUS 149 | The Law of Global Commerce | 1 |

International Finance Sequence: Units
BUS 163 International Methods of Payment and Letters 1 of Credit
BUS $164 \quad$ Alternative Financing Techniques for $\quad 1$

|  | International Trade |  |
| :--- | :--- | :--- |
| BUS 165 | International Trade Finance and Insurance | 1 |
| BUS 166 | Financing an Import/Export Business | 1 |

Importing Sequence: Units
BUS $180 \quad$ Finding and Evaluating Products for Import $\quad 1$

| BUS 182 | Classifying Imports and Clearing US Customs | 1 |
| ---: | ---: | ---: |
| Total Units | $\mathbf{1 7}$ |  |

## Survey of International Business Certificate (Untranscripted)

## Program code: sac.sib.cert

The Survey of International Business Certificate provides students with a short practical introduction to the exciting world of international trade. This is a stackable certificate which requires completion of the core courses that are required for the International Business Certificate and the Associate Degree.

## Learning Outcome(s):

Students will demonstrate an understanding of the international business environment and global cultural, social and economic diversity.

| Complete the following 3 Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| BUS 100 | Fundamentals of Business | 3 |
| BUS 106 | Culture and International Business - Kiss, Bow <br> or Shake Hands | 3 |
| BUS 125 | Introduction to International Business | 3 |
|  | Total Units | 9 |

## Global Business and Entrepreneurship Certificate (Untranscripted)

## Program code: sac.gbe.cert

The Global Business and Entrepreneurship Certificate is designed to provide students with a general overview of four areas of business including management, marketing, international, and entrepreneurship.
In business today, knowledge of how functional areas work together is deemed critical by employers. It is no longer sufficient to understand only one part of how a business operates. This certificate provides students with a well-rounded overview of the concepts, techniques, and technologies required to succeed in today's global and entrepreneurial business environments.

## Learning Outcome(s):

1. Students will demonstrate an understanding of and successfully adapt to a multicultural business environment.
2. Students will be able to create a marketing plan for a business to compete successfully in the global marketplace.
3. Students will be able to start, run, or manage an international business operation for a small or mid-size company (SME).

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| BUS 100 | Fundamentals of Business | 3 |
| BUS 125 | Introduction to International Business | 3 |
| ENTR 100 | Introduction to Innovation and Entrepreneurship | 3 |
| MKTG 113 | Principles of Marketing | 3 |
| MGMT 120 | Principles of Management | 3 |
|  | - or - |  |
| BUS 120 | Principles of Management |  |
|  |  | Total Units |

## International Finance Specialist Certificate (Untranscripted) <br> Program code: sac.ifs.cert

The International Finance Specialist Certificate is designed to provide students with practical skills in the area of finance. It is designed for business professionals interested in gaining targeted knowledge of international finance as well as to highlight recent information relevant to working professionals. The courses include the latest concepts, techniques, and technology used in the finance industry. The program provides students with cutting edge practical and applicable international finance skills for the global economy.
Learning Outcome(s):

1. Students will demonstrate an understanding of international finance and its role in international trade.
2. Students will be able to complete international letter of credit applications and complete international trade documentation in compliance with those letters of credit.
3. Students will have an understanding of international financial risk inherent with international trade.
Required Core Courses:
BUS 163 International Methods of Payment and Letters

|  | of Credit |  |
| :--- | :--- | ---: |
| BUS 164 | Alternative Financing Techniques for | 1 |
| International Trade | 1 |  |
| BUS 165 | International Trade Finance and Insurance | 1 |
|  | Financing an Import/Export Business | 1 |
|  | Total Units | $\mathbf{4}$ |

## International Law Specialist Certificate (Untranscripted)

## Program code: sac.ils.cert

The International law Specialist Certificate is designed to provide students with practical skills in the area of law. It is designed for business professionals interested in gaining targeted knowledge of international law as well as to highlight recent information relevant to working professionals. The courses include the latest concepts, techniques, and technology used in the law industry. The program provides students with cutting edge practical and applicable international law skills for the global economy.

## Learning Outcome(s):

1. Students will demonstrate an understanding of international law and its role in international trade.
2. Students will be able to complete international transactions and complete international trade documentation in compliance with the International Chamber of Commerce guidelines.
3. Students will have an understanding of international legal risk inherent with international trade.

## Required Core Courses: Units

BUS 147 International Commercial Agreements and Distribution Law

- or -

International Commercial Agreements and Distribution Law
PARA 147
BUS 148 International Intellectual Property Law 1

- or -

PARA 148 International Intellectual Property Law 1
BUS 149 The Law of Global Commerce 1

- or -

PARA 149 The Law of Global Commerce

## International Logistics Specialist Certificate <br> (Untranscripted) <br> Program code: sac.ilos.cert

The International Logistics Specialist Certificate is designed to provide students with practical skills in the area of logistics. It is designed for business professionals interested in gaining targeted knowledge of international logistics as well as to highlight recent information relevant to working professionals. The courses include the latest concepts, techniques, and technology used in the logistics industry. The program provides students with cutting edge practical and applicable international logistics skills for the global economy.
Learning Outcome(s):

1. Students will demonstrate an understanding of global logistics and its role in international trade.
2. Students will be able to complete international transactions and complete international trade documentation in compliance with international transportation regulations and guidelines.
3. Students will have an understanding of global trade and transportation risk inherent with international trade.
Required Core Courses:

| BUS 110 | Export Pricing, Quotations and Terms of Trade | 1 |
| :--- | :--- | :--- |
| BUS 111 | International Business Documentation - | 1 |
| BUS 113 | Integinning | 1 |
| BUS 114 | International Transportation | Management |

## International Marketing Specialist Certificate (Untranscripted)

## Program code: sac.ims.cert

The International Marketing Specialist Certificate is designed to provide students with practical skills in the area of marketing. It is designed for business professionals interested in gaining targeted knowledge of international marketing as well as to highlight recent information relevant to working professionals. The courses include the latest concepts, techniques, and technology used in the marketing industry. The program provides students with cutting edge practical and applicable international marketing skills for the global economy.
Learning Outcome(s):

1. Students will demonstrate an understanding of the multicultural global marketplace and its role in international trade.
2. Students will be able to complete an international marketing plan to compete in the global marketplace.
3. Students will have an understanding of global culture and trends affecting international trade.
Required Core Courses: Units
BUS 141 The Globalization of Marketing
1

BUS 142 International Market Research and Planning
BUS 143 Packaging, Pricing and Promoting Products/
BUS 145 Channels of Distribution in International
Channels of Distribution in International 1
Total Units
Intersegmental General Education Transfer Curriculum (IGETC) Certificate
Program code: sac.igetc.ca
(Complete all Intersegmental General Education Transfer Curriculum
Requirements (Plan C) as outlined on page 32) (Minimum 34 units)

## JOURNALISM

(See Communications \& Media Studies)

## KINESIOLOGY

## Option 1

## Kinesiology Degree

## Program code: sac.kin.aa

This program is designed to prepare students for transfer into baccalaureate degree programs in Kinesiology or entry-level health, sports, and fitness-related jobs. The focus is on preparing students to be able to articulate understanding of scientific foundations of Kinesiology, distinguish between Kinesiology-related careers, and demonstrate movement skills competence. Students receive exposure to the sources of knowledge in Kinesiology through sholarly study of physical activity and physical activity experience. The student is introduced to courses that promote healthy lifestyle choices and an active mind and body. Curriculum content may include the introduction to Kinesiology, nutrition, health awareness, sports medicine, physiology of exercise, and activity courses. The following classes can lead to obtaining a degree in the areas of exercise science, sports medicine-athletic training, physical therapy, kinesiology, sports management, coaching, or allied health-related and fitness-related vocations.
Learning Outcome(s):

1. Students will describe the role of Kinesiology/Physical Education in health promotion and disease prevention
2. Students will demonstrate competence in several physical activities and proficiency in at least 1 physical activity
3. Students will synthesize knowledge of the 5 components of wellbeing to discriminate between healthy and detrimental lifestyle choices
TRANSFER PLAN
Courses required to complete an associate degree at Santa Ana College in Kinesiology may not fulfill courses required by four-year universities to complete a baccalaureate degree. The Kinesiology Department at Santa Ana College recommends that students interested in transferring to a four-year institution consult with a counselor prior to beginning their courses of study.
Required Core Courses: Units
KNPR 101 Introduction to Kinesiology 3
KNHE 101 Healthful Living 3

- or -

KNHE 102 Women's Health Issues 3
KNHE 104 Nutrition and Fitness 2
KNHE 106 Cardiopulmonary Resuscitation and First Aid 3
BIOL 149 Human Anatomy and Physiology 4

- or -

BIOL 239 General Human Anatomy
4
Physical Activity Elective Courses (6 units) Units
Must include 6 units from at least 3 different areas: KNAC, KNAD, KNAF, KNAQ, KNFI, and/or KNIA. For a complete description of Kinesiology physical activity courses refer to the Santa Ana College Catalog. Make an appointment with the Kinesiology Department Chair to discuss matching active participatory courses to your career goals.

| Professional Studies Elective Courses Complete a minimum of 4 classes. (8.5-12 units) |  | Units |
| :---: | :---: | :---: |
| KNPR 125 | Sport Psychology | 3 |
| KNPR 140 | Movement Education for Elementary School Children | 3 |
| KNPR 150 | Sport and Society | 3 |
| KNPR 160 | Management of Physical Education and Sport | 3 |
| KNPR 170 | Sport Ethics | 3 |
| KNPR 201 | Movement Anatomy | 3 |
| KNPR 205 | Techniques of Exercise Leadership | 1.5 |
| KNPR 209 | Exercise for Special Populations | 2 |
| KNPR 203 | Physiology of Cardiovascular Exercise | 2 |
|  | - and - |  |
| KNPR 211 | Practicum in Fitness Evaluation I | 0.5 |
| KNPR 207 | Physiology of Resistance Training | 2 |
|  | - and - |  |
| KNPR 213 | Practicum in Fitness Evaluation II | 0.5 |
| KNSM 101 | Introduction to Sports Medicine | 3 |
| KNPR 110 | Kinesiology-related Occupational Work Experience | 1 |
|  | Total Units | 5-33 |

## Option 2

## Associate in Arts in Kinesiology for Transfer

## Program code: sac.kin.aat

The proposed Associate in Arts in Kinesiology for Transfer (AA-T in Kinesiology) is designed to prepare students for transfer into the CSU system to complete a baccalaureate degree in Kinesiology or similar major. Please consult a counselor regarding specific course requirements for your transfer institution. This degree provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Kinesiology major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Kinesiology degree students will be able to articulate understanding of scientific foundations of Kinesiology, distinguish between Kinesiology-related careers, and demonstrate movement skills competence. Students will gain knowledge and movement-based experience which prepares them in pursuit of a bachelor's or master's degree and or professional certification in exercise science, nutrition, health promotion, sports medicine athletic training, physical therapy, and coaching or fitness related fields.
Learning Outcome(s):

1. Students will apply scientific foundations to understanding human movement
2. Students will discuss the importance of physical activity in daily life and the implications for Kinesiology-related careers
3. Students will demonstrate competence in at least 3 areas of physical activity experience
Required Core Courses:
KNPR 101 Introduction to Kinesiology
BIOL 239 General Human Anatomy
BIOL 249 Human Physiology
Movement-based Courses (minimum 3 units)
Select a maximum of one (1) course from the Aquatics area: Units
KNAQ 201A Beginning Swimming
1
KNAQ 201B Lap Swimming $\quad 1$
KNAC 226A Beginning Water Polo

| Select a maximum of one (1) course from the Combatives |  |  |
| :--- | :--- | ---: |
| area: | Units |  |
| KNAC 140A | Beginning Karate | 1 |
| KNAC 155A | Beginning Self-Defense | 1 |
| KNAC 169A | Beginning Wrestling | 1 |
| Select a maximum of one (1) course from the Dance area: | Units |  |
| DNCE 106A | Introduction to Modern Dance | 1 |
| DNCE 106B | Introduction to Modern Dance | 1 |
| DNCE 108A | Introduction to Ballet | 1 |
| DNCE 108B | Introduction to Ballet | 1 |
| DNCE 110 | Beginning Mexican Folk Dance | 1 |
| DNCE 111 | Intermediate Mexican Folk Dance | 1 |
| DNCE 112 | Ethnic Dance | 1 |
| DNCE 113A | Flamenco Dance I | 1 |

DNCE 113B | Flamenco Dance II | 1 |
| :--- | :--- | :--- |

| DNCE 117 | Introduction to Middle Eastern Dance | 1 |
| :--- | :--- | :--- |


| DNCE 118 | Introduction to Caribbean and Latin Dance | 1 |
| :--- | :--- | :--- |


|  | Styles |  |
| :--- | :--- | ---: |
| DNCE 119A | Introduction to Jazz Dance | 1 |


| DNCE 119B | Introduction to Jazz Dance | 1 |
| :--- | :--- | :--- |

DNCE 120A Introduction to Hip-Hop Dance $\quad 1$
DNCE 120B Intermediate Hip-Hop Dance $\quad 1$
DNCE 122 Commercial Contemporary Dance ..... 1
DNCE 123 Introduction to Salsa Dance ..... 1
DNCE 124 Intermediate Salsa Dance ..... 1
Select a maximum of one (1) course from the Fitness area: ..... Units
KNAC 123 Personal Fitness Training ..... 1
KNAC 150A Beginning Hatha Yoga ..... 1
KNAC 170A Beginning Yoga ..... 1
KNAF 140A Beginning Walking/Jogging for Fitness ..... 1
KNAF 143A Beginning Extreme Fitness ..... 1
KNAF 144A Beginning Cross Training ..... 1
KNAF 146A Beginning Stability Ball ..... 1
KNAF 146B Intermediate Stability Ball Training ..... 1
KNAF 156A Beginning Cardio Kickboxing ..... 1
KNAF 156B Intermediate Cardio Kickboxing ..... 1
KNAF 157A Beginning Cardio Pump ..... 1
KNAF 150A Beginning Stretch, Flex and Tone ..... 1
KNFI 112A Beginning Circuit Training ..... 1
KNFI 112B Intermediate Circuit Training ..... 1
KNFI 114A Beginning Spinning ..... 1
KNFI 114B Intermediate Spinning ..... 1
KNFI 115A Beginning Cardiovascular Conditioning ..... 1
KNFI 115B Intermediate Cardiovascular Conditioning ..... 1
KNFI 147A Beginning Weight Training ..... 1
KNFI 147B Intermediate Weight Training ..... 1
DNCE 109A Pilates Mat I ..... 1
DNCE 109B Pilates Mat II ..... 1
Select a maximum of one (1) course from the Individual ..... Units
Sports area:
KNAC 107A Beginning Badminton ..... 1
KNAC 160A Beginning Tennis ..... 1

| Select a maximum of one (1) course from the Team Sports area: |  | Units |
| :---: | :---: | :---: |
| KNAC 200A | Beginning Intramural-Basketball | 1 |
| KNAC 211A | Beginning Baseball | 1 |
| KNAC 211B | Intermediate Baseball | 1 |
| KNAC 220A | Beginning Basketball | 1 |
| KNAC 220B | Intermediate Basketball | 1 |
| KNAC 260A | Beginning Soccer | 1 |
| KNAC 260B | Intermediate Soccer | 1 |
| KNAC 265A | Beginning Indoor Soccer | 1 |
| KNAC 265B | Intermediate Indoor Soccer | 1 |
| KNAC 270A | Beginning Softball | 1 |
| KNAC 290A | Beginning Volleyball | 1 |
| KNAC 290B | Intermediate Volleyball | 1 |
| List A: Select two courses |  | Units |
| MATH 219 | Statistics and Probability | 4 |
|  | - or - |  |
| MATH 219H | Honors Statistics and Probability | 4 |
|  | - or - |  |
| SOCS 219 | Statistics and Probability | 4 |
|  | - or - |  |
| SOCS 219H | Honors Statistics and Probability | 4 |
| CHEM 210 | General, Organic and Biochemistry | 5 |
| CHEM 219 | General Chemistry | 5 |
|  | - or - |  |
| CHEM 219H | Honors General Chemistry | 5 |
| PHYS 279 | College Physics I | 4 |
| PHYS 210 | Principles of Physics I | 4 |
| PHYS 217 | Engineering Physics I | 4 |
| KNHE 106 | Cardiopulmonary Resuscitation and First Aid | 3 |
|  | Total Units | 1.5-23 |

## Fitness Specialist Certificate (Transcripted)

## Program code: sac.knfs.ca

The Fitness Specialist Certificate program prepares students for employment in the fitness industry by combining a science-based academic foundation with an abundance of experiential learning. Students gain knowledge of Kinesiology principles while developing fitness assessment, exercise leadership, and individual \& group exercise programming skills. The program is designed to get students into the industry as soon as possible but includes transferrable coursework for students seeking to further their education in Kinesiology-related fields.

## Learning Outcome(s):

1. Students will select, execute, interpret, and communicate results from various fitness assessment field tests based upon age, gender, fitness level, and cultural differences
2. Students will design a health-related or performance-related program for apparently healthy individuals and several special populations
3. Students will lead personal training sessions as well as a variety of small and large group exercise activities.
Required Core Courses:
Units

| KNPR 101 | Introduction to Kinesiology | 3 |
| :--- | :--- | ---: |
| KNPR 202 | Introduction to Personal Training | 3 |
| KNPR 205 | Techniques of Exercise Leadership | 1.5 |


| KNPR 110 | Kinesiology-related Occupational Work Experience | 1-8 |
| :---: | :---: | :---: |
| KNHE 104 | Nutrition and Fitness | 2 |
|  | - or - |  |
| NUTR 115 | Nutrition | 3 |
|  | - or - |  |
| NUTR 115H | Honors Nutrition | 3 |
| KNHE 106 | Cardiopulmonary Resuscitation and First Aid | 3 |
| Select two of | the following courses: | Units |
| KNAC 140A | Beginning Karate | 1 |
| KNAC 150A | Beginning Hatha Yoga | 1 |
| KNAC 155A | Beginning Self-Defense | 1 |
| KNAC 170A | Beginning Yoga | 1 |
| KNAD 211A | Beginning Adapted Aquatics | 1 |
| KNAD 211B | Intermediate Adapted Aquatics | 1 |
| KNAF 140A | Beginning Walking/Jogging for Fitness | 1 |
| KNAF 143A | Beginning Extreme Fitness | 1 |
| KNAF 144A | Beginning Cross Training | 1 |
| KNAF 146A | Beginning Stability Ball | 1 |
| KNAF 146B | Intermediate Stability Ball Training | 1 |
| KNAF 150A | Beginning Stretch, Flex and Tone | 1 |
| KNAF 156A | Beginning Cardio Kickboxing | 1 |
| KNAF 156B | Intermediate Cardio Kickboxing | 1 |
| KNAF 157A | Beginning Cardio Pump | 1 |
| KNFI 114A | Beginning Spinning | 1 |
| KNFI 114B | Intermediate Spinning | 1 |
| KNFI 147A | Beginning Weight Training | 1 |
| KNFI 147B | Intermediate Weight Training | 1 |
|  | Total Units | 5-23.5 |

## Kinesiology Sports Medicine Certificate (Untranscripted) Program code: sac.knm.cert

This program is designed to provide students with knowledge and skills that help them understand all aspects of sports medicine/athletic training field and to prepare associate degree seeking students for transfer into Athletic Training.
Learning Outcome(s):

1. Student will recognize and select appropriate athletic injury management response
2. Students will assess and interpret sport-related injury information then explain that information to players, coaches, athletic trainers, and medical personnel.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| KNHE 101 | Healthful Living | 3 |
| KNHE 104 | Nutrition and Fitness | 2 |
| KNHE 106 | Cardiopulmonary Resuscitation and First Aid | 3 |
| KNSM 101 | Introduction to Sports Medicine | 3 |
| KNPR 125 | Sport Psychology | 3 |
| KNPR 110 | Kinesiology-related Occupational Work | $1-8$ |
|  | Experience | Total Units |

## LAW

Santa Ana College is one of a select group of community colleges chosen to participate in the Pathway to Law School Program $(2+2+3)$. This program is sponsored by the California State Bar's Council on Access and Fairness (COAF) and the California Community College Chancellor's Office. This program is an unprecedented effort within California higher education to enhance opportunities and advancement in the legal profession for diverse populations, particularly those who have traditionally been underrepresented This program is designed to prepare students to successfully apply to law school. There are no specific requirements to enter the program, but students should have an interest in the law and a strong determination to succeed at Santa Ana College and earn a bachelor's degree. For more information please visit the following websites: https://sites.google.com/site/calbardream/or www.DiscoverLaw.org. Any student who is interested in being part of the SAC Pathway to Law School Program, attending law school or receiving more information should attend one of our orientation sessions held prior to the start of each semester. Students can also request more information about the program from Professor Kristen Robinson at Robinson_Kristen@sac.edu. (Participation in this program does not guarantee admission to any participating university or law school.)

## Pathway to Law School Certificate (Transcripted)

## Program code: sac.law.ca

Any student with a goal to enter law school should complete the Pathway to Law School program. This program is recognized as part of the California State Bar and California Community College State Chancellor's office initiative "Pathway to Law School."

## Learning Outcome(s):

1. To prepare students to successfully transfer to a four-year university and successfully enroll in a law school program as part of the California State Bar and California Community College State Chancellor's office initiative, "Pathway to Law School." Upon completion of the program, students will receive a certificate of achievement on their transcript to indicate to admitting universities and law schools they have completed the pathway program.
2. Any student with a goal to enter law school should complete the Pathway to Law School program. This program is recognized as part of the California State Bar and California Community College State Chancellor's office initiative "Pathway to Law School."

## Select one from the following:

Units
LAW 100 Introduction to Legal Studies

- or -

PARA 100 The Paralegal Profession

## Select one from the following:

ENGL 103 Critical Thinking and Writing

- or -

ENGL 103H Honors Critical Thinking and Writing

- or -

PHIL 110 Critical Thinking

- or -

PHIL 110H Honors Critical Thinking - or -

PHIL 111 Introductory Logic
Select one from the following:
MATH 219 Statistics and Probability

- or -

MATH 219H Honors Statistics and Probability - or -

PSYC 210 Statistics for the Behavioral Sciences

## Select one from the following:

Units
ENGL 101 Freshman Composition

- or -

ENGL 101H Honors Freshman Composition
Select one from the following:
HIST 120 The United States to 1865

- or -

HIST 120H Honors The United States to 1865
Select one from the following:
POLT 101 Introduction to American Governments - or -

POLT 101H Honors Introduction to American Governments
Select one from the following:
BUS 105 Legal Environment of Business

BUS 101 Business Law

- or -

LAW 105 The Legal Environment of Business
3
Required Core Courses:
PARA 121 Ethics and Professional Responsibility
Select one cooperative work experience course from the following:
LAW 299 Cooperative Work Experience Education -
Occupational

- or Occupational
- or -

PARA 299 Cooperative Work Experience Education
Total Units 27-30

## Legal Office Interpreting Spanish Certificate (Transcripted) Program code: sac.lois.ca

The certificate of achievement curriculum for Legal Office Interpreting Spanish is designed to prepare the student for employment in a legal setting interpreting Spanish to English and English to Spanish. Students will be prepared for employment in law offices, court reporting services and the courts, both on the State and Federal level. Students will have a basic understanding of legal terminaolgy, ethics and legal procedures.

## Learning Outcome(s):

Upon successful completion of the program, students will:

1. Understand the Ethics and regulations of the legal profession in California by completing Law 100 or Paralegal 100 and Paralegal 121.
2. Students will understand basic terminology used in the law office and courts by completing the Law 110.
3. Students will demonstrate an entry level profeciency in legal interpretation (Spanish/English) by completion of Law 058 or BA 058.

Required Core Courses: Units

- or -

| BA 058 | $\begin{array}{l}\text { Legal Interpretation and Translation-Spanish/ } \\ \text { English }\end{array}$ | 3 |
| :--- | :--- | :--- |
| LAW 100 | Introduction to Legal Studies | 3 |


|  | - or - | 3 |
| :--- | :--- | ---: |
| PARA 100 | The Paralegal Profession | 2 |
| LAW 110 | Legal Terminology | $1-4$ |
| PAR 299 121 | Cooperative Work Experience Education - <br> Occupational | Ethics and Professional Responsibility |

## Legal Office Technician Certificate (Transcripted)

## Program code: sac.lot.ca

This certificate program is designed to prepare the student for employment in a law office. The program will prepare the student with technical office skills for employment in a law office to assist attorneys and paralegals. This program is not designed to prepare students for the practice of law nor is it designed to meet the requirements of Business and Professions code section 5450 (Paralegal Qualifications).
Learning Outcome(s):
Upon successful completion of the program, students will:

1. Understand the ethical and professional responsibilities of the legal profession by completing the Para 100 or Law 100 and Para 121.
2. Students will understand the procedures of a law office by completing Para 101.
3. Students will achieve an entry level profeciency in the technology utilized in a law office by completing BA 163 Adobe Acrobat.
4. Students will understand proper formatting, grammar and punctuation of business documents by completing BA 017 Business Writing Skills.
5. Students will understand basic Accounting procedures by completing Accounting 035 Quickbooks I.
Required Core Courses:
Units
LAW 100 Introduction to Legal Studies

- or -

| PARA 100 | The Paralegal Profession | 3 |
| :--- | :--- | :---: |
| PARA 101 | Law Office Management | 2 |
| PARA 121 | Ethics and Professional Responsibility | 2 |
| LAW 110 | Legal Terminology | 2 |
| BA 017 | Business Writing Skills | 3 |
| BA 163 | Adobe Acrobat | 3 |
| BA 179 | Introduction to Microsoft Office | 3 |
| ACCT 035 | QuickBooks I | 2 |
| PARA 105 | Cooperative Work Experience Education - <br> Occupational | 2 |

PARA 299 Cooperative Work Experience Education - or -

LAW 299 Cooperative Work Experience Education Occupational

Total Units

## LIBERAL ARTS DEGREE

This is a diversified degree designed for students desiring a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". The degree allows students to develop an appreciation and understanding of the beauty and values that have shaped and enriched our culture. The program of study also enables students to develop intellectual maturity, and a deeper understanding of themselves and the American heritage.
This program provides excellent preparation for a variety of personal and professional goals. Please consult a counselor for educational planning and information regarding specific goals.

## I. Requirements:

Complete general education Plan A (associate degree only, nontransfer), B (CSU-GE Breadth, CSU transfer), or C (IGETC, UC or CSU transfer) as related to your educational goal.
Complete a minimum of 18 units from a single Area of Emphasis listed below. For depth of study, students are strongly encouraged to complete two or more courses in a single discipline as part of their 18 units. (Courses in the chosen "Area of Emphasis" may also be applied toward general education areas on Plan A, B, and C.) Note: Although a course may be listed in more than one area of emphasis of the Liberal Arts degree, it may only be used to meet a requirement for a single emphasis.
Complete all other associate degree requirements for Santa Ana College.

## II. Areas of Emphasis:

## 1. American Studies

Program code: sac.laas.aa
These courses emphasize the peoples, cultures, institutions, and cultural trends of the United States. Students will examine American culture as a whole from various perspectives. Students will also learn how this country has been shaped by a variety of disciplines while recognizing the diversity of our culture. This emphasis may be of interest to those planning to pursue careers in business, communications, government service, law, social services, and teaching.

## Learning Outcome(s):

1. Students will study American culture as a whole from various perspectives
2. Students will examine the formation of our country while recognizing the diversity of our culture.
2 Required Core Courses: Units
ASL 110 American Sign Language I 4

ASL 111 American Sign Language II 4
ASL 116 Introduction to Deaf Studies 3
ASL 210 American Sign Language III 4

ANTH 100 Introduction to Cultural Anthropology 3

- or -

| ANTH 100H | Honors Introduction to Cultural Anthropology | 3 |
| :--- | :--- | :--- |
| ANTH 104 | Language and Culture | 3 |

- or -

ANTH 104H Honors Language and Culture 3
ANTH 125 Native Americans in the U.S. 3
ART $103 \quad \begin{aligned} & \text { Arts of Africa, Oceania, and Indigenous North } \\ & \text { America }\end{aligned}$
ART $104 \quad$ Mexican and Chicano Art History 3

| ART 108 | Contemporary Art History: Art Since Mid- <br> Twentieth Century | 3 |
| :--- | :--- | :--- |

ASIA 101 Introduction to Asian American Studies 3

| BLST 101 | Introduction to African American Studies | 3 |
| :---: | :---: | :---: |
| CHST 101 | Introduction to Chicana/o Studies | 3 |
| CDEV 110 | Child, Family, and Community (DS2) | 3 |
| CDEV 221 | Living and Teaching in a Diverse Society | 3 |
| CMST 103 | Introduction to Intercultural Communication - or - | 3 |
| CMST 103H | Honors Introduction to Intercultural Communication | 3 |
| CMST 206 | Gender Communication - or - | 3 |
| CMST 206H | Honors Gender Communication | 3 |
| CMSD 105 | Mass Media and Society - or - | 3 |
| CMSD 105H | Honors Mass Media and Society | 3 |
| CMSD 111 | Media, Race and Gender | 3 |
| CMSD 121 | Introduction to Reporting and Newswriting | 3 |
| CMPR 100 | The Computer and Society | 3 |
| CNSL 100 | Lifelong Understanding and Self-Development | 2 |
| CNSL 116 | Career/Life Planning and Personal Exploration | 3 |
| CNSL 128 | Introduction to Community Activism | 3 |
| CJ 101 | Introduction to Criminal Justice | 3 |
| CJ 101 H | Honors Introduction to Criminal Justice | 3 |
| CJ 107 | Principles and Procedures in the Criminal Justice System | 3 |
| DNCE 100 | Dance History and Appreciation - or - | 3 |
| DNCE 100H | Honors Dance History and Appreciation | 3 |
| EDUC 100 | Introduction to Education | 3 |
| ENGL 104 | Language and Culture - or - | 3 |
| ENGL 104H | Honors Language and Culture | 3 |
| ENGL 242 | Survey of American Literature, 1865-Present | 3 |
| ENGL 241 | Survey of American Literature 1600-1865 | 3 |
| ENGL 245 | The Image of African Americans in Literature and Films | 3 |
| ENGL 246 | Survey of Chicano Literature | 3 |
| ENVR 200 | Environment of Man | 3 |
| ETHN 101 | Introduction to Ethnic Studies - or - | 3 |
| ETHN 101H | Honors Introduction to Ethnic Studies | 3 |
| ETHN 102 ETHN 102H | The Borderlands: Cultural Context and Intercultural Relations - or - <br> Honors the Borderlands: Cultural Context and Intercultural Relations | 3 3 |
| GEOG 140 | California Geography | 3 |
| HIST 118 | Social and Cultural History of the United States | 3 |
| HIST 120 | The United States to 1865 - or - | 3 |
| HIST 120H | Honors The United States to 1865 | 3 |
| HIST 121 | The United States since 1865 - or - | 3 |
| HIST 121H | Honors The United States since 1865 | 3 |


| HIST 123 | African American History to 1865 | 3 |
| :---: | :---: | :---: |
| HIST 124 | Mexican American History in the United States - or - | 3 |
| HIST 124H | Honors Mexican American History in the United States | 3 |
| HIST 125 | Native Americans in the U.S. | 3 |
| HIST 127 | Women in U.S. History | 3 |
| HIST 133 | History of California | 3 |
| HIST 146 | African American History from 1863 to the Present | 3 |
| KNHE 101 | Healthful Living | 3 |
| KNHE 102 | Women's Health Issues | 3 |
| KNPR 170 | Sport Ethics | 3 |
| LAW 100 | Introduction to Legal Studies | 3 |
| MUS 103 | Jazz in America | 3 |
| MUS 104 | Rock Music History and Appreciation | 3 |
| MUS 105 | Film Music Appreciation | 3 |
| NUTR 118 | Cultural Foods | 3 |
| PARA 107 | Principles and Procedures in the Criminal Justice System | 3 |
| POLT 101 | Introduction to American Governments - or - | 3 |
| POLT 101H | Honors Introduction to American Governments | 3 |
| POLT 200 | American Political Thought - or - | 3 |
| POLT 200H | Honors American Political Thought | 3 |
| POLT 235 | Identity Politics | 3 |
| PSYC 170 | Multicultural Psychology | 3 |
| SOC 112 | Relationships, Marriages, and Family Dynamics | 3 |
| SOC 140 | Social Problems - or - | 3 |
| SOC 140H | Honors Analysis of Social Trends and Problems | 3 |
| TELV 101 | TV and Society: A Visual History | 3 |
| TELV 103 | History of Film to 1945 | 3 |
| TELV 104 | History of Film from 1945 to Present | 3 |
| THEA 100 | Introduction to Theatre | 3 |
| THEA 120 | Musical Theatre History | 3 |
| WMNS 101 | Introduction to Women's Studies | 3 |
| WMNS 102 | Women in America: Work, Family, Self | 3 |
| Note: Althou emphasis of requirement | gh a course may be listed in more than one are the Liberal Arts degree, it may only be used to for a single emphasis. |  |

Total Units
18

## 142 INSTRUCTIONAL PROGRAMS

## 2. Arts, Humanities And Communications Program code: sac.laahc.aa

These courses emphasize the study of cultural, literary, humanistic activities and artisitc expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will learn to valuel aesthetic understanding and incorporate these concepts when constructing value judgments. A course from each of the three areas, Arts, Humanities, and Communications must be included in the $\mathbf{1 8}$ units selected for this emphasis. This emphasis may be of interest to those planning to pursue careers in art history, communications, dance, deaf studies, english, languages, music, philosophy, studio art, teaching, and theatre arts.

## Learning Outcome(s):

1. Students will evaluate and interpret the ways in which people through the ages and in different cultures have expressed their experiences and interpretations of the world around them through artistic and cultural creation
2. Students will appraise aesthetic understanding and formulate these concepts when constructing value judgments.

## Arts

Units

## ART 100

Introduction to Art Concepts

- or -

| ART 100H | Honors Introduction to Art Concepts | 3 |
| :--- | :--- | :---: |
| ART 101 | Survey of Western Art History I: Prehistory <br> through the Middle Ages | 3 |
| ART 102 | Survey of Western Art History II: Renaissance <br> through the Twentieth Century | 3 |
| ART 103 | Arts of Africa, Oceania, and Indigenous North <br> America | 3 |
| ART 104 | Mexican and Chicano Art History | 3 |
| ART 105 | History of Modern Art | 3 |
| ART 106 | Asian Art History | 3 |
| ART 107 | History of Animation | 3 |
| ART 108 | Contemporary Art History: Art Since Mid- | 3 |


|  | Twentieth Century |  |
| :--- | :--- | :--- |
| ART 110 | Two-Dimensional Design | 3 |
| CMSD 103 | Introduction to Visual Communications |  |


| CMSD 103 | Introduction to Visual Communications | 3 |
| :--- | :--- | :--- |
| CMSD 105 | Mass Media and Society | 3 |



DNCE 100 Dance History and Appreciation 3

- or -

| DNCE 100H | Honors Dance History and Appreciation | 3 |
| :--- | :--- | :--- |
| DNCE 102 | Introduction to |  |

DNCE 102 Introduction to Dance Forms 3
DNCE 105 World Dance and Cultures 3
ENGL 233A Shakespeare's Comedies and Romances 3
ENGL 233B Shakespeare's Tragedies and History Plays 3
ENGL 233C Shakespeare's Theatre 3
IDS 121 Humanities Through the Arts 3
MUS 101 Music Appreciation 3
MUS 101H Honors Music Appreciation 3
MUS 102 World Music 3

MUS 102H Honors World Music 3
MUS 103 Jazz in America 3

| MUS 104 | Rock Music History and Appreciation | 3 |
| :--- | :--- | ---: |
| MUS 105 | Film Music Appreciation | 3 |
| MUS 110 | Music Fundamentals and Culture | 3 |
| MUS 111 | Basic Music Theory and Musicianship I | 4 |
| MUS 211 | Music History and Literature | 3 |
| PHOT 150 | History of Photography | 3 |
| TELV 101 | TV and Society: A Visual History | 3 |
| TELV 103 | History of Film to 1945 | 3 |
| TELV 104 | History of Film from 1945 to Present | 3 |
| THEA 100 | Introduction to Theatre | 3 |
| THEA 105 | Theatre History 1 | 3 |
| THEA 120 | Musical Theatre History | 3 |
| THEA 123 | Introduction to Drama and Acting | 3 |
| Humanities |  | Units |
| ANTH 104" | Language and Culture | 3 |
| ANTH 104H | Honors Language and Culture | 3 |


| ASL 110 | American Sign Language I | 4 |
| :--- | :--- | :--- |
| ASL 111 | American Sign Language II | 4 |
| ASL 116 | Introduction to Deaf Studies | 3 |
| ASL 210 | American Sign Language III | 4 |
| CHNS 101 | Elementary Chinese I | 5 |
| CHNS 102 | Elementary Chinese II | 5 |
| CMSD 103 | Introduction to Visual Communications | 3 |
| CMSD 110 | Introduction to Creative Nonfiction | 4 |
| CMSD 111 | Media, Race and Gender | 3 |
| ENGL 102 | Literature and Composition | 4 |ENGL 102H Honors Literature and Composition 4

ENGL 104 Language and Culture 3ENGL 104H Honors Language and Culture $\quad 3$
ENGL 220 Survey of the Bible as Literature 3
ENGL 231 Survey of English Literature I ..... 3
ENGL 232 Survey of English Literature II ..... 3
ENGL 233A Shakespeare's Comedies and Romances ..... 3
ENGL 233C Shakespeare's Theatre ..... 3
ENGL 241 Survey of American Literature 1600-1865 ..... 3
ENGL 242 Survey of American Literature, 1865-Present ..... 3

ENGL 243 The Modern American Novel ..... 3ENGL $245 \begin{array}{lll}\text { The Image of African Americans in Literature } \\ \text { and Films }\end{array} \quad 3$| ENGL 246 | Survey of Chicano Literature | 3 |
| :--- | :--- | :--- |
| ENGL 270 | Children's Literature | 3 |

ENGL 271 Survey of World Literature I ..... 3
ENGL 272 Survey of World Literature II ..... 3
ENGL 278 Survey of Literature by Women ..... 3
FREN 101 Elementary French I ..... 5
FREN 102 Elementary French II ..... 5
FREN 201 Intermediate French I ..... 5

- or -

| FREN 202 | Intermediate French II | 5 |
| :---: | :---: | :---: |
| FREN 202H | Honors Intermediate French II | 5 |
| HIST 101 | World Civilizations to the 16th Century | 3 |
| HIST 101H | - or - <br> Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century | 3 |
|  | - or - |  |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| HIST 150 | Latin American Civilization to Independence | 3 |
| HIST 151 | Modern Latin American Civilization | 3 |
| HIST 153 | History of Mexico | 3 |
| HIST 163 | Introduction to Southeast Asian History | 3 |
| IDS 121 | Humanities Through the Arts | 3 |
| IDS 200 | Introduction to Liberal Studies | 3 |
| ITAL 120 | Elementary Italian I | 5 |
| ITAL 121 | Elementary Italian II | 5 |
| JAPN 101 | Elementary Japanese I | 5 |
| JAPN 102 | Elementary Japanese II | 5 |
| KNPR 170 | Sport Ethics | 3 |
| PHIL 106 | Introduction to Philosophy | 3 |
|  | - or - |  |
| PHIL 106H | Honors Introduction to Philosophy | 3 |
| PHIL 108 | Ethics | 3 |
| PHIL 112 | World Religions | 3 |
| PHIL 118 | History of Philosophy | 3 |
| SPAN 101 | Elementary Spanish I | 5 |
|  | - or - |  |
| SPAN 101H | Honors Elementary Spanish I | 5 |
| SPAN 102 | Elementary Spanish II | 5 |
|  | - or - |  |
| SPAN 102H | Honors Elementary Spanish II | 5 |
| SPAN 195A | Advanced Conversational Spanish | 3 |
| SPAN 195B | Advanced Conversational Spanish | 3 |
| SPAN 201 | Intermediate Spanish I | 5 |
|  | - or - |  |
| SPAN 201H | Honors Intermediate Spanish I | 5 |
| SPAN 202 | Intermediate Spanish II |  |
|  | - or- | 5 |
| SPAN 202H | Honors Intermediate Spanish II | 5 |
| VIET 101 | Elementary Vietnamese I | 5 |
| VIET 102 | Elementary Vietnamese II | 5 |
| Communications |  | Units |
| CMST 101 | Introduction to Interpersonal Communication | 3 |
|  | - or - |  |
| CMST 101H | Honors Introduction to Interpersonal Communication | 3 |
| CMST 102 | Public Speaking | 3 |


| CMST 103 | Introduction to Intercultural Communication | 3 |
| :---: | :---: | :---: |
| CMST 103H | - or - <br> Honors Introduction to Intercultural Communication | 3 |
| CMST 140 | Argumentation and Debate | 3 |
| CMST 145 | Group Dynamics | 3 |
| CMST 152 | Oral Interpretation | 3 |
| CNSL 144 | Reasoning and Problem Solving | 3 |
| ENGL 101 | Freshman Composition | 4 |
| ENGL 101H | - or - <br> Honors Freshman Composition | 4 |
| ENGL 102 | Literature and Composition | 4 |
|  | - or- |  |
| ENGL 102H | Honors Literature and Composition | 4 |
| ENGL 103 | Critical Thinking and Writing | 4 |
|  | - or- | 4 |
| ENGL 103H | Honors Critical Thinking and Writing | 4 |
| EMLS 112 | Advanced Composition | 3 |
| PHIL 110 | Critical Thinking | 4 |
|  | - or - |  |
| PHIL 110H | Honors Critical Thinking | 4 |
| PHIL 111 | Introductory Logic | 4 |
| PHIL 144 | Reasoning and Problem Solving | 3 |
| READ 101 | Introduction to Academic Reading | 3 |
| READ 101X | Acceleration to Academic Reading | 3 |
| READ 102 | Academic Reading | 3 |
| READ 150 | Critical Reading | 3 |
| Note: Although a course may be listed in more than one area of emphasis of the Liberal Arts degree, it may only be used to meet a requirement for a single emphasis. |  |  |

## 144 INSTRUCTIONAL PROGRAMS

## 3. Business and Technology

## Program code: sac.labt.aa

These courses emphasize the integration of theory and practice within the fields of business and technology. Students will develop the ability to effectively manage and lead organizations. Students will demonstrate an understanding of the place of business and technology within the global economy. Students will critically apply ethical standards to business practices and decisions. Courses from both Business and Technology must be included in the 18 units selected for this emphasis. This emphasis may be of interest to those planning to pursue careers in accounting, business administration, computer information systems, computer science, engineering, finance, international business, and law.

## Learning Outcome(s):

1. Students will critique and analyze the place of business and technology within the global economy
2. Students will examine the integration of theory and practice within the fields of business and technology.
Business Units
ACCT 102 Managerial Accounting 4
ACCT 101 Financial Accounting 4
BUS 100 Fundamentals of Business $\quad 3$
BUS 101 Business Law 3

| BUS 105 | Legal Environment of Business | 3 |
| :--- | :--- | :--- |
| BUS 100 | Cultur and |  |


| BUS 106 | Culture and International Business - Kiss, Bow <br> or Shake Hands |
| :--- | :--- |

BUS 120 Principles of Management 3

| BUS 121 | Human Relations and Organizational Behavior | 3 |
| :--- | :--- | :--- |
| BUS 125 | Introduction to International Business | 3 |


| BUS 140 | Principles of Finance | 3 |
| :--- | :--- | :--- |
| BUS 150 |  |  |

BUS 150 | Introduction to Information Systems and |
| :--- |
| Applications |$\quad 3$

BUS 222 Business Writing 3

| ECON 120 | Principles/Macro | 3 |
| :--- | :--- | :--- |

ECON 121 Principles/Micro 3
MGMT 122 Business Communications $\quad 3$
MGMT 135 Human Resource Management 3
MKTG 113 Principles of Marketing 3
MATH 140 College Algebra 4

| MATH 141 | College Algebra with Support | 4.5 |
| :--- | :--- | :--- |

MATH 145 Finite Mathematics 4

| MATH 150 | Calculus for Biological, Management and Social <br> Sciences |
| :--- | :--- |


| MATH 180 | Single Variable Calculus I |
| :--- | :--- | :--- |

MATH 180H Honors Single Variable Calculus I 4
MATH 219 Statistics and Probability 4

- or -

MATH 219H Honors Statistics and Probability 4
MATH 221 Statistics and Probability with Support 4.5
PARA 131 Alternate Dispute Resolution 2
PARA 133 Workers Compensation Law and Procedure 2
PARA 136 Real Property Law and Procedure 2
PARA 138 Law of Business Organizations 2
PARA 140 Immigration Law and Procedure 2

| Technology |  | Units |
| :--- | :--- | ---: |
| BA 179 | Introduction to Microsoft Office | 4 |
| CMPR 100 | The Computer and Society | 3 |
| CMPR 105 | Visual BASIC Programming | 3 |
| CMPR 121 | Programming Concepts | 3 |
| CMPR 136 | Building a Small Office/Home Office Network | 1.5 |
| CMPR 167 | Microsoft Access | 3 |
| ENGR 100A | Introduction to Engineering | 2 |
| ENGR 100B | Introduction to Architecture/Civil Engineering/ | 2 |
| CNGR 112 | Construction (AEC) | Society and the Built Environment |

Note: Although a course may be listed in more than one area of emphasis of the Liberal Arts degree, it may only be used to meet a requirement for a single emphasis.

Total Units

## 4. Kinesiology and Wellness

## Program code: sac.lakw.aa

These courses provide an understanding of kinesiology, the mechanics of the human body, and the integration of behavior and communication in the promotion of a healthy lifestyle. Students will also demonstrate knowledge of a range of physical activities. This emphasis may be of interest to those planning to pursue careers in teaching, athletic training, coaching, nutrition, and dance.

## Learning Outcome(s):

1. Students will develop and demonstrate an understanding of the mechanics of the human body as it relates to the promotion of a healthy lifestyle
2. Students will demonstrate knowledge of a range of physical activities.
a. Kinesiology and Movement (minimum 3 units) Units

## DNCE 100 Dance History and Appreciation

DNCE 100H Honors Dance History and Appreciation 3
DNCE 102 Introduction to Dance Forms 3

DNCE 105 World Dance and Cultures 3
KNHE 101 Healthful Living 3
KNHE 102 Women's Health Issues 3
KNHE 103 Men's Health Issues 3
KNHE 104 Nutrition and Fitness 2

KNHE 106 Cardiopulmonary Resuscitation and First Aid 3
KNHE 108 Stress Management 3
KNPR 101 Introduction to Kinesiology 3

| KNPR 125 | Sport Psychology | 3 |
| :--- | :--- | :--- |

KNPR 150 Sport and Society 3
KNPR 155 Theory of Soccer 2
KNPR 170 Sport Ethics 3

KNPR 160 Management of Physical Education and Sport 3
KNPR 165 Theory of Softball 2
KNPR 175 Theory of Football 2
KNPR 195 Student Athlete Success 1
KNPR 200 Theory of Baseball 2
KNPR 275 Sport Psychology Applications-Football 2
KNSM 101 Introduction to Sports Medicine 3

| b. Scientific and Nutrition Foundation (minimum 3 units) |  | Units |
| :---: | :---: | :---: |
| ANTH 101 | Introduction to Physical Anthropology | 3 |
| ANTH 101L | Physical Anthropology Laboratory | 1 |
| BIOL 109 | Fundamentals of Biology | 3 |
|  | - |  |
| BIOL 109H | Honors Fundamentals of Biology | 3 |
| BIOL 109L | Fundamentals of Biology Laboratory | 1 |
| BIOL 115 | Concepts in Biology for Educators | 4 |
| BIOL 139 | Health Microbiology | 4 |
| BIOL 149 | Human Anatomy and Physiology | 4 |
| BIOL 177 | Human Genetics | 3 |
| BIOL 200 | Environment of Man | 3 |
| BIOL 211 | Cellular and Molecular Biology | 5 |
| BIOL 212 | Animal Diversity and Ecology | 5 |
| BIOL 214 | Plant Diversity and Evolution | 5 |
| BIOL 217 | Pathophysiology | 2 |
| BIOL 229 | General Microbiology | 5 |
| BIOL 239 | General Human Anatomy | 4 |
| BIOL 249 | Human Physiology | 4 |
| BIOL 259 | Environmental Biology | 4 |
| CHEM 109 | Chemistry in the Community | 4 |
| CHEM 115 | Concepts in Physical Sciences for Educators | 4 |
| CHEM 119 | Fundamentals - General and Organic | 5 |
| CHEM 209 | Introductory Chemistry | 4 |
| CHEM 210 | General, Organic and Biochemistry | 5 |
| CHEM 219 | General Chemistry | 5 |
|  | - or - |  |
| CHEM 219H | Honors General Chemistry | 5 |
| CHEM 229 | General Chemistry and Qualitative Analysis | 5 |
| ENVR 200 | Environment of Man | 3 |
| IDS 155 | Human Sexuality | 3 |
| NUTR 115 | Nutrition | 3 |
| NUTR 116 | Principles of Food Preparation | 3 |
| NUTR 118 | Cultural Foods | 3 |
| PHYS 109 | Survey of General Physics | 4 |
| PHYS 210 | Principles of Physics I | 4 |
| PHYS 211 | Principles of Physics II | 4 |
| PHYS 217 | Engineering Physics I | 4 |
| PHYS 227 | Engineering Physics II | 4 |
| PHYS 237 | Engineering Physics III | 4 |
| PHYS 279 | College Physics I | 4 |
| PHYS 289 | College Physics II | 4 |
| c. Behavioral Development, Communication, and Diversity (Minimum 3 units) |  | Units |
| ASIA 101 | Introduction to Asian American Studies | 3 |
| BLST 101 | Introduction to African American Studies | 3 |
| CHST 101 | Introduction to Chicana/o Studies | 3 |
| CDEV 107 | Child Growth and Development (DS1) | 3 |
| CMST 101 | Introduction to Interpersonal Communication | 3 |
|  | - or - |  |
| CMST 101H | Honors Introduction to Interpersonal Communication | 3 |
| CMST 102 | Public Speaking | 3 |



Styles1111KNAC 230A Beginning Flag Football0.5-1
KNAC 260A Beginning Soccer ..... 1
KNAC 260BKNAC 260C Advanced Soccer0.5-1
KNAC 265A
KNAC 265B Intermediate Indoor Soccer $\quad 1$
KNAC 265C Advanced Indoor Soccer ..... 0.5-1
KNAC 270A Beginning Softball ..... 1
KNAC 290A Beginning Volleyball ..... 1
KNAC 290B Intermediate Volleyball ..... 1
KNAD 201A Beginning Adapted Swimming ..... 1
KNAD 202A Beginning Adapted Circuit Training ..... 1
KNAD 202B Intermediate Adapted Circuit Training ..... 1
KNAD 205A Beginning Adapted Badminton ..... 1
KNAD 208A Beginning Adapted Aerobic Fitness ..... 1
KNAD 208B Intermediate Adapted Aerobic Fitness ..... 1
KNAD 211A Beginning Adapted Aquatics ..... 1
KNAD 211B Intermediate Adapted Aquatics ..... 1
KNAF 140A Beginning Walking/Jogging for Fitness ..... 1
KNAF 143A Boot Camp Workout ..... 1
KNAF 144A Beginning Cross Training ..... 1
KNAF 146A Beginning Stability Ball ..... 1
KNAF 146B Intermediate Stability Ball Training ..... 1
KNAF 150A Beginning Stretch, Flex and Tone ..... 1
KNAF 156A Beginning Cardio Kickboxing ..... 1
KNAF 156B Intermediate Cardio Kickboxing ..... 1
KNAF 157A Beginning Cardio Pump ..... 1
KNAQ 201A Beginning Swimming ..... 1
KNAQ 201B Lap Swimming ..... 1
KNFI 112A Beginning Circuit Training ..... 1
KNFI 112B Intermediate Circuit Training ..... 1
KNFI 112C Advanced Circuit Training 1
KNFI 114A Beginning Spinning $\quad 0.5-1$
0.5-1KNFI 115A Beginning Cardiovascular Conditioning
KNFI 115B $\quad$ Intermediate Cardiovascular Conditioning 1
KNFI 115C Advanced Cardiovascular Conditioning ..... 1
KNFI 147A Beginning Weight Training ..... 1
KNFI 147B Intermediate Weight Training ..... 1
KNIA 125 Conditioning for Football ..... 1
KNIA 128 Conditioning for Athletes ..... 1
KNIA 133 Off Season Swimming ..... 1

| KNIA 171 | Wrestling - Off-Season | 1 |
| :---: | :---: | :---: |
| KNIA 201 | Baseball Men | 3 |
| KNIA 202 | Basketball-Men | 3 |
| KNIA 204 | Football-Men | 3 |
| KNIA 206 | Swimming-Men | 3 |
| KNIA 209 | Water Polo-Men | 3 |
| KNIA 210 | Wrestling-Men | 3 |
| KNIA 211 | Softball-Women | 3 |
| KNIA 212 | Basketball--Women | 3 |
| KNIA 213 | Volleyball-Women | 3 |
| KNIA 216 | Soccer-Men | 3 |
| KNIA 217 | Swimming-Women | 3 |
| KNIA 218 | Track-Women | 3 |
| KNIA 219 | Cross Country-Women | 3 |
| KNIA 220 | Soccer-Women | 3 |
| KNIA 221 | Water Polo-Women | 3 |
| KNIA 223 | Baseball | 1 |
| KNIA 227 | Off Season Waterpolo | 1 |
| KNIA 230 | Preseason Football | 0.5 |
| KNIA 231 | Football Camp | 1 |
| KNIA 232 | Football | 1 |
| KNIA 235 | Speed and Agility | 1 |
| KNIA 240 | Advanced Basketball Skills-Men | 1 |
| KNIA 261 | Soccer-Women | 1 |
| KNIA 262 | Soccer-Men | 1 |
| KNIA 270 | Softball | 0.5 |
| KNIA 271 | Softball - Off Season | 1 |
| KNIA 281 | Track and Field - Off Season | 1 |
| KNIA 291 | Volleyball - Off Season | 1 |
| KNIA 293 | Sand Volleyball | 3 |
| DNCE 120A | Introduction to Hip-Hop Dance | 1 |
| DNCE 120B | Intermediate Hip-Hop Dance | 1 |
| DNCE 109C | Pilates Mat III | 1 |
| DNCE 102 | Introduction to Dance Forms | 3 |
| DNCE 009A | Dance Laboratory I | 0.5 |

3. Additional units to be selected from $a, b$, or $c$ above for $a$ total of
18 units

Total Units
Note: Although a course may be listed in more than one area of emphasis of the Liberal Arts degree, it may only be used to meet a requirement for a single emphasis.

## 5. Mathematics and Science <br> Program code: sac.lams.aa

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations. Courses from both mathematics and science must be included in the $\mathbf{1 8}$ units selected for the emphasis. This emphasis may of interest to those planning to pursue careers in actuarial science, business, computer science, engineering, forensics, health professions, research, science, teaching and technical writing.

## Learning Outcome(s):

1. Students will express and manipulate quantitative information in verbal, numeric, graphic and symbolic form
2. Students will understand the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.
ANTH 101 Introduction to Physical Anthropology
ANTH 101L Physical Anthropology Laboratory 3
ASTR 109 Introduction to the Solar System 3
ASTR 110 Introduction to Stars and Galaxies 3
ASTR 110H Honors Introduction to Stars and Galaxies 3
ASTR 140 Astronomy Laboratory 1
BIOL 109 Fundamentals of Biology 3
BIOL 109H Honors Fundamentals of Biology 3
BIOL 109L Fundamentals of Biology Laboratory 1
BIOL 111 Marine Biology 4
BIOL 115 Concepts in Biology for Educators 4
BIOL 139 Health Microbiology 4
BIOL 149 Human Anatomy and Physiology 4
BIOL 177 Human Genetics 3
BIOL 190 Introduction to Biotechnology 3
BIOL 190L Introductory Biotech Lab $\quad 1$
BIOL 200 Environment of Man 3
BIOL 211 Cellular and Molecular Biology 5
BIOL 212 Animal Diversity and Ecology 5
BIOL 214 Plant Diversity and Evolution 5
BIOL 229 General Microbiology 5
BIOL 239 General Human Anatomy 4
BIOL 249 Human Physiology 4
BIOL 259 Environmental Biology 4
CHEM 109 Chemistry in the Community 4
CHEM 115 Concepts in Physical Sciences for Educators 4
CHEM 119 Fundamentals - General and Organic 5
CHEM 209 Introductory Chemistry 4
CHEM 210 General, Organic and Biochemistry $\quad 5$
CHEM 219 General Chemistry 5

- or -

CHEM 219H Honors General Chemistry 5
CHEM 229 General Chemistry and Qualitative Analysis 5
CHEM 249 Organic Chemistry I 5

| CHEM 259 | Organic Chemistry II | 5 |
| :--- | :--- | :--- |

ERTH 110 Introduction to Earth Science 3

- or -

ERTH 110H Honors Introduction to Earth Science 3
ERTH 115 Earth Science for Educators 4
ERTH 150 Introduction to Oceanography 3

|  | - or - |  |
| :--- | :--- | :--- |
| ERTH 150H | Honors Introduction to Oceanography | 3 |

ENVR 140 Environmental Geology 3
ENVR 200 Environment of Man 3
ENVR 259 Environmental Biology $\quad 4$
GEOG 101 Physical Geography 3

GEOG 101L Physical Geography Laboratory $\quad 1$

| GEOG 130 | Introduction to Weather and Climate | 3 |
| :--- | :--- | :---: |
| GEOL 101 | Introduction to Geology | 3 |
| GEOL 101L | Introduction to Geology Laboratory | 1 |
| GEOL 140 | Environmental Geology | 3 |
| GEOL 150 | Introduction to Oceanography | 3 |

GEOL 150H Honors Introduction to Oceanography 3
GEOL 201 Introduction to Historical Geology 4
MATH 070 Geometry 3

MATH 083 | Beginning and Intermediate Algebra for Liberal |
| :--- | :--- |
| Arts and Social Science |

MATH $084 \quad$ Beginning and Intermediate Algebra 6

| MATH 105 | Mathematics for Liberal Arts Students | 3 |
| :--- | :--- | :--- |
| MATH 140 | College Algebra |  |

MATH 141 College Algebra with Support 4.5
MATH 145 Finite Mathematics 4

MATH 150 | Calculus for Biological, Management and Social |
| :--- | :--- |
| Sciences |$\quad 4$

MATH 162 Trigonometry 4
MATH 170 Pre-Calculus Mathematics 4
MATH 180 Single Variable Calculus I 4
MATH 180H Honors Single Variable Calculus I 4
MATH 185 Single Variable Calculus II 4
MATH 219 Statistics and Probability 4
$\qquad$
MATH 219H Honors Statistics and Probability 4
MATH 221 Statistics and Probability with Support 4.5
MATH 280 Intermediate Calculus 4

| MATH 287 | $\begin{array}{l}\text { Introduction to Linear Algebra and Differential } \\ \text { Equations }\end{array}$ | 5 |
| :--- | :--- | :--- |


| PSC 115 | Concepts in Physical Sciences for Educators | 4 |
| :--- | :--- | :--- |

PSC 117 Physical Science Survey 3

PSC $118 \quad$ Physical Science Survey Laboratory 1
PHYS 109 Survey of General Physics 4
PHYS $210 \quad$ Principles of Physics I $\quad 4$
PHYS $211 \quad$ Principles of Physics II $\quad 4$
PHYS 217 Engineering Physics I 4
PHYS 227 Engineering Physics II 4
PHYS 237 Engineering Physics III 4
PHYS 279 College Physics I 4

PSYC 200 Introduction to Biological Psychology 3
PHYS 289 College Physics II 4
PSYC $210 \quad$ Statistics for the Behavioral Sciences 4
Total Units
Note: Although a course may be listed in more than one area of emphasis of the Liberal Arts degree, it may only be used to meet a requirement for a single emphasis.

## 6. Social and Behavioral Sciences <br> Program code: sac.lasbs.aa

These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate. This emphasis may be of interest to those planning to pursue careers in anthropology, child development, criminal justice, ethnic studies, government service, law, history, marriage and family therapy, political science, psychology, social work, sociology, teaching, and urban planning.
Learning Outcome(s):

1. Students will evaluate how individuals, societies, and social subgroups operate
2. Students will apply the principles, methodologies, value systems, ethics, and thought processes employed by human inquiry.
ANTH 100 Introduction to Cultural Anthropology 3 - or ANTH 100H Honors Introduction to Cultural Anthropology 3 ANTH 103 Introduction to Archaeology 3
ANTH 104 Language and Culture 3 - or -

ANTH 104 Language and Culture 3
ANTH 105 Ancient Mesoamerican Civilization 3

ANTH 125 Native Americans in the U.S. 3
ASIA 101 Introduction to Asian American Studies 3
BLST 101 Introduction to African American Studies 3
BIOL 200 Environment of Man 3

CHST 101 Introduction to Chicana/o Studies 3
CDEV 107 Child Growth and Development (DS1) 3
CDEV 110 Child, Family, and Community (DS2) 3
CMSD 105 Mass Media and Society 3

- or -

CMSD 105H Honors Mass Media and Society 3
CMSD 111 Media, Race and Gender 3
CMST 103 Introduction to Intercultural Communication 3

- or -

Honors Introduction to Intercultural 3
CMST 103H $\begin{array}{lll}\text { Honors Introduction to Intercultural } \\ \text { Communication }\end{array}$
CMST 206 Gender Communication 3

- or -

CMST 206H Honors Gender Communication 3
CMPR 100 The Computer and Society 3
CNSL 150 Introduction to Human Services 3
CJ 101 Introduction to Criminal Justice 3
CJ 101H Honors Introduction to Criminal Justice 3
ECON 120 Principles/Macro 3
ECON 121 Principles/Micro 3

ENGL 104 Language and Culture 3

- or -

ENGL 104H Honors Language and Culture 3
ENGL $245 \begin{aligned} & \text { The Image of African Americans in Literature } \\ & \text { and Films }\end{aligned}$
ENGL 278 Survey of Literature by Women 3

| ENVR 200 | Environment of Man | 3 |
| :---: | :---: | :---: |
| ETHN 101 | Introduction to Ethnic Studies | 3 |
|  | - or - |  |
| ETHN 101H | Honors Introduction to Ethnic Studies | 3 |
| ETHN 102 | The Borderlands: Cultural Context and Intercultural Relations | 3 |
|  | - or - |  |
| GEOG 100 | World Regional Geography | 3 |
| ETHN 102H | - or - <br> Honors the Borderlands: Cultural Context and Intercultural Relations | 3 |
| GEOG 100H | Honors World Regional Geography | 3 |
| GEOG 102 | Cultural Geography | 3 |
| GEOG 140 | California Geography | 3 |
| HIST 101 | World Civilizations to the 16th Century |  |
|  | - or - |  |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century | 3 |
| HIST 102H | - or - <br> Honors World Civilizations Since the 16th Century | 3 |
| HIST 105 | Ancient Mesoamerican Civilization | 3 |
| HIST 118 | Social and Cultural History of the United States | 3 |
| HIST 120 | The United States to 1865 | 3 |
|  | - or - |  |
| HIST 120H | Honors The United States to 1865 | 3 |
| HIST 121 | The United States since 1865 | 3 |
|  | - or - |  |
| HIST 121H | Honors The United States since 1865 | 3 |
| HIST 123 | African American History to 1865 | 3 |
| HIST 124 | Mexican American History in the United States | 3 |
| HIST 124H | - or - <br> Honors Mexican American History in the United States | 3 |
| HIST 125 | Native Americans in the U.S. | 3 |
| HIST 127 | Women in U.S. History | 3 |
| HIST 146 | African American History from 1863 to the Present | 3 |
| HIST 150 | Latin American Civilization to Independence | 3 |
| HIST 151 | Modern Latin American Civilization | 3 |
| HIST 153 | History of Mexico | 3 |
| HIST 163 | Introduction to Southeast Asian History | 3 |
| HIST 181 | Survey of Chicana/Latina Women's History | 3 |
| IDS 117H | Honors Introduction to Global Studies | 3 |
| IDS 155 | Human Sexuality | 3 |
| KNPR 150 | Sport and Society | 3 |
| LAW 100 | Introduction to Legal Studies | 3 |
| POLT 101 | Introduction to American Governments | 3 |
|  | - or - |  |
| POLT 101H | Honors Introduction to American Governments | 3 |
| POLT 200 | American Political Thought | 3 |
|  | - or - |  |
| POLT 200H | Honors American Political Thought | 3 |
| POLT 201 | Introduction to Comparative Politics | 3 |
| POLT 220 | International Politics | 3 |
| POLT 235 | Identity Politics | 3 |



## Note: Although a course may be listed in more than one area of

 emphasis of the Liberal Arts degree, it may only be used to meet a requirement for a single emphasis.
## 150 INSTRUCTIONAL PROGRAMS

## LIBRARY TECHNOLOGY

## Library Technology Degree

## Program code: sac.libr.aa

The associate degree curriculum in library technology is designed to successfully prepare students for employment above the beginning clerk level as paraprofessionals in school, public, special, or academic libraries. Course content covers terminology, organization, procedures, standards, practices, and fieldwork. Entry-level positions are available in this field as library technical assistants, library assistants, library technicians and library media technicians.
Learning Outcome(s):

1. Students will apply knowledge and skills gained through all required courses to perform library technician level tasks in various types of libraries
2. Students will identify and differentiate the roles and be able to perform job duties of technicians in a library organization
3. Students will successfully prepare for employment above the beginning clerk level as paraprofessionals in school, public, special or academic libraries.
To receive a Certificate in Library Technology, a grade of "C," or better is required for each major course. Library Technology 053 is the only Pass/No Pass course of the program. LT 053 requires a "Pass" grade.
Required Core Courses:
LIBR 101 * Introduction to Library Technology 3
LIBR 110* Technical Services 3
LIBR 054* Children's Library Services 3
LIBR 122* Public Services 3

| LIBR 102 * | Information Sources for Paraprofessionals: <br> Tools and Techniques | 3 |
| :--- | :--- | :--- |

LIBR 053 Library Internship 3
BA 125 Microsoft Word 2
BA 179 Introduction to Microsoft Office 3
Electives 6

Electives must be selected from the following courses: Units
ACCT 010 Accounting Procedures 3
BA 160 Microsoft Publisher 2
BA 164 Adobe Photoshop 3
BA 166 Adobe Illustrator 3

| BA 169 | Adobe Dreamweaver | 3 |
| :--- | :--- | :--- |
| CMST 101 | Introduction to Interpersonal Communication | 3 |


| CMST 101H | Honors Introduction to Interpersonal <br> Communication |
| :--- | :--- |

CMST 103 Introduction to Intercultural Communication 3

- or -

CMST 103H | Honors Introduction to Intercultural |
| :--- |
| Communication |

| CMST 104 | Listening | 1.5 |
| :--- | :--- | :--- |

CMPR 173 Introduction to Networking Technology 3
EDUC 100 Introduction to Education 3
ENGL 270 Children's Literature 3
CDEV 107 Child Growth and Development (DS1) 3

CDEV 120A Development of the School-Age Child (DS5) 3
CDEV 221 Living and Teaching in a Diverse Society 3
CDEV 231 Developing Language and Literacy in Young
Children

| LIBI 100 | Library Research Fundamentals | 1 |
| :--- | :--- | :---: |
| MGMT 121 | Human Relations and Organizational Behavior | 3 |
| MGMT 120 | Principles of Management | 3 |
| MGMT 122 | Business Communications | 3 |
| MGMT 125 | Organizational Leadership | 3 |
| PSYC 100 | Introduction to Psychology | 3 |
|  | -or - |  |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| PSYC 140 | Introduction to Psychology of Adulthood | 3 |
| PSYC 157 | Introduction to Child Psychology | 3 |
| PSYC 170 | Multicultural Psychology | 3 |

Total Units 26-27
*Course not taught every semester

## Library Technology Certificate (Transcripted) Program code: sac.libr.ca

The certificate curriculum in library technology is designed to successfully prepare students for employment above the beginning clerk level as paraprofessionals in school, public, special, or academic libraries. Course content covers terminology, organization, procedures, standards, practices, and fieldwork. Entry-level positions are available in this field as library technical assistants, library assistants, library technicians and library media technicians

## Learning Outcome(s):

1. Students will apply knowledge and skills gained through all required courses to perform library technician level tasks in various types of libraries
2. Students will identify and differentiate the roles and be able to perform job duties of technicians in a library organization
3. Students will successfully prepare for employment above the beginning clerk level as paraprofessionals in school, public, special or academic libraries.
To receive a Certificate in Library Technology, a grade of " C ," or better is required for each major course. Library Technology 053 is the only
Pass/No Pass course of the program. LT 053 requires a "Pass" grade.
LIBR 101* Introduction to Library Technology 3
LIBR 110* Technical Services 3
LIBR 122 * Public Services 3
LIBR 054 * Children's Library Services 3
LIBR 102 * Information Sources for Paraprofessionals: $\begin{aligned} & \text { Tools and Techniques }\end{aligned}$

| LIBR 053 | Library Internship | 3 |
| :--- | :--- | :--- |
| BA 125 | Microsoft Word | 2 |

B

BA 179
Introduction to Microsoft Office
3
Total Units 20-21

## MANAGEMENT

## Management Degree

## Program code: sac.mgt.aa

The associate degree curriculum in management is designed to prepare students for various management positions in business, government, and public organizations; to aid existing managers in upgrading their skills; and to assist employees for promotion to management/supervision positions. The core of the degree program provides the student with managerial skills and theory including communicating, decision-making, organizing, motivating, and human relations.

## Learning Outcome(s):

Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling; demonstrate a thorough understanding of behavioral theories as they apply to organizations and be able to apply that theory to real-world situations; and demonstrate an ability to apply planning methods to business and organizational situations.
Required Core Courses: Units

| BUS 100 | Fundamentals of Business | 3 |
| :--- | :--- | ---: |
| BUS 222 | Business Writing | 3 |
| BUS 120 | Principles of Management | 3 |
|  | - or - |  |
| MGMT 120 | Principles of Management | 3 |
| BUS 121 | Human Relations and Organizational Behavior | 3 |

MGMT 121 Human Relations and Organizational Behavior 3

MGMT 125 Organizational Leadership
Select TWO courses from the following:
ACCT 101 Financial Accounting
BUS 105 Legal Environment of Business 3

| BUS 106 | Culture and International Business - Kiss, Bow <br> or Shake Hands | 3 |
| :--- | :--- | :--- |

BUS 125 Introduction to International Business 3

BUS 150 Introduction to Information Systems and
MGMT 135 Human Resource Management 3

## MKTG 113 Principles of Marketing

Total Units 21-22

## Management Certificate (Transcripted)

## Program code: sac.mgt.ca

The certificate curriculum in management is designed to prepare students for various management positions in business, government, and public organizations; to aid existing managers in upgrading their skills; and to assist employees for promotion to management/ supervision positions. The core courses provide students with managerial skills and theory including communicating, decisionmaking, organizing, motivating, and human relations. The student can gain practical skills in a specific area by specializing in human resource management, supervision, or small business management.
Learning Outcome(s):
Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling; demonstrate a thorough understanding of behavioral theories as they apply to organizations and be able to apply that theory to real-world situations; and demonstrate an ability to apply planning methods to business and organizational situations.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| BUS 100 | Fundamentals of Business | 3 |
| BUS 120 | Principles of Management | 3 |
|  | - or - |  |
| MGMT 120 | Principles of Management | 3 |
| BUS 121 | Human Relations and Organizational Behavior | 3 |
|  | - or- |  |
| MGMT 121 | Human Relations and Organizational Behavior | 3 |
| BUS 222 | Business Writing | 3 |
|  | - or- |  |
| MGMT 122 | Business Communications | 3 |
| MGMT 125 | Organizational Leadership | 3 |
| Select TWO courses from the following: |  | Units |
| ACCT 101 | Financial Accounting | 4 |
| BUS 105 | Legal Environment of Business | 3 |
| BUS 106 | Culture and International Business - Kiss, Bow or Shake Hands | 3 |
| BUS 125 | Introduction to International Business | 3 |
| BUS 150 | Introduction to Information Systems and Applications | 3 |
| MGMT 135 | Human Resource Management | 3 |
| MKTG 113 | Principles of Marketing | 3 |

## Retail Management Degree

## Program code: sac.mgtre.as

The Associate Degree program is approved by the Western Association of Food Chains, and persons completing the prescribed courses are eligible to receive both the ECC Certificate of Competence and the WAFC Retail Management Certificate
The WAFC Retail Management Degree is a specially recognized program designed to prepare individuals for the fast-paced retail industry. This program is also intended to help students develop an understanding of the retail manager's job and the requirements for success in the retail environment.
Learning Outcome(s):
Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling; demonstrate a thorough understanding of behavioral theories as they apply to organizations and be able to apply that theory to real-world situations; and demonstrate an ability to apply planning methods to business and organizational situations.

| Complete the following courses: | Units |  |
| :--- | :--- | ---: |
| ACCT 101 | Financial Accounting | 4 |
| BUS 120 | Principles of Management | 3 |
|  | - or- |  |
| MGMT 120 | Principles of Management | 3 |
| BUS 121 | Human Relations and Organizational Behavior | 3 |
|  | - or- |  |
| MGMT 121 | Human Relations and Organizational Behavior | 3 |
| BUS 222 | Business Writing | 3 |
|  | - or- |  |
| MGMT 122 | Business Communications | 3 |
| CMPR 100 | The Computer and Society | 3 |
| MGMT 135 | Human Resource Management |  |
| MKTG 111 | Principles of Retailing | 3 |
| MKTG 113 | Principles of Marketing |  |
|  |  | Total Units |

## 152 INSTRUCTIONAL PROGRAMS

## Retail Management Certificate (Transcripted)

## Program code: sac.mgtrt.ca

The program is approved by the Western Association of Food Chains (WAFC), and persons completing the prescribed courses are eligible to receive both the ECC Certificate of Competence and the WAFC Retail Management Certificate.
The WAFC Retail Management Certificate is a specially recognized program designed to prepare individuals for the fast-paced retail industry. This program is also intended to help students develop an understanding of the retail manager's job and the requirements for success in the retail environment.

## Learning Outcome(s):

Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling as well as demonstrate a thorough knowledge and comprehension of the key marketing areas that affect retail organizations.
Complete the following courses:

| ACCT 101 | Financial Accounting/ | 4 |
| :--- | :--- | :--- |
| BUS 120 | Principles of Management | 3 |
|  | - or - | 3 |
| MGMT 120 | Principles of Management | 3 |
| BUS 121 | Human Relations and Organizational Behavior |  |
|  | - or - | 3 |
| MGMT 121 | Human Relations and Organizational Behavior | 3 |
| BUS 222 | Business Writing |  |
|  | - or - | 3 |
| MGMT 122 | Business Communications | 3 |
| MGMT 135 | Human Resource Management | 3 |
| MKTG 111 | Principles of Retailing | 3 |
| MKTG 113 | Principles of Marketing | Total Units |
|  |  | $\mathbf{2 5}$ |

Human Resource Management Certificate (Untranscripted)

## Program code: sac.mgthr.cert

The Human Resources Management Certificate is designed to prepare students for human resources management positions in business, government, and other organizations; to aid existing managers in upgrading human resource management skills; and to assist employees for promotion to management/supervision positions. The certificate program provides the student with practical managerial skills and theory. Learning Outcome(s):
Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling;
demonstrate a thorough understanding of behavioral theories as they apply to organizations and be able to apply that theory to real-world situations; and acquire a thorough knowledge and comprehension of the key legal areas that apply to managing people and organizations, along with an ability to evaluate and assess the ethical ramifications of their actions.
Required Core Courses:

| BUS 105 | Legal Environment of Business | 3 |
| :---: | :---: | :---: |
| BUS 120 | Principles of Management | 3 |
|  | - or - |  |
| MGMT 120 | Principles of Management | 3 |
| BUS 121 | Human Relations and Organizational Behavior | 3 |
|  | - or - |  |
| MGMT 121 | Human Relations and Organizational Behavior | 3 |
| MGMT 135 | Human Resource Management | 3 |
|  | Total Units | 12 |

Units

Units

## Small Business Certificate (Untranscripted) Program code: sac.mgtsb.cert

The certificate in small business management is designed to prepare students for owning or operating a small business or organization. The core of the certificate provides the student with planning, organizing, leading and controlling skills and theory including communicating, decision-making, organizing, motivating, and human relations. The certificate program provides practical business management skills for the student.
Learning Outcome(s):
Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling as well as acquire the ability to apply planning methods to small business situations.
Required Core Courses: Units

| ACCT 035 | QuickBooks | 2 |
| :--- | :--- | :--- |
| BUS 120 | Principles of Management | 3 |

 and to assist employees for promotion to management/supervision positions. The certificate program provides practical skills for the student to use on the job.

## Learning Outcome(s):

Students will demonstrate an understanding of the core management functions of planning, organizing, leading, and controlling as well as demonstrate a thorough understanding of behavioral theories as they apply to organizations and be able to apply that theory to real-world situations.
Required Core Courses: Units
BUS 120 Principles of Management 3

- or -

MGMT 120 Principles of Management 3
BUS 121 Human Relations and Organizational Behavior $\quad 3$

- or -

| MGMT 121 | Human Relations and Organizational Behavior | 3 |
| :--- | :--- | :--- |
| BUS 222 | Business Writing | 3 |

BUS 222 Business Writing

- or -

MGMT 122 Business Communications $\quad 3$

| MGMT 125 | Organizational Leadership |  | 3 |
| :--- | :--- | :--- | ---: |
|  |  | Total Units | 12 |

## MANUFACTURING TECHNOLOGY

## CNC Lathe Set Up and Operation Option Degree

## Program code: sac.mngla.as

In addition to the general education requirements, the associate degree curriculum in manufacturing technology computer numerical control machine set up and operation is designed to prepare the student for entry or advancement in the CNC Machine Operator Specialty of manufacturing technology.
Learning Outcome(s):
Students will set up and operate a CNC Lathe to industrial standards.
Required Core Courses: Units

| MNFG 111 | Basic Mechanical Blueprint Reading | 2 |
| :--- | :--- | ---: |
| MNFG 114 | Geometric Dimensioning and Tolerancing | 3 |
| MNFG 153 | Technical Mathematics | 3 |
| MNFG 158 | Basic Machining Concepts and Operation | 3 |
| MNFG 171 | CNC Program Writing | 4 |
| Specific Major Course Requirements: | Units |  |
| MNFG 096 | Manufacturing Technology Lab | 1 |
| MNFG 159 | Advanced Turning Concepts and Operations |  |
| MNFG 176 | CNC Turning Center Set Up and Operation | 3 |
| MNFG 178 | Mastercam Lathe | 3 |
| MNFG 186 | Advanced CNC Lathe Programing, Set Up and | 3 |
| Select nine units from the following electives: | Units |  |
| MNFG 103 | Solidworks Basic Solid Modeling | 3 |
| MNFG 104 | Solidworks Intermediate Solid Modeling | 3 |
| MNFG 105 | Solidworks Advanced Solid Modeling | 3 |
| MNFG 106 | Solidworks Drawings | 3 |
| MNFG 128 | Basic Metals Technology | 3 |
| MNFG 173 | Mastercam 2D Geometry, 2D Toolpaths | 3 |
| MNFG 174 | CNC Milling Center Set Up and Operation | 3 |
| MNFG 175 | Mastercam 3D Geometry, 3D Surfaces | 3 |
| MNFG 177 | Mastercam 3D Toolpath and CAM Applications | 3 |
| MNFG 184 | Advanced CNC Mill Set Up and Operation | 3 |
| MNFG 194 | CNC Horizontal Mill Setup and Operation | 3 |
| WELD 108 | Oxyacetylene-Arc Welding | 3 |
|  |  | Total Units |

## CNC Lathe Set Up and Operation Option Certificate (Transcripted)

Program code: sac.mngla.ca
The certificate of achievement curriculum in manufacturing technology, computer numerical control machine set up and operation is designed to prepare the student for entry or advancement in the CNC Machining Industry.
Learning Outcome(s):
Students will set up and operate a CNC Lathe to industrial standards.
Required Core Courses:
Units
MNFG 111 Basic Mechanical Blueprint Reading 3
MNFG 114 Geometric Dimensioning and Tolerancing 3
MNFG 153 Technical Mathematics 3
MNFG 158 Basic Machining Concepts and Operation 3
MNFG 171 CNC Program Writing 4
Specific Major Course Requirements: Units
MNFG 096 Manufacturing Technology Lab
1
MNFG 159 Advanced Turning Concepts and Operations 3

| MNFG 176 | CNC Turning Center Set Up and Operation | 3 |
| :--- | :--- | ---: |
| MNFG 178 | Mastercam Lathe | 3 |
| MNFG 186 | Advanced CNC Lathe Programing, Set Up and | 3 |
| Select nine units from the following electives: | Units |  |
| MNFG 103 | Solidworks Basic Solid Modeling | 3 |
| MNFG 104 | Solidworks Intermediate Solid Modeling | 3 |
| MNFG 105 | Solidworks Advanced Solid Modeling | 3 |

MNFG 106 Solidworks Drawings 3
MNFG 128 Basic Metals Technology 3

MNFG 173 Mastercam 2D Geometry, 2D Toolpaths 3
MNFG 174 CNC Milling Center Set Up and Operation 3
MNFG 175 Mastercam 3D Geometry, 3D Surfaces
MNFG 177 Mastercam 3D Toolpath and CAM Applications 3
MNFG 184 Advanced CNC Mill Set Up and Operation 3
MNFG 194 CNC Horizontal Mill Setup and Operation
WELD 108 Oxyacetylene-Arc Welding 3
Total Units

## CNC Machine Set Up and Operation Option Degree

## Program code: sac.mngma.as

In addition to the general education requirements, the associate degree curriculum in manufacturing technology computer numerical control machine set up and operation is designed to prepare the student for entry or advancement in the CNC Machine Operator Specialty of manufacturing technology. Learning Outcome(s):
Students will set up and operate CNC Machines to industrial standards.
Required Core Courses: Units MNFG 111 Basic Mechanical Blueprint Reading 2
MNFG 114 Geometric Dimensioning and Tolerancing 3
MNFG 153 Technical Mathematics 3
MNFG 158 Basic Machining Concepts and Operation 3
MNFG 171 CNC Program Writing 4
Specific Major Course Requirements:
MNFG 159 Advanced Turning Concepts and Operations 3
MNFG 168 Advanced Milling Concepts and Operations 3
MNFG 174 CNC Milling Center Set Up and Operation 3
MNFG 176 CNC Turning Center Set Up and Operation 3
MNFG 194 CNC Horizontal Mill Setup and Operation 3
Select six units from the following electives:
MNFG 103 Solidworks Basic Solid Modeling 3
MNFG 104 Solidworks Intermediate Solid Modeling 3
MNFG 105 Solidworks Advanced Solid Modeling 3
MNFG 106 Solidworks Drawings 3
MNFG 128 Basic Metals Technology 3
MNFG 173 Mastercam 2D Geometry, 2D Toolpaths 3
MNFG 175 Mastercam 3D Geometry, 3D Surfaces 3
MNFG 178 Mastercam Lathe 3
MNFG 184 Advanced CNC Mill Set Up and Operation 3
MNFG $186 \begin{aligned} & \text { Advanced CNC LathePrograming, Set Up and } \\ & \text { Operation }\end{aligned}$
WELD 108 Oxyacetylene-Arc Welding 3
Total Units $\quad 36$

## CNC Machine Set Up and Operation Option Certificate (Transcripted) <br> Program code: sac.mngma.ca

The certificate of achievement curriculum in manufacturing technology computer numerical control machine set up and operation is designed to prepare the student for entry or advancement in the CNC Machine Operator Specialty of manufacturing technology.

## Learning Outcome(s):

Students will set up and operate CNC Machines to industrial standards.
Required Core Courses: Units

| MNFG 111 | Basic Mechanical Blueprint Reading | 2 |
| :--- | :--- | ---: |
| MNFG 114 | Geometric Dimensioning and Tolerancing | 3 |
| MNFG 153 | Technical Mathematics | 3 |
| MNFG 158 | Basic Machining Concepts and Operation | 3 |
| MNFG 171 | CNC Program Writing | 4 |
| Specific Major Course Requirements: |  |  |
| MNFG 096 | Manufacturing Technology Lab | 1.5 |
| MNFG 159 | Advanced Turning Concepts and Operations | 3 |
| MNFG 168 | Advanced Milling Concepts and Operations | 3 |
| MNFG 174 | CNC Milling Center Set Up and Operation | 3 |
| MNFG 176 | CNC Turning Center Set Up and Operation | 3 |
| MNFG 194 | CNC Horizontal Mill Setup and Operation | 3 |

Select six units from the following electives: Units
MNFG 103 Solidworks Basic Solid Modeling 3
MNFG 106 Solidworks Drawings 3
MNFG 128 Basic Metals Technology 3

MNFG 173 Mastercam 2D Geometry, 2D Toolpaths 3
MNFG 175 Mastercam 3D Geometry, 3D Surfaces 3
MNFG 177 Mastercam 3D Toolpath and CAM Applications 3
MNFG 178 Mastercam Lathe 3
MNFG 184 Advanced CNC Mill Set Up and Operation 3
MNFG 186 Advanced CNC LathePrograming, Set Up and 3
WELD 108 Oxyacetylene-Arc Welding 3
Total Units $\quad 37.5$
CNC Milling Machine Set Up and Operation Option Degree
Program code: sac.mngmi.as
In addition to the general education requirements, the associate degree curriculum in manufacturing technology computer numerical control machine set up and operation is designed to prepare the student for entry or advancement in the CNC Machine Operator Specialty of manufacturing technology.
Learning Outcome(s):
Students will set up and operate a CNC Mill to industrial standards.
Required Core Courses:
Units
MNFG 111 Basic Mechanical Blueprint Reading
MNFG 114 Geometric Dimensioning and Tolerancing 3
MNFG 153 Technical Mathematics 3
MNFG 158 Basic Machining Concepts and Operation 3
MNFG 171 CNC Program Writing
Specific Major Course Requirements:
Units

| MNFG 168 | Advanced Milling Concepts and Operations | 3 |
| :--- | :--- | :--- |
| MNFG 173 | Mastercam 2D Geometry, 2D Toolpaths | 3 |
| MNFG 174 | CNC Milling Center Set Up and Operation | 3 |
| MNFG 184 | Advanced CNC Mill Set Up and Operation | 3 |

MNFG 194 CNC Horizontal Mill Setup and Operation 3

MNFG 195 Mastercam 5 Axis Mill Toolpath and Application 3
Select six units from the following electives: Units
MNFG 103 Solidworks Basic Solid Modeling 3
MNFG 104 Solidworks Intermediate Solid Modeling 3
MNFG 105 Solidworks Advanced Solid Modeling 3
MNFG 106 Solidworks Drawings 3
MNFG 128 Basic Metals Technology 3
MNFG 159 Advanced Turning Concepts and Operations 3
MNFG 175 Mastercam 3D Geometry, 3D Surfaces 3
MNFG 176 CNC Turning Center Set Up and Operation 3
MNFG 177 Mastercam 3D Toolpath and CAM Applications 3
MNFG 178 Mastercam Lathe 3
MNF Advanced CNC Lathe Programing, Set Up and
WELD 108 Oxyacetylene-Arc Welding 3

Total Units 39
CNC Milling Machine Set Up and Operation Option
Certificate (Transcripted)
Program code: sac.mngmi.ca
The certificate of achievement curriculum in manufacturing technology computer numerical control machine set up and operation is designed to prepare the student for entry or advancement in the CNC Milling Machine Operator Specialty of manufacturing technology.
Learning Outcome(s):
Students will set up and operate a CNC Mill to industrial standards.
Required Core Courses: Units
MNFG 111 Basic Mechanical Blueprint Reading 2
MNFG 114 Geometric Dimensioning and Tolerancing 3
MNFG 153 Technical Mathematics 3
MNFG 158 Basic Machining Concepts and Operation 3
MNFG 171 CNC Program Writing 4
Specific Major Course Requirements: Units
MNFG 096 Manufacturing Technology Lab 2
MNFG 168 Advanced Milling Concepts and Operations 3
MNFG 173 Mastercam 2D Geometry, 2D Toolpaths 3
MNFG 174 CNC Milling Center Set Up and Operation 3
MNFG 184 Advanced CNC Mill Set Up and Operation 3
MNFG 194 CNC Horizontal Mill Setup and Operation 3
MNFG 195 Mastercam 5 Axis Mill Toolpath and Application 3
Select three units from the following electives: Units
MNFG 103 Solidworks Basic Solid Modeling 3
MNFG 106 Solidworks Drawings 3
MNFG 128 Basic Metals Technology 3
MNFG 159 Advanced Turning Concepts and Operations 3
MNFG 175 Mastercam 3D Geometry, 3D Surfaces 3
MNFG 176 CNC Turning Center Set Up and Operation 3
MNFG 177 Mastercam 3D Toolpath and CAM Applications 3
MNFG 178 Mastercam Lathe 3
MNFG 186 Advanced CNC Lathe Programing, Set Up and 3
WELD 108 Oxyacetylene-Arc Welding 3
Total Units
38

## CNC Programmer A-Mastercam Option Degree

## Program code: sac.mngpa.as

In addition to the general education requirements, the associate degree curriculum in manufacturing technology-computer numerical control programmer A (Mastercam) is designed to prepare the student for entry or advancement in the CNC programming specialty of the machine tool field.
Learning Outcome(s):
Students will prepare CNC programs to industrial standards.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| MNFG 111 | Basic Mechanical Blueprint Reading | 2 |
| MNFG 114 | Geometric Dimensioning and Tolerancing | 3 |
| MNFG 153 | Technical Mathematics | 3 |
| MNFG 158 | Basic Machining Concepts and Operation | 3 |
| MNFG 171 | CNC Program Writing | 4 |
| Specific Major Course Requirements: | Units |  |
| MNFG 173 | Mastercam-2D Geometry, 2D Toolpaths | 3 |
| MNFG 174 | CNC Milling Center Set Up and Operation | 3 |
| MNFG 175 | Mastercam-3D Geometry, 3D Surfaces | 3 |
| MNFG 176 | CNC Turning Center Set Up and Operation | 3 |
| MNFG 177 | Mastercam-3D Toolpath and CAM Applications | 3 |
| MNFG 178 | Mastercam Lathe | 3 |
| MNFG 195 | Mastercam 5 Axis Mill Toolpath and Application | 3 |
| Select three units from the following electives: | Units |  |
| MNFG 103 | Solidworks Basic Solid Modeling | 3 |
| MNFG 104 | Solidworks Intermediate Solid Modeling | 3 |
| MNFG 105 | Solidworks Advanced Solid Modeling | 3 |
| MNFG 106 | Solidworks Drawings | 3 |
| MNFG 128 | Basic Metals Technology | 3 |
| MNFG 130A | CATIA Solid Modeling I | 3 |
| MNFG 130B | CATIA Solid Modeling II | 3 |
| MNFG 159 | Advanced Turning Concepts and Operations | 3 |
| MNFG 168 | Advanced Milling Concepts and Operations | 3 |
| MNFG 184 | Advanced CNC Mill Set Up and Operation | 3 |
| MNFG 186 | Advanced CNC LathePrograming, Set Up and | 3 |
| Operation |  | 3 |

## CNC Programmer A-Mastercam Option Certificate (Transcripted)

## Program code: sac.mngpa.ca

The certificate of achievement curriculum in manufacturing technology computer numerical control programmer A (Mastercam) is designed to prepare the student for entry or advancement in the CNC programming specialty of Manufacturing Technology.
Learning Outcome(s):
Students will prepare CNC programs to industrial standards.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| MNFG 111 | Basic Mechanical Blueprint Reading | 2 |
| MNFG 114 | Geometric Dimensioning and Tolerancing | 3 |
| MNFG 153 | Technical Mathematics | 3 |
| MNFG 158 | Basic Machining Concepts and Operation | 3 |
| MNFG 171 | CNC Program Writing Specific Major Course | 4 |
|  | Manufacturing Technology Lab | 2 |
| MNFG 173 | Mastercam-2D Geometry, 2D Toolpaths | 3 | 3


| MNFG 174 | CNC Milling Center Set Up and Operation | 3 |
| :---: | :---: | :---: |
| MNFG 175 | Mastercam-3D Geometry, 3D Surfaces | 3 |
| MNFG 176 | CNC Turning Center Set Up and Operation | 3 |
| MNFG 177 | Mastercam-3D Toolpath and CAM Applications | 3 |
| MNFG 178 | Mastercam Lathe | 3 |
| MNFG 195 | Mastercam 5 Axis Mill Toolpath and Application | 3 |
| Select three | units from the following electives: | Units |
| MNFG 103 | Solidworks Basic Solid Modeling | 3 |
| MNFG 106 | Solidworks Drawings | 3 |
| MNFG 128 | Basic Metals Technology | 3 |
| MNFG 130A | CATIA Solid Modeling I | 3 |
| MNFG 130B | CATIA Solid Modeling II | 3 |
| MNFG 159 | Advanced Turning Concepts and Operations | 3 |
| MNFG 168 | Advanced Milling Concepts and Operations | 3 |
| MNFG 184 | Advanced CNC Mill Set Up and Operation | 3 |
| MNFG 186 | Advanced CNC Lathe Programing, Set Up and Operation | 3 |
| MNFG 194 | CNC Horizontal Mill Setup and Operation | 3 |
|  | Total Units | 41 |
| Conventional Machining Option Degree |  |  |
| Program code: sac.mngcm.as |  |  |
| addition to the general education requirements, the associate |  |  | degree in manufacturing technology, conventional machining, is designed to prepare the student for entry or advancement in the conventional machine tool operation specialty.

## Learning Outcome(s):

Students will set up and operate conventional machines to industrial standards.
Required Core Courses: Units
MNFG 111 Basic Mechanical Blueprint Reading 2
MNFG 114 Geometric Dimensioning and Tolerancing 3
MNFG 153 Technical Mathematics 3
MNFG 158 Basic Machining Concepts and Operation 3
MNFG 171 CNC Program Writing 4
Specific Major Course Requirements: Units
MNFG 159 Advanced Turning Concepts and Operations 3
MNFG 168 Advanced Milling Concepts and Operations 3
MNFG 169 Job Shop Skills 3
WELD 108 Oxyacetylene-Arc Welding 3
Select six units from the following electives: Units
MNFG 103 Solidworks Basic Solid Modeling 3
MNFG 106 Solidworks Drawings 3
MNFG 128 Basic Metals Technology 3
MNFG 173 Mastercam 2D Geometry, 2D Toolpaths 3
MNFG 174 CNC Milling Center Set Up and Operation 3
MNFG 176 CNC Turning Center Set Up and Operation 3
MNFG 177 Mastercam 3D Toolpath and CAM Applications 3
MNFG 178 Mastercam Lathe 3
MNFG 184 Advanced CNC Mill Set Up and Operation 3
MNFG $186 \begin{aligned} & \text { Advanced CNC Lathe Programing, Set Up and } \\ & \text { Operation }\end{aligned}$
MNFG 194 CNC Horizontal Mill Setup and Operation 3

## Conventional Machining Option Certificate (Transcripted)

## Program code: sac.mngcm.ca

The certificate of achievement curriculum in manufacturing technology, conventional machining, is designed to prepare the student for entry or advancement in the conventional machine tool operation field.

## Learning Outcome(s):

Students will set up and operate conventional machines to industrial standards.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| MNFG 111 | Basic Mechanical Blueprint Reading | 2 |
| MNFG 114 | Geometric Dimensioning and Tolerancing | 3 |
| MNFG 153 | Technical Mathematics | 3 |
| MNFG 158 | Basic Machining Concepts and Operation | 3 |
| MNFG 171 | CNC Program Writing | 4 |
| Specific Major Course Requirements: |  | Units |
| MNFG 159 | Advanced Turning Concepts and Operations | 3 |
| MNFG 168 | Advanced Milling Concepts and Operations | 3 |
| MNFG 169 | Job Shop Skills | 3 |
| WELD 108 | Oxyacetylene-Arc Welding | 3 |
| Select six units from the following electives: |  | Units |
| MNFG 103 | Solidworks Basic Solid Modeling | 3 |
| MNFG 106 | Solidworks Drawings | 3 |
| MNFG 128 | Basic Metals Technology | 3 |
| MNFG 173 | Mastercam 2D Geometry, 2D Toolpaths | 3 |
| MNFG 174 | CNC Milling Center Set Up and Operation | 3 |
| MNFG 176 | CNC Turning Center Set Up and Operation | 3 |
| MNFG 177 | Mastercam 3D Toolpath and CAM Applications | 3 |
| MNFG 178 | Mastercam Lathe | 3 |
| MNFG 184 | Advanced CNC Mill Set Up and Operation | 3 |
| MNFG 186 | Advanced CNC Lathe Programing, Set Up and Operation | 3 |
| MNFG 194 | CNC Horizontal Mill Setup and Operation | 3 |
|  | Total Units | 33 |

## 3D Solid Modeling Certificate (Untranscripted)

## Program code: sac.mng3d.cert

The certificate curriculum is designed for students who would like to earn certification of proficiency in the use of the Solidworks 3D Solid Modeling software.
Learning Outcome(s):
Students will create 3D solid models using the Solidworks software.
Required Core Courses: Units

| MNFG 103 | Solidworks Basic Solid Modeling | 3 |
| :--- | :--- | :---: |
|  | -or- | 3 |
| ENGR 103 | Solidworks Basic Solid Modeling | 3 |
| MNFG 104 | Solidworks Intermediate Solid Modeling <br> ENGR 104 | Solidworks Intermediate Solid Modeling |
| MNFG 105 | Solidworks Advanced Solid Modeling <br> -or - | 3 |
| ENGR 105 | Solidworks Advanced Solid Modeling | 3 |
| MNFG 106 | Solidworks Drawings | 3 |
|  |  | 3 |

## Medical Device Quality Assurance Certificate (Transcripted) <br> Program code: sac.mngmd.ca

A certificate in the Medical Device Quality Assurance program prepares students for prospective careers in the manufacturing, development, and/or design of medical devices, depending on work experiences and academic skill sets. Students will gain knowledge of FDA requirements for Good Manufacturing Practice (GMP) and Good Laboratory Practice (GLP) enhanced by experienced lecture materials, in-class workshops, presentation exercises, laboratory demonstrations, and exposure to other manufacturing technology disciplines. Students will have hands-on lessons to develop skills needed in the production or laboratory setting. Students will be prepared for entry level positions in medical device repairs, and medical device preparations, such as Medical Device Assembler, Medical Device Inspector, and Medical Equipment Repairer.
Learning Outcome(s):
Students will be able to work in the field of medical device industry as a medical device assembler, medical device inspector and medical equipment repairer.
Required Core Courses: Units
MNFG 111 Basic Mechanical Blueprint Reading 2

| MNFG 114 | Geometric Dimensioning and Tolerancing | 3 |
| :--- | :--- | :--- |

MNFG 153 Technical Mathematics 3
MNFG 116 QC Operations with Verisurf Software 3
MNFG 117 QC Operations with PC-DMIS CMM-1 3
MNFG 120 Introduction to Medical Device Quality 2
MNFG 121 Quality Control for Medical Devices 2
Total Units 18

## Quality Control and Inspection Certificate (Transcripted)

## Program code: sac.mngqc.ca

A certificate in Quality Control and Inspection prepares students for various quality inspector positions, as well as an introduction to various quality concepts that support inspection positions, such as inspection planning, calibration systems, sampling, quality tools including SPC, and their implementation, auditing, corrective, and preventive action, and customer, and supplier relationships.
Program includes the operation of PC-DMIS CMM software.
Learning Outcome(s):
Students will be able to work in the area of Inspection planning, calibration systems, and sampling.
Required Core Courses: Units
MNFG 111 Basic Mechanical Blueprint Reading 2
MNFG 114 Geometric Dimensioning and Tolerancing 3
MNFG 128 Basic Metals Technology 3
MNFG 153 Technical Mathematics 3
MNFG 115 QC1 Quality Inspection 3
MNFG 116 QC Operations with Verisurf Software 3
MNFG 117 QC Operations with PC-DMIS CMM-1 3
MNFG 118 QC Operations with PC-DMIS CMM-2 3

| MNFG 119 | QC2: Quality Theory | 3 |
| :--- | :--- | :--- | :--- |
|  | Total Units | $\mathbf{2 6}$ |

## MARKETING

The Contemporary Marketing Degree and Certificate programs are designed to prepare students for careers in marketing and to assist existing marketing managers and professionals in upgrading their skills. New career opportunities in marketing will be highlighted. The courses include the latest concepts, techniques and technology used to successfully develop, price, promote, and distribute products and services in a global economy. The program provides students with cutting-edge practical and applicable marketing skills for New Media Marketing.

## Contemporary Marketing Degree

## Program code: sac.mktg.aa

The Contemporary Marketing Degree program is designed to prepare students for careers in today's marketing field. New career opportunities in marketing will be highlighted throughout the program. The courses include the latest concepts, techniques and technology used to successfully develop, price, promote and distribute products and services in a global economy. The program provides students with cutting-edge practical and applicable marketing skills for New Media Marketing opportunities.
Learning Outcome(s):
Students will demonstrate an understanding the four P's of Marketing and know key duties and responsibilities that come with managing the marketing process, a thorough understanding of behavioral theories as they apply to consumers and be able to apply that theory to real-world, hands-on situations, and an ability to apply marketing research methods through their course work as well as in hands-on projects.
Required Core Courses:
Units

| MKTG 113 | Principles of Marketing | 3 |
| :--- | :--- | :--- |
| BUS 222 | Business Writing | 3 |
| BUS 100 | Fundamentals of Business | 3 |

ENTR 100 Introduction to Innovation and Entrepreneurship
Sequence Requirements:
(All sequence courses must be completed to earn this degree)
Sales Sequence:

| MKTG 120 | Understanding Consumer Behavior - Getting them to Buy, Buy, Buy |  |
| :---: | :---: | :---: |
| MKTG 121 | Negotiating - Getting to a Win-Win |  |
| MKTG 122 | Sales Strategies that Build Business Relationships and Increase Sales | 2 |
| 21st Century Marketing Sequence: |  | Units |
| MKTG 123 | Marketing and Technology - Trends and Cutting Edges |  |
| MKTG 124 | Cause Marketing and Public Relations - Doing Well by Doing Good | 1 |
| ENTR 105 | Social Media, Bootstrapping, and Market Validation | 2 |
| International Marketing Sequence: |  | Units |
| BUS 141 | The Globalization of Marketing |  |
| BUS 142 | International Market Research and Planning |  |
| BUS 143 | Packaging, Pricing and Promoting Products/ Services for Export | 1 |
| BUS 145 | Channels of Distribution in International Markets | 1 |

Advertising and Distribution Sequence: Units

| MKTG 125 | Advertising and Promotion - Get the Word Out <br> and Keep your Customers Buying | 2 |
| :--- | :--- | :--- |
| MKTG 126 | Distributing Products and Services - Reaching <br> Customers Where They Shop | 2 |

## Capstone Courses

ENTR 110 Capstone Business Simulations
Select ONE course from the following:

| BUS 125 | Introduction to International Business | 3 |
| :--- | :--- | :---: |
| BUS 127 | Introduction to E-Commerce | 3 |
| ENTR 107 | Money, Finance and Accounting for | 2 |
|  | Entrepreneurs | 2 |
| ENTR 109 | Powerful Presentations | 3 |

Total Units 30-31

## Contemporary Marketing Certificate (Untranscripted)

Program code: sac.mktg.cert
The Contemporary Marketing Certificate program is designed to prepare students for careers in today's marketing field. New career opportunities in marketing will be highlighted throughout the program. used to successfully develop, price, promote and distribute products and services in a global economy. The program provides students with cutting-edge practical and applicable marketing skills for New Media Marketing opportunities.
Learning Outcome(s):
Students will demonstrate an understanding the four P's of Marketing and know key duties and responsibilities that come with managing the marketing process.
Required Core Courses: Units
MKTG 113 Principles of Marketing

MKTG 120 Understanding Consumer Behavior - Getting 1

| MKTG 121 | Negotiating - Getting to a Win-Win | 1 |
| :--- | :--- | :--- |
| MKTG 122 | Sales Strategies that Build Business | 2 |

Relationships and Increase Sales
21st Century Marketing Sequence: Units
MKTG 123 Marketing and Technology - Trends and Cutting 1 Edges
MKTG 124 Cause Marketing and Public Relations - Doing $\quad 1$

|  | Well by Doing Good |  |
| :--- | :--- | :--- |
| ENTR 105 | Market Validation and Bootstrap Marketing | 2 |

International Marketing Sequence: Units
BUS 141 The Globalization of Marketing 1
BUS 142 International Market Research and Planning $\quad 1$

BUS 143 Packaging, Pricing and Promoting Products/ 1

|  | Services for Export | 1 |
| :--- | :--- | :--- |

Advertising and Distribution Sequence: Units
MKTG 125 Advertising and Promotion - Get the Word Out 2 and Keep your Customers Buying
MKTG 126 Distributing Products and Services - Reaching 2 Customers Where They Shop

Total Units
19

## MATHEMATICS

## Option 1

## Mathematics Degree

Program code: sac.math.as
The associate degree curriculum in mathematics prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree. Employment opportunities are available as mathematicians in government, industry and education. Please see a counselor for specific course requirements for your transfer university. Learning Outcome(s):
Students will apply concepts and principles of Calculus to perform computations and solve problems
Students will create, use and analyze graphical representations of mathematical relationships
Students will communicate mathematical knowledge and understanding of mathematics.
Required Core Courses:
MATH 180 Analytic Geometry and Calculus I

- or -

MATH 180H Honors Analytic Geometry and Calculus
MATH 185 Analytic Geometry and Calculus II 4

MATH 280 Intermediate Calculus 4
MATH 287 Introduction to Linear Algebra and Differential
Equations

CMPR 120 Introduction to Programming

- or -

CMPR 112 Java Programming
Total Units

## Option 2

## Associate in Science in Mathematics for Transfer

Program code: sac.math.ast
The Associate in Science in Mathematics for Transfer (AS-T in Mathematics) prepares students to move into the CSU system leading to a baccalaureate degree in Mathematics. Employment opportunities are available as mathematicians in government, industry, education, technology, gaming and healthcare. Please consult a counselor regarding specific course requirements for your transfer institution. Successful completion of the AS-T in Mathematics degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Mathematics major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AS-T in Mathematics, students will gain a strong foundation in the mathematical field. This knowledge base will be grounded in quantitative and analytical reasoning. Additionally, students will have the capacity to write and communicate with mathematical models and apply appropriate problem solving techniques to real world phenomena.
Learning Outcome(s):

1. Students will apply concepts and principles of Calculus to perform computations and solve problems
2. Students will create, use and analyze graphical representations of mathematical relationships
3. Students will communicate mathematical knowledge and understanding of mathematics.

Required Core Courses:
Units
MATH 180 Analytic Geometry and Calculus I 4

- or -

MATH 180H Honors Analytic Geometry and Calculus 4
MATH 185 Analytic Geometry and Calculus II 4
MATH 280 Intermediate Calculus 4
List A: Select one course from the following: (5 units)
MATH 287 Introduction to Linear Algebra and Differential 5 Equations
List B: Select one course from the following: (3-4 units) Units
CMPR 129 Introduction to Computer Organization 4
CMPR 112 Java Programming 3

| CMPR 120 | Introduction to Programming | 3 |
| :--- | :--- | :--- |
| CMPR 121 | Programming Concepts | 3 |

CMPR 131 Data Structures Concepts 3

| CMPR 141 | UNIX Operating System | 3 |
| :--- | :--- | :--- |
| CMPR 213 | C\# Programming | 3 |

PHYS 217 Engineering Physics I 4

## MEDICAL ASSISTANT

## Medical Assistant-Administrative/Clinical Degree <br> Program code: sac.ma.as

In addition to the general education requirements, the associate degree of science curriculum for medical assistant administrative/ clinical is designed to prepare a student for employment in a medical office, a hospital business office, a clinic, or allied health facility. Careers are available as medical assistants, front and back office, insurance secretaries, admitting clerks, medical records clerks and receptionists in all medical facilities.
Course content includes medical terminology; medical typing, computer techniques and skills; medical forms, reports, and charts; medical insurance, billing and collections; bookkeeping; effective human relations as related to a medical office; clinical procedures such as giving injections, sterilizing instruments, monitoring vital signs, assisting with minor surgery, instrument identification; and professional ethics and legal aspects.
Graduates will be qualified to assist doctors in clinical situations or function under the direct supervision of a medical doctor. Graduates will also be qualified to perform all clerical duties normally required in the medical office, hospital business office, clinics, and allied health facilities.

## Learning Outcome(s):

Students will demonstrate proficiency in speaking, reading and writing when communicating with patients and healthcare team; logically problem-solve in the healthcare setting; and become employable in an entry-level healthcare career upon completion of their Medical Assisting degree.
Medical Assistant Degree Option:
Required Core Courses: Units MA 051A Beginning Medical Terminology 3

| MA 051B | Advanced Medical Terminology | 3 |
| :--- | :--- | :--- |
| MA 053 | Medical Assistant-Administrative | 3 |
| MA 054 | Preparation of Medical Insurance Forms | 3 |
| MA 055 | Medical Assistant-Clinical Back Office | 3 |

Electives must be 6 units selected from the following courses:

| BA 179 | Introduction to Microsoft Office | 3 |
| :--- | :--- | ---: |
| BA 180 | Advanced Microsoft Office | 3 |
| BA 183 | Microsoft Word | 3 |
| BA 184 | Advanced Microsoft Word for the Workplace | 3 |
| MA 001 | Cooperative Work Experience Education - <br> Occupational | $1-4$ |
| MA 020 | Bloodborne and Airborne Pathogen Standards | 0.5 |
| MA 030 | Phlebotomy | 1 |
| MA 056 | Computer Applications for the Medical Office | 3 |
|  | Total Units | $\mathbf{2 1 - 2 2}$ |

## Medical Assistant-Administrative/Clinical Certificate (Transcripted)

## Program code: sac.ma.ca

The certificate of achievement curriculum for medical assistant administrative / clinical is designed to prepare a student for employment in a medical office, a hospital business office, a clinic, or allied health facility. Careers are available as medical assistants, front and back office, insurance secretaries, admitting clerks, medical records clerks, and receptionists in all medical facilities.
Course content includes medical terminology; medical typing, computer techniques and skills; medical forms, reports and charts; medical insurance, billing and collections; bookkeeping; effective human relations as related to a medical office; clinical procedures such as giving injections, sterilizing instruments, monitoring vital signs, assisting with minor surgery, instrument identification; and professional ethics and legal aspects.
Recipients of the certificate of achievement will be qualified to assist doctors in clinical situations or function under the direct supervision of a medical doctor. Recipients will also be qualified to perform all clerical duties normally required in the medical office, hospital business office, clinics and allied health facilities.

## Learning Outcome(s):

Students will demonstrate proficiency in speaking, reading and writing when communicating with patients and healthcare team; logically problem-solve in the healthcare setting; and become employable in an entry-level healthcare career upon completion of their Medical Assisting certificate.

## Required Core Courses:

| MA 051A | Beginning Medical Terminology | 3 |
| :--- | :--- | ---: |
| MA 051B | Advanced Medical Terminology | 3 |
| MA 053 | Medical Assistant-Administrative | 3 |
| MA 054 | Preparation of Medical Insurance Forms | 3 |
| MA 055 | Medical Assistant-Clinical Back Office | 3 |
|  |  | Total Units |

## MODERN LANGUAGES

## Option 1: <br> Modern Languages Degree <br> Program code: sac.ml.aa

The associate degree curriculum in modern languages is designed to meet the needs of both the student who wishes to transfer to a four-year institution and the student who wishes to achieve basic conversational ability in the language. Completion of the associate of arts degree prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree and then to possible careers requiring modern languages proficiency.
Note: Presently, the associate degree is offered in French and Spanish. The degree requires 26 units, which includes a minimum of 13 units in the major language with completion of both courses numbered 201 and 202.

## Learning Outcome(s):

Students will develop all levels of proficiency in comprehending, speaking, reading, and writing in the current modern language classes while developing an understanding of the literary and cultural context of each language.
Required Core Courses: for the concentration in Spanish: Units
SPAN 101 Elementary Spanish I 5

- or -

SPAN 101H Honors Elementary Spanish I 5
SPAN 102 Elementary Spanish II 5

- or -

SPAN 102H Honors Elementary Spanish II 5
SPAN 201 Intermediate Spanish I 5

- or -

SPAN 201H Honors Intermediate Spanish I 5
SPAN 202 Intermediate Spanish II 5

- or -

SPAN 202H Honors Intermediate Spanish II 5
SPAN 212 College Business Spanish 3

- or -

SPAN 213 College Spanish Composition 3
Required courses for the concentration in French: 24 units

| FREN 101 | Elementary French I | 5 |
| :--- | :--- | :--- |
| FREN 102 | Elementary French II | 5 |
| FREN 201 | Intermediate French I | 5 |

- or -
FREN 201H Honors Intermediate French I 5
FREN 202 Intermediate French II 5
- or -

FREN 202H Honors Intermediate French II 5
FREN 211 Intermediate Conversation and Composition I 2
FREN 214 Intermediate Conversation and Composition II 2

Students who have received credit for the first two
semesters must take ten (10) units in a second language Units other than the major:

| CHNS 101 | Elementary Chinese I | 5 |
| :--- | :--- | :---: |
| CHNS 102 | Elementary Chinese II | 5 |
| FREN 101 | Elementary French I | 5 |
| FREN 102 | Elementary French II | 5 |
| JAPN 101 | Elementary Japanese I | 5 |
| JAPN 102 | Elementary Japanese II | 5 |

## 160 INSTRUCTIONAL PROGRAMS

| SPAN 101 | Elementary Spanish I | 5 |
| :---: | :---: | :---: |
| SPAN 101H | Honors Elementary Spanish I | 5 |
| SPAN 102 | Elementary Spanish II | 5 |
| SPAN 102H | Honors Elementary Spanish II | 5 |
| ITAL 120 | Elementary Italian I | 5 |
| ITAL 121 | Elementary Italian II | 5 |
| VIET 101 | Elementary Vietnamese I | 5 |
| VIET 102 | Elementary Vietnamese II | 5 |
| Plus three 3 | units of electives from the following: | Units |
| SPAN 195A, | Advanced Conversational Spanish | 3 |
| SPAN 195B, | Advanced Conversational Spanish | 3 |
| A third language |  | 3 |
| HIST 101 | World Civilizations to the 16th Century - or - | 3 |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century - or - | 3 |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| HIST 124 | Mexican American History in the United States - or - | 3 |
| HIST 124H | Honors Mexican American History in the United States | 3 |
| HIST 150 | Latin American Civilization to Independence - or - | 3 |
| HIST 151 | Modern Latin American Civilization | 3 |
| ANTH 100 | Introduction to Cultural Anthropology - or - | 3 |
| ANTH 100H | Honors Introduction to Cultural Anthropology | 3 |
| ANTH 104 | Language and Culture - or - | 3 |
| ANTH 104H | Honors Language and Culture | 3 |
| ENGL 104 | Language and Culture - or - | 3 |
| ENGL 104H | Honors Language and Culture | 3 |
| ENGL 271 | Survey of World Literature | 3 |
| ENGL 272 | Survey of World Literature | 3 |
| GEOG 100 | World Regional Geography | 3 |
|  | - or - |  |
| GEOG 100H | Honors World Regional Geography | 3 |
| GEOG 101 | Physical Geography | 3 |

Plus three 3 units of electives from the following: Units

SPAN 195B, Advanced Conversational Spanish

## speaking, reading, and writing in the current modern language classes

 while developing an understanding of the literary and cultural context of each language.Required Core Courses: Units
SPAN 101 Elementary Spanish I 5

- or -

SPAN 101H Honors Elementary Spanish I 5
SPAN 102 Elementary Spanish II 5

- or -

SPAN 102H Honors Elementary Spanish II 5
SPAN 201 Intermediate Spanish I 5

- or -

SPAN 201H Honors Intermediate Spanish I 5
SPAN 202 Intermediate Spanish II 5

- or -

SPAN 202H Honors Intermediate Spanish II
NOTE: Students who come to SAC with credit for SPAN 101 and 102 (or 2 and 3 years of high school Spanish respectively) must take the equivalent of 10 units from the following list of possible substitution courses, including another language at the 101 or 102 level.
Substitution Courses Units

ETHN 101 Introduction to Ethnic Studies 3

- or -

ETHN 101H Honors Introduction to Ethnic Studies 3
ANTH 100 Introduction to Cultural Anthropology 3

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
SOC 100 Introduction to Sociology 3

- or -

SOC 100H Honors Introduction to Sociology 3
SOC 140 Analysis of Social Trends and Problems 3

- or -

SOC 140H Honors Analysis of Social Trends and Problems 3
WMNS 101 Introduction to Women's Studies 3
GEOG 100 World Regional Geography 3

- or -

GEOG 100H Honors World Regional Geography 3


| MUS 115D | Applied Music (Private Instruction) | 1.5 |
| :--- | :--- | ---: |
| MUS 121 | Beginning Voice | 1 |
| MUS 122 | Intermediate Voice | 1 |
| MUS 123 | Advanced Voice | 1 |
| MUS 124 | Advanced Vocal Production and Repertoire | 1 |
| MUS 140 | Instrumental Methods for Winds and Percussion | 1 |
| MUS 161 | Class Piano I | 1 |
| MUS 162 | Class Piano II | 1 |
| MUS 163 | Class Piano III | 1 |
| MUS 164A | Intermediate Piano Repertoire I | 1 |
| MUS 164B | Intermediate Piano Repertoire II | 1 |
| MUS 168 | Stylistic Interpretation of Piano Repertoire | 1 |
| MUS 169 | Harmonization at the Keyboard | 1 |
| MUS 173 | Beginning Rhythms in Percussion and Drums | 1 |
| MUS 180A | String Methods | 1 |
| MUS 180B | Intermediate String Methods | 1 |
| MUS 185 | Beginning Classical Guitar | 1 |
| MUS 186 | Intermediate Classical Guitar | 1 |
| MUS 187 | Advanced Classical Guitar | 1 |
| MUS 188 | Advanced Classical Guitar Technique and | 1 |
| MUS 215A | Applied Music (Advanced Private Instruction) | 1.5 |
| MUS 268 | Intermediate Keyboard Repertoire | 1 |
| MUS 269 | Intermediate Harmonization at the Keyboard | $28-32$ |
|  |  | 1 |

*Courses which have an " $N$ " preceding the number may be required for the major, but are not applicable to the 60 units required for the degree.

## Option 2

## Associate in Arts in Music for Transfer

## Program code: sac.mus.aat

The Associate in Arts in Music for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in music, and then into careers in public and private teaching, professional performance, church music, music therapy, composition, arranging and orchestration. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Music, students will be able to demonstrate an understanding of music theory, harmony, and musicianship at the final level of a traditional lower division music sequence. Through public performance, students will demonstrate proficiency on their primary instrument (or voice) that will allow them to perform accurately and musically within a large ensemble and in a solo setting. Upon application to music programs at four year institutions, students will need to pass an audition for acceptance as well as pass skills tests for placement into music theory, musicianship and piano classes Note: Although this Transfer Curriculum may provide sufficient preparation for some general Bachelor of Arts programs in Music, it is recommended that students supplement these degree requirements with four semesters of piano (MUS 161, 162, 163, 164), one music appreciation class (MUS 101), and one technology class (MUS 142 or MUS 152) if they intend to transfer into Bachelor of Music programs in Performance, History and Literature, Music Education, or Composition. Please consult a SAC counselor for course requirements for particular four-year institutions.

## Learning Outcome(s):

1. Students will acquire competency and experience in the creation and presentation of public performances of music
2. Students will perform proficiently (at the sophomore level) on their principal instrument in a 20-minute public recital
3. Students will demonstrate an understanding of music theory, piano, harmony and musicianship at the final level of a traditional lower division music sequence.

## Required Core Courses: Units

MUS 111 Basic Music Theory and Musicianship I 4
MUS 112 Music Theory and Musicianship II 4
MUS 114A Musicianship 1

| MUS 114B | Musicianship | 1 |
| :--- | :--- | :--- |

MUS 115A Applied Music (Private Instruction) 1.5
MUS 115B $\quad$ Applied Music (Private Instruction) $\quad 1.5$
MUS 115C Applied Music (Private Instruction) 1.5
MUS 115D Applied Music (Private Instruction) 1.5
MUS 213 Theory $3 \quad 3$
MUS 214 Theory 4

Ensembles, 1 unit required for each of 4 semesters* 4
*The ensemble course units may be chosen from the following list (take one ensemble four times or select Units different ensembles to meet this requirement):
MUS 135 Concert Chorale 1
MUS 137 Chamber Choir 1
MUS 171 Concert Band $\quad 1$
MUS 175 Jazz Ensemble $\quad 1$

| MUS 181 | Chamber Orchestra | 1 |
| :--- | :--- | :--- |
| MUS 271 | Symphonic Band | 1 |


| MUS 271 | Symphonic Band |  | 1 |
| :--- | :--- | :--- | :--- |
|  | Total Units | 26 |  |

## Digital Music Production Certificate (Transcripted)

## Program code: sac.musdm.ca

The Digital Music Production Certificate is intended for students with an interest in creating musical products with the aid of current computer technology. Career opportunities in this area include:

- audio technician in a studio
- audio specialist for web design
- independent audio technician in a project studio
- audio technician/music specialist in a video post-production unit or company
- retail specialist in a music store
- music producer/composer for film, TV, radio
- audio specialist for a computer game company

The program provides students with hands on experience and a working knowledge of the creative and technical issue surrounding the production of digital audio and its application and synchronization with other media. Students will study various means of computer assisted digital audio production including sequencing, digital recording, recording studio techniques, mixdown and synchronization to video. The business of music as well as current and emerging technologies for web audio design will also be covered. A variety of music electives are available to help students gain experience in other musical skills including instruction on an instrument, ensemble playing, and music theory.

## Learning Outcome(s):

1. Students will demonstrate a working knowledge of the creative and technical issues necessary for the production of digital audio and its application and synchronization with other media
2. Students will demonstrate a working knowledge of computer assisted digital audio production including sequencing, digital recording, recording studio techniques, mixdown and synchronization to video
3. Students will demonstrate an understanding of the business of music and current and emerging technologies for web audio design.

## Required Core Courses: Units

MUS $110 \quad$ Music Fundamentals and Culture

| MUS 111 | Basic Music Theory and Musicianship I | 4 |
| :--- | :--- | :--- |
| MUS 142 | Creating Music on the Digital Audio Workstation | 1 |
| MUS 143 | Intermediate Techniques on the Digital Audio | 1 |


| MUS 144 | Projects in Electronic Music | 1 |
| :--- | :--- | ---: |


| MUS 147 | Digital Recording Studio Sound Design | 2 |
| :--- | :--- | :--- |
|  | - or - |  |

MUS 153 Introduction to Game Audio 2
MUS $148 \quad$ Music Scoring for Film and Multimedia 2
MUS 149 The Business of Music 2
MUS 152 Beginning Audio Production 3

Plus 2 units from the elective list below
Electives must be chosen from the following courses Units

| MUS 109 | Reading and Making Music | 2 |
| :--- | :--- | ---: |
| MUS 112 | Music Theory and Musicianship II | 4 |
| MUS 121 | Beginning Voice | 1 |
| MUS 122 | Intermediate Voice | 1 |
| MUS 123 | Advanced Voice | 1 |
| MUS 124 | Advanced Vocal Production and Repertoire | 1 |
| MUS 140 | Instrumental Methods for Winds and Percussion | 1 |
| MUS 146 | Digital Recording Studio Techniques I | 2 |
| MUS 161 | Class Piano I | 1 |
| MUS 162 | Class Piano II | 1 |
| MUS 163 | Class Piano III | 1 |
| MUS 164A | Intermediate Piano Repertoire I | 1 |
| MUS 164B | Intermediate Piano Repertoire II | 1 |
| MUS 173 | Beginning Rhythms in Percussion and Drums | 1 |
| MUS 185 | Beginning Classical Guitar | 1 |
| MUS 186 | Intermediate Classical Guitar | 1 |
| MUS 187 | Advanced Classical Guitar | 1 |
| MUS 188 | Advanced Classical Guitar Technique and | 1 |
| MUS 190 | Repertoire | Introduction to ProTools |
| MUS 218 | Music Notation Using Finale Software | Total Units |
|  | 17 | 18 |

## NURSING

## Nursing Degree Pre-Nursing for the Bachelor's Degree in Nursing <br> Program code: sac.nrspr.as <br> Courses recommended for upper division standing (check with the Division Counselor and the transfer school to verify current courses): California State University, Long Beach; California State University, Fullerton; and California State University, Dominguez Hills.

## Learning Outcome(s):

Students will meet the non-nursing prerequisites for transfer to a baccalaureate program.
Required Core Courses:
CHEM 119 Fundamentals-General and Organic

CHEM 209 Introductory Chemistry 4
CHEM 210 General, Organic and Biochemistry

- or -

CHEM 219 General Chemistry

## - or -

CHEM 219H Honors General Chemistry 5
BIOL 239 General Human Anatomy 4
BIOL 249 Human Physiology 4

BIOL 229 General Microbiology 5
PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H Honors Introduction to Psychology 3
ENGL 101 Freshman Composition 4

- or -

ENGL 101H Honors Freshman Composition 4
Total Units 24-25
Please check with transfer institution for additional prerequisite courses.
Please refer to Nursing-Registered Nursing A.S. Degree for the Santa Ana College Nursing Program.
Nursing-Registered Nursing Degree
Program code: sac.nrsrg.as
The Associate Degree Nursing (ADN) program is approved by the California Board of Registered Nursing (BRN) and accredited by the Accreditation Commission for Education in Nursing (ACEN). It is designed to qualify the graduate for the licensure examination and entry into practice as a Registered Nurse (RN). Additionally, completion of the Associate in Science Degree in Nursing prepares a graduate to transfer to a four-year institution for completion of a baccalaureate degree (see a counselor for requirements). The curriculum follows the Santa Ana College Conceptual Framework for Nursing.
Completion of a Nursing Orientation (call Santa Ana College Counseling at 714-564-6103 for dates) is strongly advised. Advance placement in the program may be granted to those students with certain prior experience, vocational nursing, registered nursing education or equivalent. Advanced-Placed/Transfer/Challenge applicants require an individual appointment with the Program Director or designee. SAC reserves the right to designate a certain number of spaces for contract agreements and/or meet grant designated requirements.

## Program Learning Outcome:

Graduates will function knowledgeably, safely, and effectively in nursing practice within a variety of health care settings and will be qualified for the licensing examination.

Please refer to www.sac.edu/nursing for current and updated information.

## Admission Prerequisites:

The following prerequisites are required for entry into the program and first semester. Nursing students must meet current departmental catalog requirements.

1. Apply to Santa Ana College, obtain a Student Identification Number, and submit all official college transcripts to Santa Ana College, Admissions Office, 1530 W. 17th Street, Santa Ana, CA. 92706-3398. Please alert the college to possible name changes (e.g. maiden name). It is the student's responsibility to follow up and make sure transcripts have been received.
2. Complete high school/equivalency or have a college degree, verified by submitting official transcripts of high school or college graduation, passing the GED, or passing the California High School Proficiency Examination.
3. Complete courses or equivalents (units are semester units):

BIOL 239 General Human Anatomy 4
BIOL 249 Human Physiology 4
BIOL 139 Health Microbiology 4
ENGL 101 Freshman Composition 4

- or -

ENGL 101H Honors Freshman Composition
Total Units 16
BIOL 229 General Microbiology (5 Units) can be substituted for BIOL 139 Health Microbiology.The science prerequisites must be completed within seven (7) years of applying to the Nursing Program.
4. Assessment Technology Institute's Test of Essential Academic Skills (TEAS V or ATI TEAS): All students, including AdvancedPlaced/Transfer/Challenge applicants, are required to successfully complete the diagnostic assessment of preparation, TEAS V/ATI TEAS, prior to entry into the Nursing Program. Remediation is required if this test is not passed. Please see www.sac.edu/nursing for TEAS remediation information.

## Admission Procedures:

## For Students Entering the First Semester:

A multi-criteria admission selection process is being used to select students to enter the first semester. The multi-criteria admission selection process is based on points given for the science prerequisites' GPA, completion of English and general education courses, previous degrees, recent work in healthcare, life experiences, fluency in specific languages, and results on the Assessment Technology Institute's Test of Essential Academic Skills (TEAS V/ATI TEAS) test. Please refer to www.sac.edu/nursing for the specific point breakdown of the multi-criteria. The multi-criteria applications for first semester are accepted from February 15th through March 2nd for fall admissions and from September 15th through September 30th for spring admissions. The science prerequisites require a grade of " $C$ " or higher with an overall Grade Point Average (GPA) of 2.5 or higher.

## For Advanced-Placed Students:

There is an entry list for second, third, and fourth semesters. Please refer to www.sac.edu/nursing for information.
An individual appointment with the Program Director or designee is required to determine placement. All the prerequisites require a grade of "C" or higher with an overall Grade Point Average (GPA) of 2.5 or higher. After completing the prerequisites for advanced placement, students must submit a Prerequisite Verification Form (obtained in the Health Sciences/Nursing Office, R-213, 714-564-6825 or at www.sac. edu/nursing). After prerequisite verification, students are placed on the entry list for the appropriate semester and course.

Students are admitted after successfully completing NRN 200 Role Transition, and successfully passing the Assessment Technology Institute's Test of Essential Academic Skills (TEAS V/ATI TEAS) test. Students on the second, third, and fourth semester entry lists are admitted on a space available basis according to "first to complete all of the requirements, first admitted." Advanced-placed and Re-entry students share entry based on space availability. A student who successfully completes all requirements but who is not accepted because of limited class size will be accepted as soon as space becomes available.
Students may turn down entry to the Role Transition course and/or the program once. A second refusal will result in the student's name being placed at the end of the entry list. A third refusal will result in removal from the list.

## Upon acceptance to all semesters:

1. Evidence of a physical examination by an M.D., Physician Assistant, or Nurse Practitioner will be required prior to entry in the program and on an annual basis. Evidence of a physical exam and immunizations must be submitted on the Nursing Program's form upon entry into the program verifying the applicant's health and physical ability to perform the academic and clinical requirements of an RN student. Examinations, including immunization status, must have been performed within 4 months prior to beginning the Nursing Program.
2. A cleared background check is required of all Nursing students after acceptance into the Nursing Program.
3. A cleared drug test is required of Nursing students after acceptance into the program.
4. A current (within one year of issue date) American Heart Association Basic Life Support BLS Provider Card is required upon entry to the Nursing Program and renewed every year.
5. Malpractice insurance must be maintained throughout the Nursing Program.
Students with incomplete physical information, CPR, malpractice insurance, background check, and drug testing will not be allowed into the clinical setting because of mandatory hospital and program requirements. If a student re-enters the program after one or more semester(s) absence, a new background check and drug testing must be provided.

## Program Information

The program is four semesters (fall and spring). Students are required to have transportation to off-campus clinical sites. There are 1-2 clinical days per week. These clinical days may be day, evening, or night shifts including weekends in eight or twelve-hour configurations. Theory courses meet 1 to 2 days per week. Please refer to the website at www.sac.edu/nursing for further information.
Please note that this is considered a full-time program. Students are advised to limit outside employment to 12 hours/week. Excessive work schedules combined with family and school commitments may contribute to being unsuccessful in the program.
It is the student's responsibility to contact the Health Sciences/Nursing office at 714-564-6825 when a change of address or phone number has occurred. If mail is returned due to a wrong address or a student does not respond to an acceptance letter, the student's name will be removed from the entry list.
Approximate cost for the supplies/fees can be obtained at www.sac. edu/nursing.
Students who are a "NO SHOW" for the first day of class will be dropped and replaced by an alternate.
The BRN requires all licensure applicants to provide a valid Social Security number.
A Concept-Based Curriculum was implemented and has been phased into all four semesters. A Concept-Based Curriculum allows students to learn nursing concepts in depth with greater emphasis on nursing implementations and exemplars to showcase specific diseases.

## The RN program has three options:

Option I - Generic RN academic program of two years. Applicants interested in this option must:
a. Complete the admission prerequisites and
b. Be admitted into the Santa Ana College RN program at the first semester of the program or be advanced-placed.
Option II - LVN to RN, academic program of one year.
Licensed Vocational Nurses (LVNs) are admitted at the beginning of the second year of the program. To apply for licensure as a Registered Nurse, one must be licensed in California as a Vocational Nurse and:
a. Complete the admission prerequisites,
b. Be admitted into the Santa Ana College RN program in the beginning of the second year of the program (third semester) with college credit granted for 21.5 units of LVN courses,
c. Complete the Role Transition course with a grade of "Pass" before entering the program, and
d. Be placed into the third semester which is dependent upon space availability in the program.
Option III - Thirty (30) Unit LVN Option - (BRN regulation 1429), academic program of one year.
Information on the Thirty (30) Unit LVN Option is available in the Health Sciences/Nursing Office. Applicants interested in this option are required to meet with the Program Director or designee regarding this option being a non-degree option and:
A. Must be licensed in California as a Vocational Nurse,
B. Complete the admission prerequisites required for the 30 Unit LVN Option,
C. Be admitted into the Santa Ana College RN program in the beginning of the second year of the program (third semester),
D. Complete the Role Transition course with a grade of "Pass" before entering the program, and
E. Be placed into the third semester which is dependent upon space availability in the program.
Major nursing requirements for the Associate Degree in Nursing for the Concept-Based Curriculum prior to Fall 2019:

First Year Requirements

## Course

Units

## First Semester

| NRN 160 | Introduction to Pharmacology | 1 |
| :--- | :--- | ---: |
| NRN 161 | Principles of Nursing Practice | 2 |
| NRN 161L | Principles of Nursing Practice Lab | 2.5 |
| NRN 162 | Pharmacological Concepts | 1.5 |
| NRN 163 | Simple Concepts | 3 |
| NRN 163L | Simple Concepts Lab | 2.5 |

## Second Semester

| NRN 164 | Family Health Concepts | 2 |  |
| :--- | :--- | :--- | ---: |
| NRN 164L | Family Health Concepts Lab | 2 |  |
| NRN 165 | Health Illness Concepts |  | 2.5 |
| NRN 165L | Health Illness Concepts Lab |  | 2.5 |
|  |  | Total Units | $\mathbf{2 1 . 5}$ |

## Second Year Requirements

| Course | Units |  |
| :--- | :--- | ---: |
| Third Semester |  |  |
| NRN 261 | Mental Health Concepts | 1.5 |
| NRN 261L | Mental Health Concepts Lab | 1.5 |
| NRN 262 | Acute Concepts | 3 |
| NRN 262L | Acute Concepts Lab | 3 |

Fourth Semester

| NRN 263 | Complex Concepts | 3.5 |  |
| :--- | :--- | :--- | ---: |
| NRN 263L | Complex Concepts Lab | 2.5 |  |
| NRN 264L | Preceptorship Lab |  | 2.5 |
| NRN 200 | Role Transition |  | 2 |
|  |  | Total Units | $\mathbf{1 9 . 5}$ |

**NRN 200 must be taken by advanced-placed students prior to entering the Nursing Program; not required by generic students unless assigned as part of remediation.
Major nursing requirements for the Associate Degree in Nursing is being implemented in Fall 2019 following approval by the BRN and ACEN. Hours and units will change; graduation requirements do not change.

## First Year Requirements

| Course |  | Units |
| :--- | :--- | ---: |
| NRN 170 | Pharmacological Concepts of Nursing | 2.0 |
| NRN 171 | Principles of Nursing Practice and Simple <br> Concepts | 4.5 |
| NRN 171L | Principles of Nursing Practice and Simple <br> Concepts Lab | 4.5 |

## Second Semester

NRN 172 Family Health and Illness Concepts 4.0
NRN 172L Family Health and Illness Concepts Lab 4.5
Total Units 19.5
Second Year Requirements
Course Units
NRN 271 Mental Health and Acute Concepts 4.0
NRN 271L Mental Health and Acute Concepts Lab 4.5
Fourth Semester
NRN 272 Complex Concepts 3.5
NRN 272L Complex Concepts and Preceptorship Lab $\quad 4.5$
NRN 200 Role Transition 2

Total Units 16.5
**NRN 200 must be taken by advanced-placed students prior to entering the Nursing Program; not required by generic students unless assigned as part of remediation.
Graduation requirements for the Associate Degree in Nursing (See Counseling regarding catalog rights for graduation requirements):

Total nursing units required $=39$ (Prior to entering fall 2019)
36 (Entering fall 2019)
Course
Units
BIOL 239 General Human Anatomy 4
BIOL 249 Human Physiology 4
BIOL 139 Health Microbiology 4

ENGL 101 Freshman Composition 4
ENGL 101H Honors Freshman Composition
CMST 102 Public Speaking 3
CMST 145 Group Dynamics at SAC 3
Communications 101 Group Dynamics at SCC

- or -

|  | Communications 110 - Public Speaking at SCC |  |
| :--- | :--- | :--- |
| SOC 100 | Introduction to Sociology | 3 |

- or -

SOC 100H Honors Introduction to Sociology

| PSYC 100 | Introduction to Psychology |
| :--- | :--- |
|  | - or - |

PSYC 100H Honors Introduction to Psychology
Select one course from the Associate Degree Plan A, Social and Behavioral Science category, American Institutions
Select one course from the Associate Degree Plan A, Humanities category

Total $=70$ (Prior to entering fall 2019)
67 (Entering fall 2019)
***Only Biol 249 and Biol 139 are required for Option III - 30 Unit Option LVN students.
Cultural Breadth and Lifelong Understanding/Self-Development graduation requirements are met for nursing students with completion of the Nursing major.
Math proficiency for graduation: Successful completion of math proficiency is required for graduation.
The California BRN stipulates that RN students must complete sixteen (16) units of natural, behavioral, and social sciences as well as six (6) units of communications skills, in addition to the approved nursing units, to qualify for examination and licensure.
There are no required electives for the degree. If desired, these courses are recommended: Biology 217; Chemistry 119, 209, 210, 219, 219(H); Medical Assisting 051A; Medical Assisting 051B; Math 219; Nursing Registered 098, 106A, 106B, 106C 198, 206A,206B, $206 C$.

## Challenge Credit

The student with previous nursing education or experience may challenge any Nursing course per the BRN. Application for "Credit by Examination" may be obtained in the Admissions Office. The application must be completed by the student, processed by the Admissions Office, and submitted to the Health Sciences/Nursing Office. The application to challenge must be submitted within the first two weeks of the course. Challenge courses require registration fees. The student will be directed to the appropriate faculty and will be given objectives for the course. An appointment will be made to take the examination(s). The student must be currently enrolled in the course. The theory course must be successfully passed before challenging the concurrent clinical course. The student must meet all clinical requirements. Students may attempt "Credit by Examination" only once in a particular course. If a course has been failed, credit by examination will not be allowed. Grading for the "Credit by Examination" is on a pass/no pass basis.

## Re-Admission to Program After Withdrawal/Failure

A student may re-enter the Nursing Program once after withdrawal or failure. No student shall be re-admitted after two (2) withdrawals or failures of SAC Nursing Program courses. In cases of grave or extenuating circumstances, a consideration for re-admittance after two withdrawals or failures may be made by the Program Director.

## Record of Conviction(s)

Please note: The California Board of Registered Nursing (BRN) requires California Department of Justice and Federal Bureau of Investigation review prior to licensure (upon completion of the program). Section 480 (a) (1) of the Business and Professions Code, authorizes the BRN to deny licensure to applicants convicted of crimes substantially related to nursing. Anyone who wishes clarification may contact:
The Board of Registered Nursing
P.O. Box 944210 Sacramento, CA. 94244-2100

Website: www.rn.ca.gov Telephone: (916) 322-3350

## Educational Concerns:

Students or concerned parties have the right to contact the California Board of Registered Nursing (BRN) and/or the Accreditation Commission for Education in Nursing (ACEN) regarding concerns about the educational program. It is recommended that this is done after all college means for resolving problems/issues have been exhausted.

3 BRN
P.O. Box 944210, Sacramento, CA. 94244-2100
(916) 322-3350
www.rn.ca.gov
ACEN
3343 Peachtree Road, NE, Suite 850, Atlanta, GA. 30326
(404) 975-5000
www.acenursing.org

## NUTRITION AND FOOD

Option 1

## Nutrition and Dietetics Degree

## Program code: sac.nut.as

The associate degree curriculum in nutrition and dietetics prepares students to transfer into a curriculum at a four-year institution leading to a baccalaureate degree. Opportunities in the field include positions in: management in hospitals, schools, hotels and restaurants; clinical dietetics in acute care hospitals, clinics and convalescent homes; community nutrition at all levels - international, federal, state, and local; research, product development and testing; teaching, and promotion of food in business.

## Learning Outcome(s):

Students will successfully transfer into a curriculum at a four-year institution leading to a baccalaureate degree.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| NUTR 101 | The Food System and Career Opportunities | 1.5 |
| NUTR 115 | Nutrition | 3 |
|  | - or - |  |
| NUTR 115H | Honors Nutrition | 3 |
| BIOL 139 | Health Microbiology | 4 |
|  | - or - |  |
| BIOL 229 | General Microbiology | 5 |
| CHEM 219 | General Chemistry | 5 |
|  | - or - |  |
| CHEM 219H | Honors General Chemistry | 5 |
| PSYC 100 | Introduction to Psychology | 3 |
|  | - or - |  |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| List A - Select two courses |  | Units |
| CHEM 229 | General Chemistry and Qualitative Analysis | 5 |
| CHEM 249 | Organic Chemistry I | 5 |
| BIOL 239 | General Human Anatomy | 4 |
| BIOL 249 | Human Physiology | 4 |
| MATH 219 | Statistics and Probability | 4 |
| MATH 219H | Honors Statistics and Probability | 4 |
| List B - Select one course |  | Units |
| NUTR 116 | Principles of Food Preparation | 3 |
| NUTR 118 | Cultural Foods | 3 |
| NUTR 110 | Food Sanitation and Safety | 3 |
| NUTR 121 | Sports Nutrition | 3 |
|  | Total Units | - 30.5 |

## Option 2

## Associate in Science in Nutrition and Dietetics for Transfer Program code: sac.nut.ast

The Associate in Science in Nutrition and Dietetics (AS-T in Nutrition and Dietetics) prepares students to transfer into the CSU system leading to a baccalaureate degree in Nutrition and Dietetics. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the Associate in Science in Nutrition and Dietetics (AS-T in Nutrition and Dietetics) degree also provides guaranteed admission to the CSU system, although not to a particular campus or major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the Associate in Science in Nutrition and Dietetics, students will understand scientific concepts of nutrition related to the function of nutrients in basic life processes, explain current health issues with emphasis on individual needs, and apply food science principles related to ingredient function and interaction, food preparation techniques, sensory evaluation standards, food safety and sanitation, and nutrient composition of food.
Required Core Courses: Units

| NUTR 115 | Nutrition | 3 |
| :---: | :---: | :---: |
|  | - or - |  |
| NUTR 115H | Honors Nutrition | 3 |
| BIOL 139 | Health Microbiology | 4 |
|  | - or - |  |
| BIOL 229 | General Microbiology | 5 |
| CHEM 219 | General Chemistry | 5 |
|  | - or - |  |
| CHEM 219H | Honors General Chemistry | 5 |
| PSYC 100 | Introduction to Psychology | 3 |
|  | - or- |  |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| List A - Select two courses: |  | Units |
| CHEM 229 | General Chemistry and Qualitative Analysis | 5 |
|  | - or - |  |
| CHEM 249 | Organic Chemistry 1 | 5 |
|  | - or - |  |
| BIOL 239 | General Human Anatomy | 4 |
|  | - or - |  |
| BIOL 249 | Human Physiology | 4 |
|  | - or - |  |
| MATH 219 | Statistics and Probability | 4 |
|  | - or - |  |
| MATH 219H | Honors Statistics and Probability | 4 |
|  | - or - |  |
| PSYC 210 | Statistics for the Behavioral Sciences | 4 |
| List B - Select one course: |  | Units |
| NUTR 116 | Principles of Food Preparation | 3 |
|  | - or - |  |
| NUTR 118 | Cultural Foods | 3 |
|  | - or - |  |
| NUTR 110 | Food Sanitation and Safety | 3 |

Culinary Arts Foundation Option Certificate (Transcripted)
Program code: sac.culn.ca
The Culinary Arts Foundation Certificate is designed to prepare students with the knowledge and skills necessary to begin their own culinary arts business, for professional improvement and retraining, or for a wide variety of employment opportunities in the profession.
The program also offers core courses to be utilized as transfer courses for students pursuing a Bachelor's Degree in Food Science or Nutrition with a foods emphasis
Learning Outcome(s):
Students will successfully transfer into a curriculum at a four-year institution leading to a baccalaureate degree.
Required Core Courses:

| CULN 110 | Food Sanitation and Safety | 3 |
| :--- | :--- | ---: |
| NUTR 110 | -or - |  |
| Food Sanitation and Safety | 2 |  |
| CULN 120 | Restaurant Management and Culinary | 3 |
| CULN 140 | Advanced Culinary and Restaurant <br> Management | Introduction to Baking \& Pastry |
| CULN 299 | Cooperative Work Experience Education | 3 |

Total Units $12-27$

## Hospitality Foundation Certificate (Transcripted) Program code: sac.nutho.ca

The Hospitality Foundation Certificate is designed to prepare students with the knowledge and skills necessary to seek employment in the fields of restaurant management, hotel/resort management, food and beverage service, and special events/meeting planning.
Learning Outcome(s):

1. Perform activities associated with setting up, monitoring, controlling, marketing and improving hospitality services to meet industry requirements.
2. Demonstrate understanding of the operations performed within the hospitality industry.
3. Apply problem-solving and critical-thinking skills to provide customer service, to improve interpersonal skills, and to resolve workplace conflict.
4. Apply mathematical principles necessary for decision making in the hospitality industry.
Required Core Courses: Units
CULN 100 Introduction to Culinary Arts and Hospitality 2

CULN 110 Food Sanitation and Safety 3 - or -

NUTR 110 Food Sanitation and Safety

- and -

CULN 150 Principles of Pantry 2
CULN 160 Principles of Beverage Service 2
CULN 200 Business Practices for Culinary Arts

| CULN 200 | Professionals | 3 |
| :--- | :--- | ---: |
| CULN 299 | Cooperative Work Experience Education | $1-4$ |
| BUS 080 | Business Mathematics | 3 |
| KNHE 107 | Cardiopulmonary Resuscitation | 2 |

Selected one course from the following: Units
FDM 102 Promotion and Coordination
BUS $120 \quad$ Principles of Management
3

| BUS 121 | Human Relations and Organizational Behavior | 3 |
| :--- | :--- | :--- |
| BUS 170 | Principles of Small Business Management | 3 |

## OCCUPATIONAL THERAPY ASSISTANT

## Occupational Therapy Assistant Degree

## Program code: sac.ota.as

The Occupational Therapy Assistant Program provides a strong foundation in the skills and knowledge necessary for entry level occupational therapy assistant competencies. The program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE), c/o Accreditation Department, American Occupational Therapy Association (AOTA), 4720 Montgomery Lane, Suite 200, Bethesda,MD,20814-3449, phone number (301) 652-AOTA and web address is acoteonline.org. Graduates of the program are qualified to sit for the national certification examination, administered by the National Board of Certification for Occupational Therapy (NBCOT), 12 South Summit Avenue, Suite 100, Gaithersburg, MD 20877, phone number (301) 990-7979. Students who have completed all requirements will also need to apply for a license to practice in the State of California through the California Board of Occupational Therapy, 2005 Evergreen Street, Suite 2250, Sacramento, CA 95815, phone number (916) 263-2294. Occupational therapy is a discipline which focuses on function as well as quality of life. Occupational therapy assistants provide service to individuals with physical, mental or developmental disabilities, across life phases, who need to remediate skills of everyday tasks of self-care, home management, community skills, work, and leisure. The major requires general education courses including biological, social, and behavioral science, in addition to occupational therapy courses. The program utilizes classroom instruction and fieldwork experiences to prepare the student to meet certification and employment standards.
When applying for the certification examination with the National Board of Certification in Occupational Therapy (NBCOT), applicants will be asked to answer questions related to the topic of felonies. Application for state licensure with the Board of Occupational Therapy (BOT) requires fingerprinting. For information about limitations based on felonies, applicants are advised to call NBCOT and BOT (address and phone numbers above) anytime prior to the application process. Further, there is a high probability that students will be required to be fingerprinted (at the student's cost) and/or have a drug test and criminal background check at a fieldwork site. Problems with fingerprinting and background could result in a delay or failure of program completion.
These requirements are required prerequisites for Occupational Therapy 101, Foundations of Occupation and Occupational Therapy or 101L, Exploration of Occupation through Activity or Occupational Therapy 100, Medical Terminology and Documentation for Occupational Therapy.

1. Completion of the following tests are for purposes of guidance and for establishment that prerequisite skills of 101 and 101L have been met. (Required of all applicants except those that have a baccalaureate degree.):
a. College Test of English Placement (reading section only) with a minimum score of 25 or above. Students scoring below 25 will be referred to SAC Learning Center.
b. Santa Ana College Test in Math, Level III or successful completion of Intermediate Algebra with a grade of "C" or better.
2. ENGL 101 or 101 H (4units), or equivalent, with a grade of " $C$ " or better.
3. Oral Communication Skill (3 units) - Satisfactory completion of CMST $102,140,145$, or equivalent, with a grade of " $C$ " or better.
4. Biology 149, Human Anatomy \& Physiology (4 units) or equivalent, with grade of "C" or better.
5. PSYC 100 or 100 H (3 units), or equivalent, with a grade of " C " or better.
6. Evidence of a physical examination and appropriate immunizations must be submitted verifying the applicants physical ability to perform the fieldwork requirement of an Occupational Therapy Assistant (O.T.A.).

## Admission Procedures:

Applications to the OTA program will be accepted 1 time per year open dates for applications will be posted on the OTA website
The application must include:

- Official transcripts showing grades for all prerequisite classes
- Completion of 12th grade, verified by transcrips or GED score validated by appropriate testing institution. Students who have an associate's or bachelor's degree from an accredited United States institution do not need to provide high school transcripts or GED scores.
- Level III Math placement test score from Santa Ana College or completion of an Intermediate Algebra course with a grade of "C" or better.
One month before starting classes in the OTA program, students must submit documentation of the following:
- Registration with specified agency for background check
- Current health information demonstrating TB screening and required immunizations/titers
- Professional liability insurance
- Current CPR - BLS for Healthcare Providers from the American Heart Association (this is the only CPR that will be accepted)


## Learning Outcome(s)

1. Students graduating from the OTA program will pass the national certification test within 1 year of graduation
2. Students who enter the OTA program will complete all coursework with their respective cohort.

First Year

| First Semester | Units |  |
| :--- | :--- | ---: |
| OTA 100 | Medical Terminology and Documentation for the | 1 |
| OTA 101 | Foundations of Occupation and Occupational <br> Therapy | 4 |
| OTA 101L | Exploration of Occupation Through Activity | 2 |
| OTA 110 | Human Occupation Across Lifespan | 3 |

Second Semester Units

| OTA 102 | Psychosocial Function and Dysfunction | 4 |
| :--- | :--- | ---: |
| OTA 102L | Psychosocial Components of Occupation | 2.5 |
| OTA 111 | Applied Kinesiology | 1 |
| OTA 115 | Human Disease and Occupation | 2 |
| PSYC 250 | Introduction to Abnormal Psychology | 3 |

Second Year
Third Semester Units

OTA 103 Physical Function and Dysfunction 4

| OTA 103L | Physical Components of Occupation | 2.5 |
| :--- | :--- | ---: |
| OTA 201 | Contemporary Models of Occupational Therapy | 4 |

Fourth Semester
Units
OTA 202 Level II Fieldwork - Part I
6
OTA 203 Level II Fieldwork - Part II
Required OTA Core Courses - 45 units

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| BIOL 149 | Human Anatomy and Physiology |  |
| CMST 101 | Introduction to Interpersonal Communication - or - |  |
| CMST 101H | Honors Introduction to Interpersonal Communication - or - |  |
| CMST 102 | Public Speaking - or - |  |
| CMST 140 | Argumentation and Debate - or - |  |
| CMST 145 | Group Dynamics |  |
| ENGL 101 | Freshman Composition |  |
|  | - or- |  |
| ENGL 101H | Honors Freshman Composition |  |
| PSYC 100 | Introduction to Psychology |  |
|  | - or - |  |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| Humanities |  |  |
| U.S. History or | r Political Science ( American Institutions) | 3 |
| Cultural Bread |  | 3 |
| Communicatio | on \& Analytical Thinking | 3 |
| Math proficiency for graduation: Successful completion of the Santa Ana College Math Proficiency Exam or Intermediate Algebra |  |  |
| All general education, with the exception of Biology 149 and PSYC 100, are waived for students who have a bachelor's degree from an US regionally accredited college |  |  |

Total Units

## OCEANOGRAPHY

(See Geology)

## OFFICE TECHNOLOGY

(See Business Applications and Technology)

## PARALEGAL

## Paralegal Degree

Program code: sac.para.aa
This American Bar Association (ABA) approved program is designed to prepare students to work as a Paralegal/Legal Assistant as defined 3 by section 6450 of the California Business and Professions Code, who are qualified by education, who either contracts with or is employed by an attorney, law firm, corporation, governmental agency, or other entity, and who performs substantial legal work under the direction and supervision of an active member of the State Bar of California, as defined in Section 6060, or an attorney practicing law in the federal courts of this state, that has been specifically delegated by the attorney to him or her.
This program is not designed to prepare students for the practice of law.
Learning Outcome(s):
Upon successful completion of the program students will be able to:

1. Make ethical decisions in the workplace.
a. Students will complete the PARA 121.
b. Students will incorporate ethical standards in PARA 101 through problem solving and discussion board discussions.
2. Understand legal concepts.
a. Students will demonstrate legal concepts in the legal specialty classes through examination and practical exercises.
b. Students will draft law office memorandum and appellate briefs in PARA 248, incorporating analysis of legal concepts.
3. Communicate effectively orally and in writing.
a. Students will draft law office memorandum.
b. Students will use proper grammar, punctuation, and spelling.
c. Students will create client correspondence.
4. Be proficient in using legal technology.
a. Students will demonstrate the use of the Microsoft suite (Word, PowerPoint and Excel) in their completion of assignments.
b. Students will complete assignments using legal-specific software.
5. Exhibit critical thinking skills.
a. Students will analyze cases related to the legal specialty classes.
b. Students will analyze fact patterns to demonstrate the application of legal concepts to fact patterns.
All courses must be passed with a C grade or better with the exception of PARA 297, which is pass/no pass.

## Specific General Education Requirements for Degree:

The ABA additionally specifies that a student must complete a minimum of 18 semester units of ABA approved general education courses from at least 3 disciplines in the areas of language and composition, mathematics, social science and behavioral sciences, natural sciences, humanities and the arts. This excludes courses in kinesiology, counseling, performing arts, accounting, computer science, technical writing, business mathematics, keyboarding, and business law. Students are urged to seek counseling prior to enrollment to insure that college general education choices satisfy this requirement.
Note: Students must complete the program within 5 years or repeat any legal specialty courses which were completed more than 5 years prior to graduation. Legal specialty courses subject to these requirements are marked with an asterisk (*). Students should take Para 100 or Law 100 prior to or concurrently with other legal specialty courses except Para 120 and Para 107.

## Required Core Courses:

$\begin{array}{cl}\text { PARA } 100 & \text { The Paralegal Profession } \\ & \text { - or - }\end{array}$
LAW 100 Introduction to Legal Studies
PARA 101 * Law Office Management
PARA 120 * Computers in the Law Office
PARA 121 Ethics and Professional Responsibility4
PARA 145* Civil Litigation Overview-PARA 146 * Tort Law and Alternative Dispute Resolution 4
PARA 150 * Legal Transactions
PARA 246 Legal Research and Analysis 4
PARA 248 Advanced Research and Writing ..... 3
PARA 297 * The Professional Paralegal ..... 2
BUS 105 Legal Environment of Business- or -

LAW 105 The Legal Environment of Business
Students must choose a minimum of 3 units from the legal elective courses. Students must demonstrate that they have completed 18 semester units of general education as defined by the American Bar Association. Within the requirement for 18 semester credits or the equivalent of general education course work, students must take courses in at least three disciplines, such as social sciences, natural sciences, mathematics, humanities, foreign language, and English.

## Course

## PARA 105 * Cooperative Work Experience Education -1-4

| PARA 107 | Principles and Procedures in the Criminal Justice <br> System | 3 |
| :--- | :--- | :---: |
| PARA 122 | Elder Law | 2 |
| PARA 132 | Family Law and Procedure | 2 |
| PARA 133 | Workers Compensation Law and Procedure | 2 |
| PARA 134 | Probate Law and Procedure | 2 |
| PARA 135 | Bankruptcy Law and Procedure | 2 |
| PARA 136 | Real Property Law and Procedure | 2 |
| PARA 137 | Tort and Insurance Law | 2 |
| PARA 138 | Law of Business Organizations | 2 |
| PARA 139 | Fundamentals of Labor Law | 2 |
| PARA 140 | Immigration Law and Procedure | 2 |
| PARA 143 | Civil Litigation Overview | 2 |
| PARA 144 | Introduction to eDiscovery | 2 |
| PARA 147 | International Commercial Agreements and | 1 |


| PARA 148 | International Intellectual Property Law | 1 |
| :--- | :--- | ---: |
| PARA 149 | The Law of Global Commerce | 1 |
| PARA 299 | Cooperative Work Experience Education | $1-4$ |
| LAW 110 | Legal Terminology | 2 |
| LAW 299 | Cooperative Work Experience Education - | 1 |
|  | Occupational |  |

Note: Students must complete the program within 5 years or repeat any legal specialty courses which were completed more than 5 years prior to graduation. Legal specialty courses subject to this are marked with an asterisk (*).
Students must complete the requirements for the Associate of Arts degree as outlined in the appropriate catalog. The student must demonstrate they have complied with the American Bar Association definitions of "general education."

## Paralegal Certificate (Transcripted)

## Program code: sac.para.ca

This American Bar Association (ABA) approved program is designed to prepare students to work as a Paralegal/Legal Assistant as defined by section 6450 of the California Business and Professions Code, who is qualified by education, who either contract with or is employed by an attorney, law firm, corporation, governmental agency, or other entity, and who perform substantial legal work under the direction and supervision of an active member of the State Bar of California, as defined in Section 6060, or an attorney practicing law in the federal courts of this state that has been specifically delegated by the attorney to him or her.
This program is not designed to prepare students for the practice of law.

## Learning Outcome(s):

Upon successful completion of the program students will be able to:

1. Make ethical decisions in the workplace.
a. Students will complete the PARA 121 Ethics class
b. Students will incorporate ethical standards in PARA 101 through problem solving and group discussions.
2. Understand legal concepts. a. Students will demonstrate legal concepts in the legal specialty classes through examination and practical exercises. b. Students will draft law office memorandum and appellate briefs in PARA 248 incorporating analysis of legal concepts.
3. Communicate effectively orally and in writing.
a. Students will draft law office memorandum.
b. Students will use proper grammar, punctuation, and spelling.
c. Students will create client correspondence.
4. Be proficient in using legal technology.
a. Students will demonstrate the use of the Microsoft suite (Word, PowerPoint and Excel) in their completion of assignments. b. Students will complete assignments using legal specific software.
5. Exhibit critical thinking skills.
a. Students will analyze cases related to the legal specialty classes.
b. Students will analyze fact patterns to demonstrate the application of legal concepts to fact patterns.
All courses must be passed with a C grade or better with the exception of PARA 297, which is a pass/no pass.
A Paralegal Certificate is available to students who meet the 18 semester units of ABA approved general education courses from at least 3 disciplines in the areas of language and composition, mathematics, social science and behavioral sciences, natural sciences, humanities and the arts and who complete the Paralegal course requirements as set forth below.
The approved 18 units of general education courses excludes courses in kinesiology, counseling, performing arts, accounting, computer science, technical writing, business mathematics, keyboarding, and business law. Students are urged to seek counseling prior to enrollment to insure that college general education choices satisfy this requirement.Major requirements for students seeking the certificate: Note: Students must complete the program within 5 years or repeat any legal specialty courses which were completed more than 5 years prior to graduation. Legal specialty courses subject to these requirements are marked with an asterisk (*).

## Core courses

| PARA 100 | The Paralegal Profession | 3 |
| :--- | :--- | :--- |
|  | - or - | 3 |
| LAW 100 | Introduction to Legal Studies | 4 |
| PARA 120 * | Computers in the Law Office | 2 |
| PARA 101 | Law Office Management | 2 |
| PARA 121 | Ethics and Professional Responsibility | 4 |
| PARA 145* | Civil Litigation Overview | 4 |
| PARA 146 * | Tort Law and Alternative Dispute Resolution | 5 |
| PARA 150 * | Legal Transactions | 4 |
| PARA 246 | Legal Research and Analysis | 3 |
| PARA 248 | Advanced Research and Writing | 2 |
| PARA 297 * | The Professional Paralegal | 3 |
| BUS 105 | Legal Environment of Business |  |

LAW 105 The Legal Environment of Business
Students must choose a minimum of 3 units from the legal elective courses. Certificate students must demonstrate that they have completed 18 semester units of general education as defined by the American Bar Association. Within the requirement for 18 semester credits or the equivalent of general education course work, students must take courses in at least three disciplines, such as social sciences, natural sciences, mathematics, humanities, foreign language, and English.

| gal Elec |  | Units |
| :---: | :---: | :---: |
| PARA 105 | Cooperative Work Experience Education Occupational | 1-4 |
| PARA 107 | Principles and Procedures in the Criminal Justice System | 3 |
| PARA 122 | Elder Law | 2 |
| PARA 132 | Family Law and Procedure | 2 |
| PARA 133 | Workers Compensation Law and Procedure | 2 |
| PARA 134 | Probate Law and Procedure | 3 |
| PARA 135 | Bankruptcy Law and Procedure | 2 |
| PARA 136 | Real Property Law and Procedure | 2 |
| PARA 137 | Tort and Insurance Law | 2 |
| PARA 138 | Law of Business Organizations | 2 |
| PARA 139 | Fundamentals of Labor Law | 2 |
| PARA 140 | Immigration Law and Procedure | 2 |
| PARA 143 | Civil Litigation Overview | 2 |
| PARA 144 | Current Issues in Civil Litigation Discovery | 2 |
| PARA 147 | International Commercial Agreements and Distribution Law | 1 |
| PARA 148 | International Intellectual Property Law | 1 |
| PARA 149 | The Law of Global Commerce | 1 |
| PARA 299 | Cooperative Work Experience Education |  |
| LAW 110 | Legal Terminology | 3 |
| LAW 299 | Cooperative Work Experience Education Occupational | 1-4 |

Note: Students must complete the program within 5 years or repeat any legal specialty courses which were completed more than 5 years prior to graduation. Legal specialty courses subject to this are marked with an asterisk (*).
Students must complete a total of 60 semester units. The 3 additional units may be paralegal course electives or another

## PHARMACY TECHNOLOGY

The Pharmacy Technology program is designed to prepare students for employment as pharmacy technicians. Pharmacy technicians assist pharmacists by performing the technical tasks related to the packaging and distribution of medication, including prescriptions. Careers for pharmacy technicians are available in drug stores, hospitals, compounding pharmacies, and managed care organizations. Pharmacy technicians also work in other specialized pharmacy practice sites, providing medications for patients in clinics, hospice, and long-term care facilities and for patients requiring home healthcare or home infusion services.
The Program coursework is based on the national "Model Curriculum for Pharmacy Technician Training" established by a consortium of professional organizations under the leadership of the American Society of Health-System Pharmacists (ASHP), 7272 Wisconsin Avenue, Bethesda, MD, 20814; phone (301) 657-3000. Following the ASHP model, the curriculum is sequenced to provide a foundation level of lecture courses, an application level of lab courses, and an experiential level of externships.
Although there are no specific entry prerequisites for the Pharmacy
Technology program, students should have a good command of the English language, good basic math skills, and good verbal communication ability. Manual dexterity, hearing, and visual perception must be adequate to perform the technical tasks in the lab courses and externship. Prospective students are encouraged to attend a Pharmacy Technology program orientation meeting for a more complete overview of the requirements and recommendations. Information on dates and times for the orientation meetings can be obtained by calling the Division of Human Services and technology at 1-714-564-6800. To enroll, students must submit evidence of background clearance, urine drug test clearance, immunization records (or titer), and recent TB clearance.
The Pharmacy Technology program offers three training options for pharmacy technicians: the Basic Certificate, the Advanced Certificate, and the associate degree. All three training options conform to the requirements specified in section 1793.6 of Title 16 of the California Code of Regulations.
Students who complete only the Basic Certificate option are qualified primarily for jobs in drug stores or other outpatient pharmacy sites. By finishing the additional major courses required for the associate degree or the Advanced Certificate option, students are fully prepared for employment in any pharmacy practice setting. Students are strongly encouraged to complete the Basic Certificate option first and then continue through the remaining courses required for the Advanced Certificate or associate degree. Students with Bachelor or Associate degrees in any other field that have already completed their general education classes, are qualified to petition for the Associate degree in Pharmacy Technology upon completion of the Advanced Certificate Requirement. Although the Pharmacy Technology training program is not part of the pre-pharmacy curriculum, students who plan to attend pharmacy school may enhance their chance of acceptance by completing the Advanced Certificate option. Prior to obtaining employment, pharmacy technicians must be licensed by the California State Board of Pharmacy, 1625 North Market Blvd, Suite N219, Sacramento, CA 95834; phone 916-574-7937. Upon completion of any of the three training options, students are eligible to apply for a state Pharmacy Technician license under Qualifying Method A. Documentation will be provided by the program director using the "Affidavit of Completion of Coursework or Graduation" portion of the license application. Note that applicants must submit fingerprints for a Department of Justice background check, to be done at the applicant's expense. Applicants must also possess a high school diploma or GED and a valid social security number. License applications and complete information on the qualifications may be downloaded from the Board of Pharmacy's web site at www.pharmacy.ca.gov.

The California State Board of Pharmacy does not administer a board exam for pharmacy technicians. To become a certified pharmacy technician (CPhT), students must pass the national exam administered by the Pharmacy Technician Certification Board (PTCB), 1100 15th Street, NW, Suite 730
Washington, DC, 20005-1707; phone 800-363-8012. Information on the certification process can be obtained at www.ptcb.org. Note that the PTCB also requires applicants to have a high school diploma or GED.
Applicants for licensing and certification will be asked to answer questions related to misdemeanor and felony convictions, illegal drug use, and health issues that might impair their ability to practice safely. In its duty to protect the public, the Board of Pharmacy will refuse to issue a pharmacy technician license to anyone deemed unfit to practice. Individuals with criminal backgrounds may also be prohibited from taking the national certification exam.

## Pharmacy Technology Degree

## Program code: sac.phar.as

In addition to the general education requirement, the associate degree includes the full-spectrum training required for employment in all pharmacy practice settings. Upon completion of the associate degree, graduates will meet the academic training requirements for licensing with the California State Board of Pharmacy. Graduates will also be well prepared for the Pharmacy Technician Certification Board exam. The major course requirements for the associate degree consists of the same 20 units of coursework listed in the Basic Certificate option, including the 1.5 units outpatient externship rotation. In addition to completing two additional academic courses (PHAR 057 and PHAR 060), students choosing the associate degree must perform 240 additional hours (three additional units) of externship, involving rotations in inpatient and sterile products pharmacy services. Students will be placed in the hospital and/or home infusion setting to complete these rotations. Background checks, health screenings, and/or drug testing will be required prior to lab classes. Any required investigations are done at the student's expense. In addition, completion of a Communication Studies class (Communication Studies 097 or 101, or 101 H , or 102) is a pre-requisite for externship. Students are expected to understand and agree to abide by the Program Guidelines, which include technician standards and essential functions for pharmacy technicians.
The associate degree is accredited by the American Society of HealthSystem Pharmacists (ASHP). Students must complete each required course with a grade of " C " or better ( 0.5 unit of Pharmacy Technology 060 L or other L-series lab classes and externship with a grade of " P ") to qualify for the degree option.
All courses are required to be completed within a 3-year period to be eligible for Pharmacy Technology program enrollment and certificate/ degree.

## Learning Outcome(s):

1. Students will be prepared for pharmacy job interviews
2. Students will successfully complete the Pharmacy Technician Certification Board Exam and license application process in a timely manner.
Required Core Courses: Units

| PHAR 048 | Introduction to Pharmacy Technology | 2 |
| :--- | :--- | ---: |
| PHAR 051 | Body Systems I | 3.5 |
| PHAR 052 | Body Systems II | 3.5 |
| PHAR 054A | Beginning Pharmacy Calculations | 1 |
| PHAR 054B | Advanced Pharmacy Calculations | 1 |
| PHAR 056 | Pharmacy Operations | 4.5 |
| PHAR 057 | Inpatient Pharmacy Services | 2 |
| PHAR 060 | Sterile Products | 4.5 |
| PHAR 072A | Pharmacy Technology Externship Outpatient | $0.5-1.5$ |
| PHAR 072B | Pharmacy Technology Externship Inpatient | $0.5-2.5$ |

PHAR 072C Pharmacy Technology Externship Sterile
Products

| PHAR 056L Pharmacy Technology Skills Lab | 0.5 |
| :--- | :--- | :--- |

- or -

PHAR 057L Pharmacy Technology Skills Lab 0.5

- or -

PHAR 060L Pharmacy Technology Skills Lab

- or -

PHAR 072L-1 Pharmacy Technology Skills Lab 0.5
CMST 097 American English Conversational Skills 3

- or -

CMST 101 Introduction to Interpersonal Communication 3

- or -

CMST 101H Honors Introduction to Interpersonal 3
Communication

- or -

CMST 102 Public Speaking 3
Recommended electives: Units

| BIOL 139 | Health Microbiology | 4 |
| :--- | :--- | ---: |
| BIOL 149 | Human Anatomy and Physiology | 4 |
| BA 038 | Telephone Techniques | 0.5 |
| BA 110 | Computer Keyboarding Skills | $1-2$ |
| BA 115 | Computer Keyboarding Speed and Accuracy <br> Development | $1-2$ |
| CHEM 109 | Chemistry in the Community | 4 |
| CHEM 119 | Fundamentals - General and Organic | 5 |
| CMPR 100 | The Computer and Society | 3 |
| PHAR 080 | Pharmacy Calculations Review |  |
|  |  | Total Units | | $\mathbf{2 7 - 3 2}$ |
| :--- | :--- |

## Pharmacy Technology Advanced Certificate (Transcripted) Program code: sac.phara.ca

The Pharmacy Technology Advanced Certificate Option includes the full-spectrum training required for employment in all pharmacy practice settings. Upon completion of the Advanced Certificate, graduates will meet the academic training requirements for licensing with the California State Board of Pharmacy. Graduates will also be well prepared for the Pharmacy Technician Certification Board exam.
The major course requirements for the Advanced Certificate consists of the same 20.0 units of coursework listed in the Basic Certificate option, including the one unit outpatient externship rotation. In addition to completing two additional academic courses (PHAR 057 and PHAR 060), students choosing the Advanced Certificate option must perform 240 additional hours (three additional units) of externship, involving rotations in inpatient and sterile products pharmacy services. Students will be placed in the hospital and/or home infusion setting to complete these rotations. Background checks, health screenings, and/or drug testing will be required prior to lab classes. Any required investigations are done at the student's expense. In addition, completion of a Communication Studies class (Communication Studies 097, or 101, or 101H, or 102) is a pre-requisite for externship. Students are expected to understand and agree to abide by the Program Guidelines, which include technician standards and essential functions for pharmacy technicians.
The Advanced Certificate option is accredited by the American Society of Health-System Pharmacists (ASHP). Students must complete each required course with a grade of "C" or better ( 0.5 unit of PHAR 060L or other L-series lab classes and externship with a grade of "P") to qualify for the Advanced Certificate.
All courses are required to be completed within a 3 -year period to be eligible for Pharmacy Technology program enrollment and certificate/ degree.

## Learning Outcome(s):

1. Students will be prepared for pharmacy job interviews
2. Students will successfully complete the Pharmacy Technician Certification Board Exam and license application process in a timely manner.
Required Core Courses: Units

| PHAR 048 | Introduction to Pharmacy Technology | 2 |
| :--- | :--- | ---: |
| PHAR 051 | Body Systems I | 3.5 |
| PHAR 052 | Body Systems II | 3.5 |
| PHAR 056 | Pharmacy Operations | 4.5 |
| PHAR 057 | Inpatient Pharmacy Services | 2 |
| PHAR 060 | Sterile Products | 4.5 |
| PHAR 056L | Pharmacy Technology Skills Lab | 0.5 |

- or -

PHAR 057L Pharmacy Technology Skills Lab

- or -

PHAR 060L Pharmacy Technology Skills Lab

- or -

PHAR 072L-1 Pharmacy Technology Skills Lab

- or -

PHAR 084L Pharmacy Technology Skills Lab
CMST 101 Introduction to Interpersonal Communication

- or -

CMST 102 Public Speaking

- or -

CMST 097 American English Conversational Skills

- or -

CMST 101H Honors Introduction to Interpersonal

|  | Communication | 1 |
| :--- | :--- | ---: |
| PHAR 054A | Beginning Pharmacy Calculations | 1 |
| PHAR 054B | Advanced Pharmacy Calculations | $0.5-1.5$ |
| PHAR 072A | Pharmacy Technology Externship Outpatient <br>  <br> -and - | $0.5-2.5$ |
| PHAR 072B | Pharmacy Technology Externship Inpatient <br>  <br> -and - | $0.5-2.5$ |
| PHAR 072C | Pharmacy Technology Externship Sterile <br> Products |  |

Recommended electives
Units

| BA 115A | Computer Keyboarding Speed and Accuracy <br> Development | 1 |
| :--- | :--- | :--- |
| BIOL 149 | Human Anatomy and Physiology | 4 |
| CHEM 109 | Chemistry in the Community | 4 |
| CMPR 100 | The Computer and Society | 3 |

Total Units 27-32

## Pharmacy Technology Basic Option Certificate (Transcripted) <br> Program code: sac.pharb.ca

The Basic Certificate option prepares students for entry-level employment as pharmacy technicians in the retail pharmacy sector. By completing the Basic Certificate option, students will meet the minimum academic training requirements for licensing as specified by the California State Board of Pharmacy.
Students who intend to complete only the Basic Certificate option will be placed for a minimum of 80 hours of externship in an outpatient (drug store or ambulatory care clinic) pharmacy site to gain workplace experience.
Background checks, health screenings, and/or drug testing will be required prior to lab classes. Any required investigations are done at the student's expense. In addition, completion of a Communication Studies class (Communication Studies 097, or 101, or 101 H , or 102) is a prerequisite for externship. Students are expected to understand and agree to abide by the Program Guidelines, which include technician standards and essential functions for pharmacy technicians.
The Basic Certificate option is not accredited by the American Society of Health-Systems Pharmacists (ASHP). Students who earn the Basic Certificate and then continue through the Advanced Certificate will be designated as having completed an ASHP-accredited program. Students must complete each required course with a grade of "C" or better (Externship with a grade of "P") to qualify for the Basic Certificate. All courses are required to be completed within a 3 -year period to be eligible for Pharmacy Technology program enrollment and certificate/ degree.
Learning Outcome(s):

1. Students will be prepared for pharmacy job interviews.
2. Students will successfully complete the Pharmacy Technician Certification Board Exam and license application process in a timely manner.
Major requirements for the Basic Certificate option:
Required Core Courses: Units
PHAR 048 Introduction to Pharmacy Technology 2
PHAR 051 Body Systems I 3.5
PHAR 052 Body Systems II 3.5

| PHAR 056 Pharmacy Operations | 4.5 |
| :--- | :--- | :--- |

CMST 101 Introduction to Interpersonal Communication 3

- or -

CMST 101H Honors Introduction to Interpersonal 3 Communication

- or-

CMST 102 Public Speaking 3
CMST 097 American English Conversational Skills 3

| PHAR 054A Beginning Pharmacy Calculations | 1 |
| :--- | ---: |
| PHAR 054B Advanced Pharmacy Calculations | 1 |
| PHAR 072A Pharmacy Technology Externship Outpatient | $0.5-1.5$ |

Recommended electives Units

| BIOL 139 | Health Microbiology | 4 |
| :--- | :--- | ---: |
| BA 038 | Telephone Techniques | 0.5 |
| BA 110 | Computer Keyboarding Skills | 1 |
| BA 115 | Computer Keyboarding Speed and Accuracy <br> Development | 1 |
| CHEM 109 | Chemistry in the Community | 4 |
| CHEM 119 | Fundamentals - General and Organic | 5 |
| CMPR 100 | The Computer and Society | 3 |
| PHAR 080 | Pharmacy Calculations Review | 2 |
| PHAR 056L | Pharmacy Technology Skills Lab | $0.5-2$ |
| PHAR 072L-1Pharmacy Technology Skills Lab | $0.5-2$ |  |

## 174 INSTRUCTIONAL PROGRAMS

## PHILOSOPHY

## Option 1

## Philosophy Degree

## Program code: sac.phil.aa

The associate degree curriculum in philosophy prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree. The baccalaureate degree is intended for those students who plan to teach philosophy, or for pre-professional students in such areas as theology and law, and as a foundation for graduate studies in the areas of library science, diplomacy, theoretical physical science, and specialized historical studies.
Learning Outcome(s):
Students will develop strong skills in critical thinking, logical analysis, and analytical writing, and will understand the core historical and contemporary ideas central to the discipline.
Required Core Courses: Units

| PHIL 106 | Introduction to Philosophy - or - | 3 |
| :---: | :---: | :---: |
| PHIL 106H | Honors Introduction to Philosophy | 3 |
| PHIL 108 | Ethics | 3 |
| PHIL 110 | Critical Thinking - or - | 4 |
| PHIL 110H | Honors Critical Thinking - or - | 4 |
| PHIL 111 | Introductory Logic | 4 |
| PHIL 112 | World Religions | 3 |
| PHIL 118 | History of Philosophy | 3 |
| Electives |  | 6 |
|  | Total Units | 22 |
| A minimum of six elective units to be selected from the following: |  |  |
| ART 101 | Survey of Western Art History I: Prehistory Through the Middle Ages | 3 |
| ART 102 | Survey of Western Art History II: Renaissance through the Twentieth Century | 3 |
| ENGL 233A | Shakespeare's Comedies and Romances | 3 |
| ENGL 233B | Shakespeare's Tragedies and History Plays | 3 |
| ENGL 233C | Shakespeare's Theatre | 3 |
| ENGL 233D | Shakespeare's Theatre | 3 |
| ENGL 271 | Survey of World Literature I | 3 |
| ENGL 272 | Survey of World Literature II | 3 |
| HIST 101 | World Civilizations to the 16th Century - or - | 3 |
| HIST 101H | Honors World Civilizations to the 16th Century | 3 |
| HIST 102 | World Civilizations Since the 16th Century - or - | 3 |
| HIST 102H | Honors World Civilizations Since the 16th Century | 3 |
| IDS 121 | Humanities Through the Arts | 3 |
| MUS 101 | Music Appreciation | 3 |
|  | - or - |  |
| MUS 101H | Honors Music Appreciation | 3 |
| PSYC 100 | Introduction to Psychology | 3 |
|  | - or - |  |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| THEA 233A | Shakespeare's Comedies and Romances | 3 |
| THEA 233B | Shakespeare's Tragedies and History Plays | 3 |
| THEA 233C | Shakespeare's Theatre | 3 |
| THEA 233D | Shakespeare's Theatre | 3 |

## Option 2

## Associate in Arts in Philosophy for Transfer <br> Program code: sac.phil.aat

The Associate in Arts in Philosophy for Transfer (AA-T in Philosophy) is designed to prepare students for transfer into the CSU system to complete a baccalaureate degree in Philosophy. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Philosophy major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees.
Upon completion of the AA-T in Philosophy students will have an understanding of the core historical and contemporary ideas central to the discipline of philosophy. Students will also have the critical thinking, logical analysis, and analytical writing skills instrumental for success across academic disciplines.

## Learning Outcome(s):

Students will develop strong skills in critical thinking, logical analysis, and analytical writing, and will understand the core historical and contemporary ideas central to the discipline.

| Required Core Courses: Select Two (7 units) |  | Units |
| :---: | :---: | :---: |
| PHIL 111 | Introductory Logic | 4 |
| PHIL 106 | Introduction to Philosophy | 3 |
|  | - or - |  |
| PHIL 106H | Honors Introduction to Philosophy | 3 |
|  | - or - |  |
| PHIL 108 | Ethics | 3 |
| List A: Select one (3-4 units) |  | Units |
| Any course from Required Core not already used |  |  |
|  | - or- |  |
| PHIL 110 | Critical Thinking | 4 |
|  | - or - |  |
| PHIL 110H | Honors Critical Thinking | 4 |
|  | - or - |  |
| PHIL 112 | World Religions | 3 |
|  | - or - |  |
| PHIL 118 | History of Philosophy | 3 |

PHIL 118 History of Philosoph
3
List B: Select two (6-7 units) Units Any course from List A not already used
List C: Select one (3-4 units)
Units
Any course from List A or B not already used

- or -

HIST 101 World Civilizations to the 16th Century

HIST 101H Honors World Civilizations to the 16th Century

- or -

HIST 102 World Civilizations Since the 16th Century3

- or -

HIST 102H
Honors World Civilizations Since the 16th Century

## PHOTOGRAPHY

## Photography Degree

## Program code: sac.phot.aa

The associate in arts degree in photography provides a foundation in basic photography processes combined with a high level of creative opportunity and individual expression. Enrollment in this program prepares transfer students to enter advanced degree programs at four-year institutions as well as to enter the field of photography in positions such as studio photographer, fashion photographer, museum/gallery photographer, photo journalist, and free lance photographer. Please consult a SAC Counselor for information about course requirements for particular four-year institutions.

## Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will possess general knowledge of the monuments, movements and principal artists of major art periods of the past and contemporary thinking on art, design and photography.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| ART 102 | Western Art History | 3 |
|  | -or - |  |
| PHOT 150 | History of Photography | 3 |
| ART 110 | Two-Dimensional Design | 2 |
| ART 124 | Gallery Production | 0.5 |
| PHOT 009 | Photography Lab | 3 |
| PHOT 180 | Beginning Photography | 3 |
| PHOT 185A | Landscape Photography | 3 |
| PHOT 191 | Commercial Studio Practices | 3 |
| PHOT 194 | Digital Workflow | 3 |
| PHOT 196 | Introduction to Commercial Photography | 3 |
| PHOT 291 | Wedding and Quinceanera Photography | 3 |
| PHOT 292 | Portrait Photography |  |


| Plus 3 units from the following courses: | Units |  |  |
| :--- | :--- | ---: | ---: |
| ART 162 | Digital Design with Photoshop-I | 3 |  |
| ART 195 | Introduction to Digital Media Arts | 3 |  |
| PHOT 185B | Landscape Photography | 3 |  |
| PHOT 197 | Intermediate Commercial Photography | 3 |  |
| PHOT 294 | Color Photographic Expression |  | 3 |
|  | Total Units | 32.5 |  |

## Commercial Photography Certificate (Transcripted) <br> Program code: sac.phot.ca

The digital photography certificate program is an intensive course of study focused on providing the student with a broad base of technical skills with additional emphasis on visual communication. Career positions include production printer, studio photographer, and free lance photographer.

## Learning Outcome(s):

1. Students will demonstrate visual literacy, including competency in the non-verbal languages of art and design
2. Students will demonstrate competency in critical analysis and verbal and written responses to visual phenomena
3. Students will possess the aesthetic knowledge and technical skills necessary in digital photography, including wedding, quinceanera and commercial, to begin a career as a production printer, studio photographer or freelance photographer

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| PHOT 009 | Photography Lab | 0.5 |
| PHOT 180 | Beginning Photography | 3 |
| PHOT 185A | Landscape Photography | 3 |
| PHOT 191 | Commercial Studio Practices | 3 |
| PHOT 194 | Digital Workflow | 3 |
| PHOT 196 | Commercial Photography | 3 |
| PHOT 291 | Wedding and Quinceañera Photography | 3 |
| Plus 3 units from the following courses: | Units |  |
| ART 124 | Gallery Production | 2 |
| ART 129 | Graphic Design Concepts for the Web | 3 |
| ART 162 | Digital Design with Photoshop-I | 3 |
| BUS 170 | Principles of Small Business Management | 3 |
| PHOT 150 | History of Photography | 3 |
| PHOT 292 | Portrait Photography | 3 |

## PHYSICS

Option 1
Physics Degree

## Program code: sac.phys.as

The associate degree curriculum in physics prepares students to move into a curriculum at a four-year institution leading to a baccalaureate, and then into careers in applied physics, research and development, and/or as assistant research scientists.
Learning Outcome(s):
Students will develop communication via coherent and succinct scientific writing, creative and critical thought for problem solving, and technological competence in the use of computerized sensors, software, and programming for scientific purposes.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| PHYS 217 | Engineering Physics I | 4 |
| PHYS 227 | Engineering Physics II | 4 |
| PHYS 237 | Engineering Physics III | 4 |
| MATH 180 | Analytical Geometry and Calculus I | 4 |
| MATH 185 | Analytical Geometry and Calculus II | 4 |
| MATH 280 | Intermediate Calculus |  |
|  |  | 4 |

Chemistry courses may be required for upper division standing (check with a counselor and the Transfer Center).

## 176 INSTRUCTIONAL PROGRAMS

## Option 2

## The Associate in Science in Physics for Transfer

## Program code: sac.phys.ast

The Associate in Science in Physics for Transfer (AS-T) prepares students to transfer into the CSU system leading to a baccalaureate degree in Physics. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AS-T degree also provides guaranteed admission to the CSU system, although not to a particular campus or major. See page $\mathbf{2 4}$ for a list of additional requirements for all associate in arts for transfer (AA-T) and associate in science for transfer (AS-T) degrees. In addition to the AS-T degree requirements, students are encouraged to complete additional courses, that may be articulated as major preparation, prior to transfer. Some typical courses that may be articulated are MATH 287, MATH 290, CHEM 219, and CMPR 120. While these additional courses are not required for this degree, they will better prepare students for upper-division Physics coursework at a CSU. Upon completion of the AS-T, students will become grounded in the fundamental physical laws as well as quantitative and analytical reasoning. Upon completion of the baccalaureate degree in Physics, students may then move in to careers in applied physics, education, and/or as assistant research scientists.

## Learning Outcome(s):

Students will develop communication via coherent and succinct scientific writing, creative and critical thought for problem solving, and technological competence in the use of computerized sensors, software, and programming for scientific purposes.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| PHYS 217 | Engineering Physics I | 4 |
| PHYS 227 | Engineering Physics II | 4 |
| PHYS 237 | Engineering Physics III | 4 |
| MATH 180 | Analytic Geometry and Calculus I - or - | 4 |
| MATH 180H | Honors Analytic Geometry and Calculus | 4 |
| MATH 185 | Analytic Geometry and Calculus II | 4 |
| MATH 280 | Intermediate Calculus | 4 |
|  | Tota | 24 |

## PLANT BIOLOGY

(See Biological Science Degree for major requirements and counseling for transfer requirements.)

## POLITICAL SCIENCE

## Option 1

## Political Science Degree A.A. Degree

## Program code: sac.polt.aa

The associate degree curriculum in political science prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree. The baccalaureate degree prepares students for law school, teaching, public relations, journalism, government service on the local, state and national levels, and private employment where government institutions are involved.

## Required Core Courses:

Units
POLT 101 American Government and Politics 3

- or -

POLT 101H Honors American Government and Politics
9 units from 3 courses below. Units

| POLT 201 | Introduction to Comparative Politics | 3 |
| :--- | :--- | :--- |
| POLT 220 | International Politics | 3 |
| POLT 235 | Identity Politics | 3 |

POLT 235 Identity Politics 3

| POLT 200 | American Political Thought |  |
| :--- | :--- | ---: |
|  | -or - | 3 |
| POLT 200H | Honors American Political Thought | 3 |
| $\mathbf{4}$ units from courses below. | Units |  |
| ENGL 101 | Freshman Composition | 4 |
|  | - or - | 4 |
| ENGL 101H | Honors Freshman Composition | 4 |
| Elective 9 units. Select electives from the following list. | Units |  |
| ANTH 100 | Introduction to Cultural Anthropology | 3 |
|  | - or - | 3 |
| ANTH 100H | Honors Introduction to Cultural Anthropology | 3 |
| CMPR 100 | The Computer and Society | 3 |
| ECON 120 | Principles/Macro | 3 |

Foreign Language 101
Foreign Language 102
Foreign Language 201

- or -

Foreign Language 201H
Foreign Language 202

- or -

Foreign Language 202H
HIST 101 World Civilizations to the 16th Century 3

- or -

HIST 101H Honors World Civilizations to the 16th Century 3
HIST 102 World Civilizations Since the 16th Century 3

| HIST 102H | Honors World Civilizations Since the 16th <br> Century |
| :--- | :--- |

HIST 120 The United States to 1865

4

HIST 120H Honors The United States to 1865
HIST 150 Latin American Civilization to Independence $\quad 3$

HIST 151 Modern Latin American Civilization 3
HIST 153 History of Mexico 3

| IDS 117H | Honors Introduction to Global Studies | 3 |
| :--- | :--- | :--- |
| PHIL 106 | Introduction to Philosophy |  |

PHIL 106 Introduction to Philosophy 3
PHIL 106H Honors Introduction to Philosophy 3
PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H Honors Introduction to Psychology 3
SOC 100 Introduction to Sociology 3

- or -

SOC 100 H Honors Introduction to Sociology 3
CMST 140 Argumentation and Debate 3
Total Units 25

Option 2

## Associate in Arts in Political Science for Transfer

## Program code: sac.polt.aat

The Associate in Arts in Political Science for Transfer (AA-T) prepares students to transfer into the CSU system. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU in the Political Science major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AA-T in Political Science students will have an understanding of both the breadth and depth of the political science discipline. This knowledge will be grounded in the comprehension of political science principles, concepts, ideas, theories, research, and terminology. Students will also have the capacity to write and think in a critical and analytical way about issues pertaining to politics, government, and society.

## Learning Outcome(s):

Students will demonstrate an understanding of American and international political institutions.

## Required Core Courses: <br> Units

POLT 101 Introduction to Government

- or -

POLT 101H Honors Introduction to Government
List A - Select 3 courses:


## PSYCHOLOGY

## Option 1

## Associate in Arts in Psychology Degree

## Program code: sac.psyc.aa

The associate degree in psychology prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree for specialization in any of more than twenty branches of psychology including child, clinical, personal, vocational and marriage counseling, industrial, mental health, and college teaching. Completion of the twoyear program is appropriate for students whose career plans include helping people, e.g., teaching, social welfare, probation, criminology, nursing, law, or personnel work. Consult a counselor for information about course requirements for specific universities.

## Learning Outcome(s):

Students will be able to employ the scientific method of inquiry to address psychological questions, possess an understanding of the relationship between biology and psychological processes, demonstrate an understanding of the major theoretical perspective in the field of psychology, and be able to communicate their ability to think critically through problem solving and decision making, using the standards and conventions of the American Psychological Association.
Required Core Courses:

PSYC 100H Honors Introduction to Psychology

- and -

PSYC 210 Statistics for the Behavioral Sciences

- or -

MATH 219 Statistics and Probability

- or -

MATH 219H Honors Statistics and Probability

- and -

PSYC 219 Introduction to Research Methods in Psychology 3
Two courses from the following psychology electives: Units

| PSYC 140 | Introduction to Psychology of Adulthood and <br> Aging | 3 |
| :--- | :--- | ---: |
| PSYC 157 | Introduction to Child Psychology | 3 |
| PSYC 170 | Multicultural Psychology | 3 |
| PSYC 180 | Introduction to Lifespan Psychology | 3 |
| PSYC 200 | Introduction to Biological Psychology | 3 |
| PSYC 230 | Psychology and Effective Behavior | 3 |
| PSYC 240 | Introduction to Social Psychology | 3 |
| PSYC 250 | Introduction to Abnormal Psychology | 3 |
| One additional elective from the psychology courses above | Units |  |

One additional elective
or from the following:
ANTH 100 Introduction to Cultural Anthropology 3

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
ANTH 101 Introduction to Physical Anthropology 3
BIOL 109 Fundamentals of Biology 3

- or -

BIOL 109H Honors Fundamentals of Biology 3
BIOL 149 Human Anatomy and Physiology 4

CHEM 109 Chemistry in the Community 4
CHEM 119 Fundamentals - General and Organic 5
CMPR 100 The Computer and Society 3

| IDS 155 | Human Sexuality |
| :--- | :--- |
| KNPR 125 | Sport Psychology |
| PHIL 110 | Critical Thinking <br> - or - |
| PHIL 110H Honors Critical Thinking |  |
| PHIL 111 | Introductory Logic |
| SOC 100 | Introduction to Sociology <br> - or - |
| SOC 100H | Honors Introduction to Sociology |

The Associate in Arts in Psychology for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in psychology. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU, in the Psychology major. See page 24 for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of of the AA-T in Psychology, students will have a general understanding of main psychological theories as they pertain to development, personality, psychological disorders, learning, memory, and social dynamics as well as an understanding of the physiological basis of human behavior. This knowledge base will be grounded in the understanding of basic research methodology. Additionally, students will have the capacity to write and think in a critically analytical way about issues pertaining to human behavior and mental processes. Completion of the AA-T is appropriate for students whose career plans include helping people, i.e., teaching, social welfare, probation, criminology, nursing, law, or personnel work.

## Learning Outcome(s):

Students will be able to employ the scientific method of inquiry to address psychological questions, possess an understanding of the relationship between biology and psychological processes, demonstrate an understanding of the major theoretical perspective in the field of psychology, and be able to communicate their ability to think critically through problem solving and decision making, using the standards and conventions of the American Psychological Association.

## Required Core Courses:

PSYC 210 Statistics for the Behavioral Sciences

- or -

MATH 219 Statistics and Probability

- or -

MATH 219H Honors Statistics and Probability
PSYC 100 Introduction to Psychology

- or -

PSYC 100H Honors Introduction to Psychology $\qquad$
PSYC 219 Introduction to Research Methods in Psychology 3
List A - select one course (3 units) Units
BIOL 109 Fundamentals of Biology

- or -

BIOL 109H Honors Fundamentals of Biology $\qquad$
PSYC 200 Introduction to Biological Psychology 3
List B - select one course below (3-4 units) or any course not selected from List A
ENGL 101 Freshman Composition

- or -

ENGL 101H Honors Freshman Composition

List C - select one course below (3-5 units) or any course not Units
selected from List A or List B
ANTH 100 Introduction to Cultural Anthropology 3

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
ANTH 101 Introduction to Physical Anthropology 3
ANTH 104 Language and Culture 3

- or -

ANTH 104 H Honors Language and Culture 3
BIOL 177 Human Genetics 3
BIOL 211 Cellular and Molecular Biology 5
BIOL 239 General Human Anatomy 4
CHEM 119 Fundamentals - General and Organic 5
CHEM 209 Introductory Chemistry 4
CHEM 219 General Chemistry 5

- or -

CHEM 219H Honors General Chemistry 5
ENGL 102 Literature and Composition 4

- or -

ENGL 102H Honors Literature and Composition 4
ENGL 103 Critical Thinking and Writing 4

- or -

ENGL 103H Honors Critical Thinking and Writing 4
ENGL 104 Language and Culture 3

- or -

ENGL 104H Honors Language and Culture 3
CDEV 107 Child Growth and Development (DS1) 3
MATH 105 Mathematics for Liberal Arts Students 3
MATH 140 College Algebra 4
MATH 145 Finite Mathematics 4
MATH $150 \begin{array}{ll}\text { Calculus for Biological, Management and Social } \\ \text { Sciences }\end{array}$
MATH 162 Trigonometry 4
MATH 170 Pre-Calculus Mathematics 4
MATH 180 Single Variable Calculus I 4

- or -

MATH 180H Honors Single Variable Calculus I 4
PSC 115 Concepts in Physical Sciences for Educators $\quad 4$
PHYS 109 Survey of General Physics 4
PHYS 210 Principles of Physics I 4
PHYS 217 Engineering Physics I 4
PHYS 279 College Physics I 4
$\begin{array}{lll}\text { PSYC } 140 & \begin{array}{l}\text { Introduction to Psychology of Adulthood and } \\ \text { Aging }\end{array} & 3\end{array}$
PSYC 157 Introduction to Child Psychology 3
PSYC 170 Multicultural Psychology 3
PSYC 180 Introduction to Lifespan Psychology 3
PSYC 230 Psychology and Effective Behavior 3
PSYC 240 Introduction to Social Psychology 3
PSYC 250 Introduction to Abnormal Psychology 3
SOC 100 Introduction to Sociology 3

- or -

SOC 100H Honors Introduction to Sociology $\quad 3$
SOC 140 Social Problems 3

- or -

SOC 140H Honors Analysis of Social Trends and Problems 3
SOC 240 Introduction to Social Psychology $\quad 3$
Total Units 20-22

## SCIENCE

## Science Degree

## Program code: sac.sci.as

The associate degree in science is designed to provide students with a foundation in science that will allow transfer to a four-year college or university to complete a baccalaureate science degree in disciplines such as astronomy, biology, biochemistry, chemistry, geology, geophysics, meteorology, oceanography, or physics.
For transfer with upper division standing, most four-year institutions require a minimum of one-year of calculus and one-year of general chemistry in addition to the courses required in the science major. Check with the Santiago Canyon College/Santa Ana College Transfer Center or counselor for specific transfer requirements.
Units used to satisfy the Santiago Canyon College/Santa Ana College general education requirements may also be used to satisfy the Science Degree requirements.

## Learning Outcome(s):

Students will understand the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.
Required Core Courses: Units

| MATH 180 | Analytic Geometry and Calculus I | 4 |
| :--- | :--- | :--- |
|  | - or - | 4 |
| MATH 180H | Honors Analytic Geometry and Calculus | 5 |
| CHEM 219 | General Chemistry <br>  <br>  <br> - or - |  |
| CHEM 219H | Honors General Chemistry | 5 |

General Science Emphasis:
Required Core Courses:
Science Core Required Courses - 9 units 9
MATH 185 Analytic Geometry and Calculus II 4

Electives ${ }^{\text {A }}$
Total Units
A - Electives for any emphasis of the Science Degree must be selected from the following courses:
Any course numbered 100 or higher in Astronomy, Biology, Chemistry,
Earth Science, Environmental Studies, Geology, Physical Science, or
Physics and MATH 185, 280.

## Astronomy Emphasis:

Required Core Courses:
Science Core Required Courses ${ }^{B}$

| ASTR 109 | Introduction to the Solar System | 3 |
| :--- | :--- | :--- |
| ASTR 110 | Introduction to Stars and Galaxies | 3 |


| ASTR 110H | Honors Introduction to Stars and Galaxies | 3 |
| :--- | :--- | :--- |
| ASTR 140 | Astronomy Laboratory | 1 |
| MATH 185 | Analytic Geometry and Calculus II | 4 |
| Electives A,C |  | Total Units |
|  | $\mathbf{2 6}$ |  |

A - Electives for any emphasis of the Science Degree must be selected from the following courses:
Any course numbered 100 or higher in Astronomy, Biology, Chemistry, Earth Science, Environmental Studies, Geology, Physical Science, or Physics and MATH 185, 280.
B - Astronomy Emphasis Students may substitute PHYS 217 for CHEM 219.
c - Completion of PHYS 217/227/237 and/or MATH 280 highly recommended.

## Biology Emphasis:

Required Core Courses: Units
Science Core Required Courses
BIOL 211 Cellular and Molecular Biology
BIOL 212 Animal Diversity and Ecology

- or -

BIOL 214 Plant Diversity and Evolution
Electives A,E
Total Units
A - Electives for any emphasis of the Science Degree must be selected from the following courses:
Any course numbered 100 or higher in Astronomy, Biology, Chemistry, Earth Science, Environmental Studies, Geology, Physical Science, or Physics and MATH 185, 280.
D - Biology Emphasis Students may substitute MATH 150 for MATH 180/180H.
E - CHEM 229 and Biology 211 and 212 or 214 highly recommended for Biology Emphasis Students.
Chemistry Emphasis:
Required Core Courses: Units
Science Core Required Courses 9
CHEM 229 General Chemistry and Qualitative Analysis 5
MATH 185 Analytic Geometry and Calculus II 4
Electives $\mathrm{A}, \mathrm{F} \quad 8$

## Total Units <br> 26

A - Electives for any emphasis of the Science Degree must be selected from the following courses:
Any course numbered 100 or higher in Astronomy, Biology, Chemistry, Earth Science, Environmental Studies, Geology, Physical Science, or Physics and MATH 185, 280.
F - Completion of CHEM 259 or CHEM 249 and MATH 185 highly recommended for Chemistry Emphasis Students.

## Geology Emphasis:

Required Core Courses: Units
Science Core Required Courses 9
GEOL 101 Introduction to Geology 3
GEOL 101L Introduction to Geology Laboratory 1
GEOL 201 Introduction to Historical Geology 4
Electives $\mathrm{A}, \mathrm{G} \quad 9$

A - Electives for any emphasis of the Science Degree must be selected from the following courses:
Any course numbered 100 or higher in Astronomy, Biology, Chemistry, Earth Science, Environmental Studies, Geology, Physical Science, or Physics and MATH 185, 280.
${ }^{\text {G }}$ - Completion of CHEM 229 and MATH 185 highly recommended for Geology Emphasis Students.

## 180 INSTRUCTIONAL PROGRAMS

## Physics Emphasis:

## Required Core Courses:

Units
Science Core Required Courses*****
PHYS 217 Engineering Physics I
PHYS 227 Engineering Physics II

- or -

PHYS 237 Engineering Physics III
MATH 185 Analytic Geometry and Calculus II 4

Electives ***** 5
***** Physics Emphasis Students may substitute MATH 280 for CHEM 219.
***** Completion of PHYS 217/227/237 and/or MATH 280 highly recommended for Physics Emphasis Students.
Electives for any emphasis of the Science Degree must be selected from the following courses:
Any course numbered 100 or higher in Astronomy, Biology, Chemistry, Earth Science, Environmental Studies, Geology, Physical Science, or Physics and MATH 185, 280.

## SIGN LANGUAGE

(See American Sign Language)

## SOCIAL SCIENCE

## Social Science Degree

## Program code: sac.socs.aa

The associate degree curriculum in social science is designed to provide the student with a better understanding of human behavior, past and present, the historical and social environmental forces that operate in the world, and the significant problems of the present day. Completion of the degree prepares students to move into a curriculum at a fouryear institution leading to a baccalaureate degree. Some employment opportunities are available in the teaching of social science.
Learning Outcome(s):
Students will evaluate how individuals, societies, and social subgroups operate.

## Required Core Courses:

HIST 101 World Civilizations to the 16th Century

- or -

HIST 101H Honors World Civilizations to the 16th Century - or -

HIST 102 World Civilizations Since the 16th Century - or -

HIST 102H Honors World Civilizations Since the 16th Century
HIST 120 United States to 18653
$\begin{array}{ll} & \text { - or - } \\ \text { HIST 120H } & \text { Honors United States to } 1865\end{array}$

- or -

HIST 121 United States Since 1865

- or -

HIST 121H Honors United States Since 1865
$\square$
ANTH 100 Cultural Anthropology 3 - or -

ANTH 100H Honors Cultural Anthropology - or -

SOC 100 Introduction to Sociology

- or -

SOC 100H Honors Introduction to Sociology

| ECON 120 | Principles/Macro | 3 |
| :---: | :---: | :---: |
| POLT 101 | Introduction to Government | 3 |
|  | - or - |  |
| POLT 101H | Honors Introduction to Government | 3 |
| PSYC 100 | Introduction to Psychology | 3 |
|  | - or - |  |
| PSYC 100H | Honors Introduction to Psychology | 3 |
| Select a minimum of 6 units from the recommended electives below: |  |  |
|  | Total Units | 24 |
| ANTH 101 | Introduction to Physical Anthropology | 3 |
| ANTH 103 | Introduction to Archaeology | 3 |
| ANTH 125 | Native Americans in the U.S. | 3 |
| CMPR 100 | The Computer and Society | 3 |
| GEOG 100 | World Regional Geography | 3 |
|  | - or- |  |
| GEOG 100H | Honors World Regional Geography | 3 |
| HIST 125 | Native Americans in the U.S. | 3 |
| HIST 127 | Women in U.S. History | 3 |
| HIST 181 | Survey of Chicana/Latina Women's History | 3 |
| IDS 117H | Honors Introduction to Global Studies | 3 |
| POLT 200 | American Political Thought | 3 |
|  | - or - |  |
| POLT 200H | Honors American Political Thought | 3 |
| POLT 201 | Introduction to Comparative Politics | 3 |
| POLT 220 | International Politics | 3 |

## SOCIOLOGY

## Option 1

## Sociology Degree

## Program code: sac.soc.aa

The associate degree curriculum in sociology is an interdisciplinary social science program providing students an understanding of interpersonal behavior and social structure, a critical appreciation of contemporary social life, and a frame of reference for an analysis of human behavior. Completion of the associate in arts degree prepares 3 students to move into a curriculum at a four-year institution leading to a baccalaureate degree.

## Learning Outcome(s):

Students will identify, contrast and apply the methods and theoretical perspectives in sociology utilized to explain social interaction and
Required Core Courses:
- or -
ANTH 100H Honors Introduction to Cultural Anthropology 3
PSYC 100 Introduction to Psychology 3
- or -
PSYC 100H Honors Introduction to Psychology 3
SOC 100 Introduction to Sociology 3
- or -
SOC 100H Honors Introduction to Sociology 3
SOC 140 Analysis of Social Trends and Problems 3
- or -
SOC 140H Honors Analysis of Social Trends and Problems 3
Selected electives (two courses from the following): Units

| ANTH 101 | Introduction to Physical Anthropology | 3 |
| :--- | :--- | :--- |
| *ANTH 104 | Language and Culture | 3 |

*ANTH 104 Language and Culture
3
- or -

| *ANTH 104H | Honors Language and Culture - or - | 3 |
| :---: | :---: | :---: |
| *ENGL 104 | Language and Culture - or - | 3 |
| *ENGL 104H | Honors Language and Culture | 3 |
| ANTH 105/ HIST 105 | Ancient Mesoamerican Civilization | 5 |
| ANTH 125/ HIST 125 | Native Americans in the U.S. | 3 |
| MATH 219 | Statistics and Probability - or - | 4 |
| MATH 219H | Honors Statistics and Probability - or - | 4 |
| SOCS 219 | Statistics and Probability - or - | 4 |
| SOCS 219H | Honors Statistics and Probability | 4 |
| PSYC 140 | Introduction to Psychology of Adulthood and Aging |  |
| PSYC 157 | Introduction to Child Psychology | 3 |
| PSYC 240 | Introduction to Social Psychology - or - | 3 |
| SOC 240 | Introduction to Social Psychology | 3 |
| SOC 112 | Relationships, Marriage and Family Dynamics | 3 |
|  | Total Units | 18 |

## Option 2

## Associate in Arts in Sociology for Transfer

## Program code: sac.soc.aat

The Associate in Arts in Sociology for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in sociology. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU campus, in one of seven different Sociology majors. See
page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AST) degrees. Upon completion of this degree, students will accurately apply key sociological concepts when assessing their own and other societies; and distinguishing between personal/group opinions and scientific conclusions when analyzing and evaluating social issues. Students will be able to clearly communicate historical, social and cultural awareness in oral and written assignments, including an awareness of the variety and relative severity of social issues impacting people differently due to their particular place within the social structure
Learning Outcome(s):
Students will identify, contrast and apply the methods and theoretical perspectives in sociology utilized to explain social interaction and social structure, including the analysis of social problems.

## Required Core Courses (includes List A) (10 units)

Units
SOC 100 Introduction to Sociology

- or -

SOC 100H Honors Introduction to Sociology

## List A - two courses

| SOC 140 | Analysis of Social Trends and Problems OR | 3 |
| :--- | :--- | :--- |
|  | - or - | 3 |
| SOC 140H | Honors Analysis of Social Trends and Problems | 3 |
| MATH 219 | Statistics and Probability | 4 |

MATH 219H Honors Statistics and Probability - or -

SOCS 219 Statistics and Probability - or -

SOCS 219H Honors Statistics and Probability
List B - two courses (6 units)
Units
Any List A course not used above
SOC 112 Relationships, Marriages, and Family Dynamics 3
SOC 240 Introduction to Social Psychology 3

- or -

PSYC 240 Introduction to Social Psychology
List C - select one course (3-4 units) Units
Any course not selected above
ANTH 100 Introduction to Cultural Anthropology

- or -

ANTH 100H Honors Introduction to Cultural Anthropology 3
ENGL 101H Honors Freshman Composition 4
ENGL 102 Literature and Composition 4

ENGL 103 Critical Thinking and Writing 4

- or -

ENGL 103H Honors Critical Thinking and Writing 4
GEOG 102 Cultural Geography 3
PHIL 110 Critical Thinking 4

- or -

PHIL 110H Honors Critical Thinking 4
PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H Honors Introduction to Psychology 3
OR another introductory course in the social sciences chosen from:
ASIA 101 Introduction to Asian American Studies 3
BIOL 200 Environment of Man 3
BLST 101 Introduction to African American Studies 3
CHST 101 Introduction to Chicana/o Studies 3
CDEV 107 Child Growth and Development (DS1) 3
CJ 101 Introduction to Criminal Justice 3
CNSL 150 Introduction to Human Services 3
ECON 120 Principles/Macro 3
ECON 121 Principles/Micro 3
ENVR 200 Environment of Man 3

ETHN 101 Introduction to Ethnic Studies 3

- or -

ETHN 101H Honors Introduction to Ethnic Studies 3
GEOG 100 World Regional Geography 3

- or -

GEOG 100 H Honors World Regional Geography 3
HIST 118 Social and Cultural History of the United States $\quad 3$

| HIST 120 | The United States to 1865 | 3 |
| :--- | :--- | :--- |

-or-
HIST 120H Honors The United States to 1865
HIST 121 The United States since 18653

| HIST 121H | Honors The United States since 1865 | 3 |
| :---: | :---: | :---: |
| HIST 122 | American History-Dynamics of Change | 3 |
| HIST 123 | African American History to 1865 | 3 |
| HIST 124 | Mexican American History in the United States or - | 3 |
| HIST 124H | Honors Mexican American History in the United States | 3 |
| HIST 127 | Women in U.S. History | 3 |
| HIST 146 | African American History from 1863 to the Present | 3 |
| POLT 101 | American Government and Politics -or- | 3 |
| POLT 101H | Honors American Government and Politics | 3 |
| PSYC 157 | Introduction to Child Psychology | 3 |
| SCI 200 | Environment of Man | 3 |
| TELV 105 | Mass Media and Society | 3 |
|  |  |  |
| TELV 105H | Honors Mass Media and Society |  |
| WMNS 101 | Introduction to Women's Studies | 3 |
|  | Total Units |  |
| SPEECH-LANGUAGE PATHOLOGY ASSISTANT |  |  |
| Speech-Language Pathology Assistant Degree |  |  |

## Program code: sac.slpa.as

The Speech-Language Pathology Assistant Program is designed to prepare students for employment assisting speech-language pathologists working with communicatively disordered children and adults. Students will be trained to administer treatment as prescribed by the speech-language pathologist, conduct screenings for speechlanguage and hearing disorders, and to provide general support assistance to the speech-language pathologist. The Associate of Science program offers an intensive course of study in the area of speech and language disorders, including supervised treatment and field experience in a variety of settings such as educational, clinical, and/ or medical.
Further, there is a high probability that students will be required to complete immunizations, fingerprinting (at the student's cost) and/ or have a drug test and criminal background check at a fieldwork site. Problems with fingerprinting and background checks could result in a delay of placement or failure of program completion.
Upon completion of the A.S. Degree program, the graduate is eligible for registration as a Speech-Language Pathology Assistant by the Department of Consumer Affairs, Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board. Prior to obtaining employment, students who have completed all A.S. degree requirements will need to apply for registration to practice in the State of California through the Department of Consumer Affairs, Speech Language Pathology and Audiology and Hearing Aid Dispensers Board, 2005 Evergreen Street, Suite 2100 Sacramento, CA 95815, phone number 916-263-2666. When applying for registration with the California board, applicants will be asked to answer questions regarding prior felony arrests and convictions. In addition, applicants must submit fingerprints for a Department of Justice and Federal Bureau of Investigation background check, to be done at the applicant's expense, and possess a valid social security number. For information about limitations based on criminal history, applicants are advised to call the Board directly anytime prior to the application process. Registration application and complete information on necessary documents can be obtained through the Department of Consumer Affairs, Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board website at www.speechandhearing.ca.gov.
All A.S. degree requirements must be completed with a grade of $C$ or better at the conclusion of the program.

1. Students will be prepared for employment as Speech-Language Pathology Assistants
2. Students will pass the State of California registration requirements for Speech-Language Pathology Assistants.
Required Core Courses:
Units
SLPA 118 Introduction to Speech-Language Pathology 1
$\overline{\text { SLPA } 119 \text { Assisting }}$

| SLPA 119 | Speech, Language and Hearing Development <br> Across the Lifespan | 3 |
| :--- | :--- | :--- |

CMST 151 Voice and Diction for Effective Communication $\quad 3$
CDEV 107 Child Growth and Development (DS1) 3
PSYC $157 \quad$ Introduction to Child Psychology 3
CDEV 108 Observation and Assessment for Early Learning $\quad 3$

| and Development |  |  |
| :--- | :--- | :--- |
| SLPA 120 | Speech-Language Pathology Clinical | 2 |


| SLPA 120 | Speech-Language Pathology Clinical <br> Management and Procedures | 2 |
| :--- | :--- | :--- |


| SLPA 150 | Observation of Speech-Language Pathology <br> Clinical Practices | 0.5 |
| :--- | :--- | ---: |
| SLPA 160 | Introduction to Communicative Disorders and <br> Treatment | 3 |
| CMST 170 | Introduction to Phonetics | 3 |
| SLPA 180 | Speech-Language Pathology Screening <br> Processes and Intervention Procedures | 3 |
| SLPA 190 | Clinical Fieldwork I | 2 |
| SLPA 200 | Adult and Geriatric Communication Disorders | 3 |
| CDEV 205 | Introduction to Children with Special Needs | 3 |
| SLPA 250 | Speech-Language Pathology Assistant Clinical <br> ASLeldwork II | 2 |
|  | Total Units | 37.5 |
| General Education Requirements: | Units |  |
| BIOL 109 | Fundamentals of Biology | 3 |


| BIOL 109 | Fundamentals of Biology |
| :--- | :--- |
|  | - or - |

BIOL 109H Honors Fundamentals of Biology 3

BIOL 109L, Fundamentals of Biology Laboratory 1

- or -

BIOL 149 Anatomy and Physiology 4

- or -

BIOL 239 General Human Anatomy 4
ENGL 101 Freshman Composition 4

- or -

ENGL 101H Honors Freshman Composition 4
PSYC 100 Introduction to Psychology 3

- or -

PSYC 100H Honors Introduction to Psychology 3
CMST 101 Introduction to Interpersonal Communication 3

- or -

CMST 101H Honors Introduction to Interpersonal 3

| CMST 103 | Introduction to Intercultural Communication | 3 |
| :--- | :--- | :--- |

- or -

CMST 103H Honors Introduction to Intercultural 3
Communication

| ANTH 104 | Language and Culture | 3 |
| :--- | :--- | :--- |

ANTH 104H Honors Language and Culture 3

- or -

ENGL 104 Language and Culture 3

- or -

ENGL 104H Honors Language and Culture 3
PSYC $140 \quad$ Introduction to Psychology of Adulthood and Aging 3

To complete the A.S. degree requirements, students need to fulfill the requirements for the Math and Reading proficiencies, American Institutions, Communication and Analytical Thinking, and Lifelong Understanding and Self-Development from Section F2.

## TEACHING

Teaching is both an extremely rewarding and challenging profession. Students planning to teach elementary, secondary or special education may begin preparation at Santa Ana College. The college offers programs of study which fulfill the lower-division requirements for transfer into majors at CSU, UC, and independent colleges throughout the state

## Suggested Preparation for Elementary Teaching:

Liberal Studies and Child Development are the two most common university majors for students who are planning to enter Teacher Education programs for the multiple-subject teaching credential. At Santa Ana College these relevant majors are described under Elementary Education (Pre-Professional) and the Child Development School-Age Option.

## Suggested Preparation for Secondary Teaching:

Teaching at the secondary level (junior high / high school) requires a single-subject teaching credential. The best preparation is to major in the subject area one plans to teach

## Suggested Preparation for Special Education Teaching:

Students interested in working with students with special needs should determine which age group they are most interested in teaching. For elementary special education, students should take coursework as if they are preparing for the elementary classroom. Students interested in this area could use the Special Education Paraprofessional Program available at Santa Ana College to prepare for transfer to the university. For secondary special education, students should major in a core single-subject area (such as math, science, and English).
For more information on preparation for a career in teaching, please visit the Santa Ana College Center for Teacher Education, S-110.

## TELEVISION/VIDEO COMMUNICATIONS

## Option 1

## Television/Video Communications Degree

## Program code: sac.tv.aa

The television/video communications program provides training in all major facets of television production with special emphasis on studio and field production, editing, broadcast journalism, scriptwriting, and computer graphics and animation.
Completion of the associate degree prepares students to move into a four-year program leading to a baccalaureate degree. Please consult a SAC Counselor for information about course requirements for particular four-year institutions. The associate degree also trains students to assume entry level positions in broadcasting, cable TV, corporate video, and advertising.
Learning Outcome(s):

1. Students will demonstrate basic knowledge and operational skills associated with various technologies and equipment utilized in the production and post production of professional video programs
2. Students will acquire sufficient knowledge and understanding of the various aspects and crew positions associated with producing professional television programs, so as to be able to effectively assess the technical and personnel requirements for a production, coordinate the necessary resources and successfully execute the plan as either an individual or a member of a production team
3. Students will demonstrate critical thinking by reviewing and critiquing past and current movies and TV shows to assess their strengths and weakness from the point of view of the media consumer.

The AA degree and certificate options use the following courses as the required core courses for all:
Required Core Courses:

| TELV 100 | Introduction to Electronic Media: Broadcasting, <br> Cable, Video | 3 |
| :--- | :--- | :---: |
| TELV 110 | Introduction to Television Production | 3 |
| TELV 112 | Introduction to Video Editing and Post <br> Production | 3 |
| TELV 130 | Principles of Broadcast News | 3 |

Required Core Courses: Units

| TELV 115A | Single-Camera Production and Editing | 3 |
| :--- | :--- | :---: |
| TELV 120 | Screenwriting for TV, Film, the Web, Corporate | 3 |
| TELV 150 | Prodeo and Digital Media | 3 |
| TELV 152 | Beginning Audio Production | 3 |
| TELV 230A | Broadcast News Production | 3 |
| TELV 260 | Lighting Systems and Techniques for TV/Video | 3 |

Plus 6 units from the following courses: Units

| ART 162 | Digital Design with Photoshop-I | 3 |
| :--- | :--- | ---: |
| CMST 105 | Mass Media and Society | 3 |
|  | - or - | Units |
| CMST 105H | Honors Mass Media and Society | 3 |
| CMST 151 | Voice and Diction for Effective Communication | 3 |
| TELV 009A | TV/Video Communications Laboratory | 0.5 |
| TELV 009B | TV/Video Communications Laboratory | 0.5 |
| TELV 009C | TV/Video Communications Laboratory | 0.5 |
| TELV 010A | TV/Video Communications Advanced | 0.5 |
| TELV 010B | Taboratory I | 0.5 |
| TELV 010C | Taboratory II |  |
| TELVideo Communications Advanced | 0.5 |  |
| Laboratory III | 0.5 |  |

## 184 INSTRUCTIONAL PROGRAMS

## Option 2

## Associate in Science in Film, TV and Electronic Media for Transfer <br> Program code: sac.ftem.ast

The Associate in Science in Film, Television and Electronic Media for Transfer (AS-T in Film, Television and Electronic Media) is designed to prepare students for transfer into the CSU system to complete a baccalaureate degree in Film, Television and Electronic Media, as well as to prepare them for work in those industries. Please consult a counselor regarding specific course requirements for your transfer institution. Completion of the Associate in Science in Film, Television and Electronic Media for Transfer (AS-T in Film, Television and Electronic Media) also provides guaranteed admission with junior status to the CSU system, along with priority admission to a local CSU in a similar major. See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. Upon completion of the AS-T in Film, Television and Electronic Media, students will have an understanding of the various aspects associated with the production and post production of films, television and electronic media. Students will also possess the knowledge and technical skills required for academic and professional success in related areas.

## Required Core Courses: Select two:

TELV 100 Introduction to Electronic Media: Broadcasting, Cable, Video

- or -

CMSD 105 Mass Media and Society

- or -

| CMSD 105H | Honors Mass Media and Society | 3 |
| :--- | :--- | :--- |
| TELV 120 | Beginning Screenwriting for TV, Film, the Web, | 3 |

TELV 120 Beginning Screenwriting for TV, Film, the Web, Corporate Video and Digital Media
List A: Select one from each area
Area 1: 3 units

| TELV 152 | Beginning Audio Production | 3 |
| :--- | :--- | :--- |
| MUS 152 | Beginning Audio Production | 3 |

Area 2: 3 units
TELV 115A Single-Camera Production and Editing
List B:
Select one course:
Any course not already used above

| TELV 110 | Introduction to Television Production | 3 |
| :--- | :--- | :---: |
| ART 100 | Introduction to Art Concepts | 3 |
| ART 100H | Honors Introduction to Art Concepts | 3 |
| ART 102 | Survey of Western Art History II: Renaissance <br> through the Twentieth Century | 3 |
| THEA 100 | Introduction to Theatre | 3 |
| ENGL 102 | Literature and Composition | 4 |
| ENGL 102H | Honors Literature and Composition | 4 |
| ENGL 103 | Critical Thinking and Writing | 4 |
| ENGL 103H | Honors Critical Thinking and Writing | 4 |
| PHIL 110 | Critical Thinking | 4 |
| PHIL 110H | Honors Critical Thinking | 4 |

List C:
Select one course: Units
Any course not already used above

| TELV 101 | TV and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 103 | History of Film to 1945 | 3 |
| TELV 104 | History of Film from 1945 to Present | 3 |
| TELV 112 | Introduction to Video Editing and <br> Postproduction | 3 |
| TELV 115B | Advanced Single-Camera Production and <br> Editing | 3 |
| TELV 121 | Intermediate Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 123 | Advanced Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 150 | Producing and Directing for Television 3 <br> TELV 215 Advanced Single-Camera/Digital Cinema <br> Production <br> TELV 298 TV/Video Communications Practicum/Internship | 3 |

## Television/Video Communications Certificate A-Television Production (Transcripted) <br> Program code: sac.tva.ca

Emphasis on orientation with studio and field equipment, production planning, program directing, and post-production process.

## Learning Outcome(s):

1. Students will demonstrate basic knowledge and operational skills associated with various technologies and equipment utilized in the production and post production of professional video programs
2. Students will acquire sufficient knowledge and understanding of the various aspects and crew positions associated with producing professional television programs, so as to be able to effectively assess the technical and personnel requirements for a production, coordinate the necessary resources and successfully execute the plan as either an individual or a member of a production team
3. Students will demonstrate critical thinking by reviewing and critiquing past and current movies and TV shows to assess their strengths and weakness from the point of view of the media consumer.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| TELV 100 | Introduction to Electronic Media: TV, Radio, Film, <br> and the Internet | 3 |
| TELV 112 | Introduction to Video Editing and <br> Postproduction | 3 |
| TELV 140 | Cinematography | 3 |
| TELV 115A | Single-Camera Production and Editing | 3 |
| Required Core Courses: | Units |  |
| TELV 120 | Beginning Screenwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 110 | Introduction to Television Production | 3 |
| TELV 215 | Advanced Single-Camera/Digital Cinema <br> Production | 3 |

Total Units 21

## Television/Video Communications Certificate B-Broadcast Journalism (Transcripted) <br> Program code: sac.tvb.co

Emphasis on preparing students for work in television news programming, documentaries, or public service productions. Students will gain practical experience producing and staffing a weekly news show aired on local cable television

## Learning Outcome(s):

1. Students will demonstrate basic knowledge and operational skills associated with various technologies and equipment utilized in the production and post production of professional video programs
2. Students will acquire sufficient knowledge and understanding of the various aspects and crew positions associated with producing professional television programs, so as to be able to effectively assess the technical and personnel requirements for a production, coordinate the necessary resources and successfully execute the plan as either an individual or a member of a production team
3. Students will demonstrate critical thinking by reviewing and critiquing past and current movies and TV shows to assess their strengths and weakness from the point of view of the media consumer.
Required Core Courses: Units

| TELV 100 | Introduction to Electronic Media: TV, Radio, Film, <br> and the Internet | 3 |
| :--- | :--- | ---: |
| TELV 112 | Introduction to Video Editing and <br> Postproduction | 3 |
| TELV 140 | Cinematography | 3 |
| TELV 115A | Single-Camera Production and Editing | 3 |

Units

| Required Electives | Units |  |
| :--- | :--- | ---: |
| TELV 230A | Broadcast News Production | 3 |
| TELV 230B | Broadcast News Production | 3 |
| TELV 130 | Principles of Broadcast News | 3 |
| CMSD 121 | Introduction to Reporting and Newswriting | 3 |
|  |  | Total Units | $\mathbf{2 4}$

Television/Video Communications C-Television Scriptwriter Certificate (Transcripted)

## Program code: sac.tvc.ca

Emphasis on learning writing skills for the development of such television programming as sitcoms, talk shows, news and documentaries, musical variety shows, game shows and soaps, as well as commercials, corporate videos and web programs.

## Learning Outcome(s):

1. Students will demonstrate basic knowledge and operational skills associated with various technologies and equipment utilized in the production and post production of professional video programs
2. Students will acquire sufficient knowledge and understanding of the various aspects and crew positions associated with producing professional television programs, so as to be able to effectively assess the technical and personnel requirements for a production, coordinate the necessary resources and successfully execute the plan as either an individual or a member of a production team
3. Students will demonstrate critical thinking by reviewing and critiquing past and current movies and TV shows to assess their strengths and weakness from the point of view of the media consumer.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| TELV 100 | Introduction to Electronic Media: TV, Radio, Film, <br> and the Internet | 3 |
| TELV 110 | Introduction to Television Production | 3 |
| TELV 112 | Introduction to Video Editing and <br> Postproduction | 3 |
| TELV 130 | Principles of Broadcast News | 3 |

Required Core Courses: Units

| TELV 101 | Television and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 120 | Screenwriting for TV, Film, the Web, Corporate <br> Video and Digital Media | 3 |
| TELV 121 | Intermediate Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 123 | Advanced Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 150 | Producing and Directingfor Television | 3 |
| TELV 230A | Broadcast News Production | 3 |


| TELV 101 | Television and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 120 | Screenwriting for TV, Film, the Web, Corporate <br> Video and Digital Media | 3 |
| TELV 121 | Intermediate Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 123 | Advanced Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 150 | Producing and Directingfor Television | 3 |
| TELV 230A | Broadcast News Production | 3 |


| TELV 101 | Television and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 120 | Screenwriting for TV, Film, the Web, Corporate <br> Video and Digital Media | 3 |
| TELV 121 | Intermediate Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 123 | Advanced Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 150 | Producing and Directingfor Television | 3 |
| TELV 230A | Broadcast News Production | 3 |


| TELV 101 | Television and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 120 | Screenwriting for TV, Film, the Web, Corporate <br> Video and Digital Media | 3 |
| TELV 121 | Intermediate Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 123 | Advanced Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 150 | Producing and Directingfor Television | 3 |
| TELV 230A | Broadcast News Production | 3 |


| TELV 101 | Television and Society: A Visual History | 3 |
| :--- | :--- | :--- |
| TELV 120 | Screenwriting for TV, Film, the Web, Corporate <br> Video and Digital Media | 3 |
| TELV 121 | Intermediate Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 123 | Advanced Scriptwriting for TV, Film, the Web, <br> Corporate Video and Digital Media | 3 |
| TELV 150 | Producing and Directingfor Television | 3 |
| TELV 230A | Broadcast News Production | 3 |

Plus, select 3 units from the following courses: Units
CMSD 105 Mass Media and Society 3 - or -

CMSD 105H Honors Mass Media and Society 3

|  | - or - |  |
| :--- | :--- | ---: |
| CMSD 105H | Honors Mass Media and Society | 3 |
| CMST 151 | Voice and Diction for Effective Communication | 3 |
| TELV 009A | TV/Video Communications Laboratory | 0.5 |
| TELV 009B | TV/Video Communications Laboratory | 0.5 |
| TELV 009C | TV/Video Communications Laboratory | 0.5 |
| TELV 010A | TV/Video Communications Advanced <br> Laboratory I | 0.5 |
| TELV 010B | TV/Video Communications Advanced <br> Laboratory II | 0.5 |


|  | - or - |  |
| :--- | :--- | ---: |
| CMSD 105H | Honors Mass Media and Society | 3 |
| CMST 151 | Voice and Diction for Effective Communication | 3 |
| TELV 009A | TV/Video Communications Laboratory | 0.5 |
| TELV 009B | TV/Video Communications Laboratory | 0.5 |
| TELV 009C | TV/Video Communications Laboratory | 0.5 |
| TELV 010A | TV/Video Communications Advanced <br> Laboratory I | 0.5 |
| TELV 010B | TV/Video Communications Advanced <br> Laboratory II | 0.5 |

TELV 009B TV/Video Communications Laboratory 0.5
TELV 009C TV/Video Communications Laboratory 0.5
TELV 010A $\quad$ TV/Video Communications Advanced 0.5 Laboratory I0.5

|  | - or - |  |
| :--- | :--- | ---: |
| CMSD 105H | Honors Mass Media and Society | 3 |
| CMST 151 | Voice and Diction for Effective Communication | 3 |
| TELV 009A | TV/Video Communications Laboratory | 0.5 |
| TELV 009B | TV/Video Communications Laboratory | 0.5 |
| TELV 009C | TV/Video Communications Laboratory | 0.5 |
| TELV 010A | TV/Video Communications Advanced <br> Laboratory I | 0.5 |
| TELV 010B | TV/Video Communications Advanced <br> Laboratory II | 0.5 |


| TELV 010C | TV/Video Communications Advanced <br> Laboratory III | 0.5 |
| :--- | :--- | ---: |
| TELV 010D | TV/Video Communications Advanced | 0.5 |
| TELV 101 | Laboratory IV | 3 |
| TELV 103 | History of Fociety: A Visual History | 3 |
| TELV 104 | History of Film from 1945 to Present | 3 |
| TELV 115A | Single-Camera Production and Editing | 3 |


| TELV 010C | TV/Video Communications Advanced <br> Laboratory III | 0.5 |
| :--- | :--- | ---: |
| TELV 010D | TV/Video Communications Advanced | 0.5 |
| TELV 101 | Laboratory IV | 3 |
| TVLV and Society: A Visual History | 3 |  |
| TELV 103 | History of Film to 1945 | History of Film from 1945 to Present |
| TELV 115A | Single-Camera Production and Editing | 3 |


| TELV 010C | TV/Video Communications Advanced <br> Laboratory III | 0.5 |
| :--- | :--- | ---: |
| TELV 010D | TV/Video Communications Advanced | 0.5 |
| TELV 101 | Laboratory IV | 3 |
| TVLV and Society: A Visual History | 3 |  |
| TELV 103 | History of Film to 1945 | History of Film from 1945 to Present |
| TELV 115A | Single-Camera Production and Editing | 3 |


| TELV 010C | TV/Video Communications Advanced <br> Laboratory III | 0.5 |
| :--- | :--- | ---: |
| TELV 010D | TV/Video Communications Advanced | 0.5 |
| TELV 101 | Laboratory IV | 3 |
| TVLV and Society: A Visual History | 3 |  |
| TELV 103 | History of Film to 1945 | History of Film from 1945 to Present |
| TELV 115A | Single-Camera Production and Editing | 3 |


| TELV 010C | TV/Video Communications Advanced <br> Laboratory III | 0.5 |
| :--- | :--- | ---: |
| TELV 010D | TV/Video Communications Advanced | 0.5 |
| TELV 101 | Laboratory IV | 3 |
| TVLV and Society: A Visual History | 3 |  |
| TELV 103 | History of Film to 1945 | History of Film from 1945 to Present |
| TELV 115A | Single-Camera Production and Editing | 3 |


| TELV 010C | TV/Video Communications Advanced <br> Laboratory III | 0.5 |
| :--- | :--- | ---: |
| TELV 010D | TV/Video Communications Advanced | 0.5 |
| TELV 101 | Laboratory IV | 3 |
| TVLV and Society: A Visual History | 3 |  |
| TELV 103 | History of Film to 1945 | History of Film from 1945 to Present |
| TELV 115A | Single-Camera Production and Editing | 3 |


| TELV 115B | Advanced Single-Camera Production and Editing | 3 |
| :--- | :--- | ---: |
| TELV 131 | Beginning Broadcast News Workshop | 2 |
| TELV 142 | Acting for the Camera | 3 |
| TELV 190 | Introduction to ProTools | 1.5 |
| TELV 215 | Advanced Single-Camera/Digital Cinema | 3 |
| TELV 230B | Broadcast News Production | 3 |
| TELV 230C | Broadcast News Production | 3 |
| TELV 230D | Broadcast News Production | 3 |
| TELV 298 | TV/Video Communications Practicum/lnternship | 3 |
| THEA 108 | The Business of Entertainment | 3 |
|  | Total Units | $33-33.5$ |

## Television/Video Communications-Media Studies Certificate (Untranscripted)

## Program code: sac.tvms.cert

Emphasis on preparing students for careers as producers and executives in the cable, television, and film industries as well as those who wish to be media teachers, critics, and historians. Students will gain theoretical knowledge about the history, development, and societal impact of the media in the United States and the world as well as practical experience in dealing with production aesthetics and terminology, basic scriptwriting skills, and business and budgeting applications relating to the electronic media.

## Learning Outcome(s):

1. Students will demonstrate basic knowledge and operational skills associated with various technologies and equipment utilized in the production and post production of professional video programs
2. Students will acquire sufficient knowledge and understanding of the various aspects and crew positions associated with producing professional television programs, so as to be able to effectively assess the technical and personnel requirements for a production, coordinate the necessary resources and successfully execute the plan as either an individual or a member of a production team
3. Students will demonstrate critical thinking by reviewing and critiquing past and current movies and TV shows to assess their strengths and weakness from the point of view of the media consumer.
Required Core Courses: Units

| CMST 105 | Mass Media and Society | 3 |
| :--- | :--- | :--- |
|  | - or - | 3 |
| CMST 105H | Honors Mass Media and Society | 3 |
| TELV 100 | Introduction to Electronic Media: TV, Radio, Film <br> and the Internet | 3 |
| TELV 101 | Television and Society: A Visual History | 3 |
| TELV 103 | History of Film to 1945 | - or - |
| TELV 120 | Beginning Writing forTV, Film and Corporate <br> Video | 3 |

## THEATRE ARTS

## Option 1 (A)

Theatre Arts - Performance Emphasis Degree
Program code: sac.taper.aa
The Theatre Arts Performance degree provides a fundamental exploration of Theatre Arts focusing on performance styles and acting techniques. It is designed to prepare the student for entry level performance careers in stage, television, and film, as well as other occupations where voice training, dynamic presentations, and adaptability in interactive style are important. This degree provides a more flexible and diverse study plan in comparison to the associate in arts degree for transfer. Please consult a SAC counselor for information about course requiremnts for particular four-year institutions.

## Learning Outcome(s):

1. Students will develop competency and gain practical experience in performing dynamic characters in the presentation of public performances of live stage productions
2. Students will develop an understanding of the interaction between script, actor and audience and the areas of scenery, lighting, sound and costume
3. Students will demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors and designers, past and present.
Required Core Courses: ..... Units
THEA 100 Introduction to Theatre ..... 3
THEA 105 Theatre History 1 ..... 3
THEA 110 Acting Fundamentals ..... 3
THEA 120 Musical Theatre History ..... 3
Plus an additional 9 units from the following courses: ..... Units
THEA 111 Intermediate Acting ..... 3
THEA 113 Acting for the Camera ..... 3
THEA 114 Acting for the Camera II ..... 3
THEA 118 Fundamentals of Scene Study ..... 2
THEA 132 Stage Makeup ..... 3
THEA 135 Technical Production ..... 1
THEA 140A Theatre Performance ..... 2
THEA 150A Rehearsal and Performance in Production ..... 2
THEA 150B Technical Theatre in Production ..... 2
THEA 151 Showcase I ..... 3
THEA 152 Tour Ensemble ..... 3
THEA 153 Introduction to Directing ..... 2
THEA 154 Performance Ensemble ..... 2
THEA 155 Children's Theatre Ensemble ..... 2
THEA 169 Cooperative Work Experience-Entertainment ..... 1-4
THEA 177 Principles of Playwrighting ..... 3
THEA 186 Voice for the Actor ..... 3
THEA 198 Topics ..... 0.5
THEA 255 Motion Picture Performance Production ..... 3

## Option 1 (B)

Theatre Arts - Technical Theatre Emphasis Degree

## Program code: sac.tatec.aa

The Technical Theatre degree provides a fundamental exploration of Theatre Arts focusing on the technical elements that support performers and enhance performances. It is designed to prepare the student for entry level technical careers such as stage technician, lighting technician, sound technician, master electrician, scenic carpenter, stage manager, and other related careers. This degree provides a more flexible and diverse study plan in comparison to the associate in arts degree for transfer. Please consult a SAC counselor for information about course requirements for particular four-year institutions.

## Learning Outcome(s):

1. Students will participate in the creation and presentation of public performances of theatre to gain practical experience using the entertainment technologies appropriate for live stage performances
2. Students will demonstrate competency in core practical skills as used in the technical theatre industry today
3. Students will develop a clear understanding of the interaction between script and the areas of stage management, scenery, lighting, sound and costume.

## Required Core Courses: Units

THEA 100 Introduction to Theatre 3
THEA 105 Theatre History $1 \quad 3$
THEA 120 Musical Theatre History 3
THEA 131 Stagecraft 3

Plus an additional 9 units from the following courses: Units

| THEA 110 | Acting Fundamentals | 3 |
| :--- | :--- | ---: |
| THEA 132 | Stage Makeup | 3 |
| THEA 133 | Lighting Fundamentals | 3 |
| THEA 135 | Technical Production | 1 |
| THEA 150B | Technical Theatre in Production | 2 |
| THEA 165 | Introduction to Intelligent Lighting | 1.5 |
| THEA 165L | Fundamentals of Programming for Intelligent | 0.5 |
| THEA 166 | Lighting Lab | Intermediate Programming |
| THEA 166L | Intermediate Programming Lab | 1 |
| THEA 167 | Setup for Intelligent Lighting | 1 |
| THEA 168A | Computer Applications for Entertainment <br> Lighting | 1 |
| THEA 169 | Cooperative Work Experience-Entertainment | $\mathbf{1 - 4}$ |
| MUS 152 | Beginning Audio Production |  |
|  |  | Total Units |

## Option 2

## Associate in Arts in Theatre Arts for Transfer Program code: sac.taper.aat

The Associate in Arts in Theatre Arts for Transfer (AA-T) prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree in theatre arts which can lead to careers in teaching, design, technical theatre, theatre management, professional performance, stage direction, stage management, and related areas. Please consult a counselor regarding specific course requirements for your transfer institution, Completion of the AA-T degree also provides guaranteed admission with junior status to the CSU system, along with priority admission to the local CSU, in the Theatre Arts major.
See page $\mathbf{2 4}$ for a list of additional requirements for all Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer
(AA-S) degrees. Upon completion of the AA-T in Theatre Arts, students will understand and be able to demonstrate the fundamental performance and technical production processes for the theatre arts, demonstrate knowledge of the historical and cultural dimensions of theatre, and understand the interaction between script, actor, and audience and the areas of scenery, lighting, sound, and costume.

## Learning Outcome(s):

Students will participate in the creation and presentation of public performances of theatre to gain an understanding of the processes and collaborative nature of the art
Students will develop an understanding of the interaction between script, actor and audience and the areas of scenery, lighting, sound and costume.
Complete 6 units from the following core: Units
THEA 100 Introduction to Theatre 3

- or -
THEA 105 Theatre History $1 \quad 3$

THEA 110 Acting Fundamentals 3
Complete an additional 3 core units in your chosen area of emphasis - Performance or Technical Theatre.
Performance Emphasis Core: THEA 150A and THEA 151 Technical Emphasis Core: THEA 135 and THEA 150B
THEA 135 Technical Production 1
THEA 150A Rehearsal and Performance in Production 2
THEA 150B Technical Theatre in Production 2
THEA 151 Showcase I 3
Plus 9 units from the following electives: Units
THEA 111 Intermediate Acting 3
THEA 131 Stagecraft 3
THEA 132 Stage Makeup 3
THEA 133 Lighting Fundamentals 3
THEA 136 Fundamentals of Costume Design 3
THEA 152 Tour Ensemble 2
THEA 154 Performance Ensemble 2
THEA 155 Children's Theatre Ensemble 2

## 188 INSTRUCTIONAL PROGRAMS

## Costume Design Certificate (Untranscripted)

## Program code: sac.tacd.cert

This certificate curriculum is designed to prepare students for entry level costume careers within the entertainment industry which includes television/film, theme parks, theatres, and varied performance venues across the country and world. Emphasis is placed on developing fundamental costume design skill sets while gaining an understanding of the processes and procedures utilized in the entertainment industry for costuming actors/performers. Possible entry level job titles are: Costume Design Assistant, Wardrobe Manager, Costume Manager, Dresser, Cutter/Draper, Production Designer, and Costume Shop Assistant, all of which can lead to advanced careers within these industries.

## Learning Outcome(s):

1. Students will demonstrate an understanding of the relationship between costumes, the script, and the actor
2. Students will develop an understanding of the responsibilities and the art of the costume designer as it relates to characterization for a specific script
3. Students will develop the fundamental skills to visualize, pattern, construct, and fit performers with custom costumes.

| Complete the following 17.0 units: | Units |  |
| :--- | :--- | ---: |
| FDM 105A | Beginning Sewing | 3 |
| FDM 111A | Fashion Illustration Techniques | 3 |
| FDM 113 | Fashion Draping | 3 |
| FDM 136 | Fundamentals of Costume Design | 3 |
|  | - or - |  |
| THEA 136 | Fundamentals of Costume Design | 3 |
| THEA 132 | Stage Makeup | 3 |
| THEA 150B | Technical Theatre in Production |  |
|  |  | Total Units |
|  |  | 17 |

## Entertainment Technology (Transcripted)

## Program code: sac.taet.ca

The Entertainment Technology program provides hands-on training with a focus on emerging entertainment technologies. The program focuses on the study of industry practices, including contemporary computer applications used for entertainment design disciplines, visualization, virtualization, project management, and support documentation. Students will become proficient in the utilization of entertainment technologies commonly used in concerts, dance performances, television, theatre, theme parks, sports arenas, houses of worship, industrial settings, and digital cinema. Fundamental skills will be developed that are necessary to assist students in pursuing career paths such as:

- Entertainment Lighting Technician
- Moving Light Programmer
- Console Operator
- Moving Light Technician
- Master Electrician
- Assistant Lighting Designer and Director
- Costume Technician
- Assistant Costume Designer
- Special Effects Makeup Technician
- Makeup Technician
- Audio Technician
- Digital Content Creator
- Projections Technician


## Learning Outcome(s):

1. Students will demonstrate competency in basic skills required to pursue an entry level career path as an Entertainment Lighting Technician, Conventional and Moving Light Programmer, Master Electrician, Assistant Lighting Designer, or Entertainment Audio Technician.
2. Students will participate in the creation and presentation of public performances of theatre and dance to gain practical experience using the entertainment technologies appropriate for stage performances.
Complete 7 units from the following core: Units
THEA 100 Introduction to Theatre 3
THEA 131 Stagecraft 3
THEA 169 Cooperative Work Experience-Entertainment 1
Plus a minimum of 10 units from the following electives: Units
THEA 130 Lighting Design 2
THEA 132 Stage Makeup 3
THEA 133 Lighting Fundamentals 3
THEA 135 Technical Production 1

| MUS 152 | Beginning Audio Production | 3 |
| :--- | :--- | ---: |
| THEA 165 | Introduction to Entertainment Lighting | 1.5 |

THEA 165L Fundamentals of Programming for Intelligent 0.5
Lighting Lab

| THEA 166 | Intermediate Programming | 1 |
| :--- | :--- | :--- |
| THEA 166L | Intermediate Programming Lab | 1 |

THEA 167 Setup for Intelligent Lighting 1

THEA 168A Computer Applications for Entertainment 2.5 Technology

Total Units
17-18.5

## Screen Performance Certificate (Transcripted)

## Program code: sac.tasp.ca

This certificate program is designed for those who want to pursue an acting career in film, television, commercials, and digital media. Students hone their performance, auditioning, and improvisation skills and have ample opportunity to perform in front of the camera and learn the practical business skills needed to succeed in the industry.
Complete 15 units in the following core: Units
THEA 111 Intermediate Acting 3
THEA 113 Acting for the Camera 3
THEA 114 Acting for the Camera II 3
THEA 190 Improvisation for Stage and Screen 3
THEA 255 Motion Picture Performance Production 3

Plus 4-6 units from the following electives: Units
THEA 118 Fundamentals of Scene Study 2
THEA 153 Introduction to Directing 2

TELV $112 \quad$| Introduction to Video Editing and |
| :--- | :--- |
| Postproduction |

TELV 115A Single-Camera Production and Editing 3

| TELV 120 | Beginning Screenwriting for TV, Film, the Web, <br> Corporate Video, and Digital Media | 3 |
| :--- | :--- | :--- |

TELV 140 Cinematography 3

Total Units: 19-21

## WELDING TECHNOLOGY

## Welding Technology Degree

## Program code: sac.weld.as

In addition to the general education requirements, the associate degree and certificate curriculum in welding technology is designed to provide comprehensive occupational training in all common types of welding methods relating to the needs of today's welding fabrication industry. The program provides students with manipulative skills and technical knowledge required to operate oxyacetylene, shielded electric arc, M.I.G., T.I.G. and semiautomatic flame cutting welding equipment. In addition, students will be prepared for certification as required by employment in the welding industry. Employment opportunities available are welder, welder technician, inspector, maintenance welder, production welder in manufacturing, construction industries and shipbuilding. The Santa Ana College Welding Program is a Los Angeles Certified Testing Lab Facility. The program offers training and testing for the following certifications:

## SMAW, FCAW, T.I.G., and M.I.G.

## Learning Outcome(s):

1. Student will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| WELD 108 | Oxyacetylene-Arc Welding | 3 |
| WELD 125A | Intermediate Arc Welding | 3 |
| WELD 129A | Advanced Arc Welding Level I | 3 |
| WELD 139A | Inert Gas Welding Level I | 3 |
| WELD 153A | Math/Blue Print Reading for Welders | 3 |
| WELD 154A | Beginning Pipe Fundamentals | 3 |
| Please select 3 units from the following list: | Units |  |
| BUS 170 | Principles of Small Business Management | 3 |
| CMST 101 | Introduction to Interpersonal Communication | 3 |
|  | - or - |  |
| CMST 101H | Honors Introduction to Interpersonal | 3 |
| CNGL 061 | Introduction to Composition | 3 |
| MNFG 053 | Technical Mathematics | 3 |
| WELD 140A | Welding Certification Training Level I | 3 |
|  |  | Total Units |

## Welding Technology Certificate (Transcripted)

## Program code: sac.weld.ca

The certificate curriculum in welding technology is designed to provide comprehensive occupational training in all common types of welding methods relating to the needs of today's welding fabrication industry. The program provides students with manipulative skills and technical knowledge required to operate oxyacetylene, shielded electric arc, MIG,TIG and semiautomatic flame cutting welding equipment. In addition, students will be prepared for certification as required by employment in the welding industry. Employment opportunities available are welder, welder technician, inspector, maintenance welder, production welder in manufacturing, construction industries and shipbuilding. The Santa Ana College Welding Program is a Los Angeles Certified Testing Lab Facility. The program offers training and testing for the following certifications: SMAW, FCAW, TIG, and MIG.

## Learning Outcome(s):

1. Student will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses: Units
WELD 108 Oxyacetylene-Arc Welding 3
WELD 125A Intermediate Arc Welding 3
WELD 129A Advanced Arc Welding Level I 3
WELD 139A Inert Gas Welding Level I 3

WELD 153A Math/Blue Print Reading for Welders 3
Please select 3 units from the following list: Units
BUS 170 Principles of Small Business Management 3
ENGL 061 Introduction to Composition 4

CMST 101 Introduction to Interpersonal Communication 3

- or -

Honors Introduction to Interpersonal Communication
CMST 101H

Technical Mathematics ..... 3
MNFG 153 Technical Mathematics
3

## Advanced Arc-Semi-Automatic Welding Certificate (Transcripted) <br> Program code: sac.advweld.ca

The certificate curriculum in welding technology is designed to provide advanced occupational training in Advanced Arc and Inert Gas Welding in common types of welding methods relating to the needs of today's welding fabrication industry. The program provides students with manipulative skills and technical knowledge required to operate oxyacetylene, shielded electric arc, MIG, TIG and semiautomatic flame cutting welding equipment. In addition, students will be prepared for certificaton as required by employment in the welding industry. Employment opportunities available are welder, welder technician, inspector, maintenance welder, production welder in manufacturing, construction industries and shipbuilding. The Santa Ana College Welding Program is a Los Angeles Certified Testing Lab Facility. The program offers training and testing for the following certifications: SMAW, FCAW, TIG, MIG and PIPE.

## Learning Outcome(s):

1. Student will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| WELD 129B | Advanced Arc Welding Level II | 3 |
| WELD 129C | Advanced Arc Welding Level III | 3 |
| WELD 129D | Advanced Arc Welding Level IV | 3 |
| WELD 139B | Inert Gas Welding Level II | 3 |
| WELD 139C | Inert Gas Welding Level III | 3 |
| WELD 140B | Welding Training Certification Level II | 3 |
| WELD 140C | Welding Certification Training Level III | 3 |
| WELD 141B | Welding Certification Exam Preparation Level II | $\mathbf{3}$ |
|  |  | Total Units |

## Advanced Pipe Welding Technology Certificate (Untranscripted)

## Program code: sac.welap.cert

The certificate curriculum in welding technology is designed to provide advanced occupational training in pipe welding, both manually in advanced arc and automatically through orbital technologies with inert gas welding processes. These classes are designed to meet both current and future needs in the pipe welding industry. The program provides students oxyacetylene, shielded electric arc, semi-automatic flame cutting equipment, orbital welding technologies using MIG and TIG processes automatically. In addition, students will be prepared for certification as required by employment in the pipe welding industry. Employment opportunities available are welder, welder technician, inspector, maintenance welder, production welder in manufacturing, construction industries, and shipbuilding. The Santa Ana College welding program is a Los Angeles Certified Testing Lab Facility. The program offers training and testing for the following certifications: SMAW, FCAW, TIG, MIG and Pipe.

## Learning Outcome(s):

1. Student will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.
Required Core Courses: Units

WELD 154A Beginning Pipe Fundamentals 3

WELD 154B Intermediate Pipe Welding 3

| WELD 154C Advanced Pipe Welding |  | 3 |
| :--- | :--- | :--- |
|  | Total Units | 9 |

## Automated Robotic Welding Systems Certificate (Transcripted) <br> Program code: sac.welar.ca

The certificate curriculum in welding technology is designed to provide advanced occupational training in Automated Robotic Welding. The program provides students with training in set up, programming and operation in automated systems. These classes are designed to meet both current and future needs in the robotic welding industry. The program provides the students the knowledge in the Gas Metal Arc Welding process. In addition, students will be prepared for certification as required by employment in the robotic welding industry. Employment opportunities available are welder, robotic welder technician, inspector, production welder in manufacturing and shipbuilding. The Santa Ana College Welding Program is a Los Angeles Certified Testing Lab Facility. The program offers training and testing for the following certifications: SMAW, FCAW, TIG, MIG and Pipe.

## Learning Outcome(s):

1. Student will successfully pass a comprehensive online course on Shop Safety
2. Students will successfully pass a comprehensive online course on Shop Environmental Concerns.

| Required Core Courses: |  | Units |
| :---: | :---: | :---: |
| WELD 156A | Beginning Robotic Welding | 3 |
|  | - or - |  |
| MNFG 156A | Beginning Robotic Welding | 3 |
| WELD 156B | Intermediate Robotic Welding | 3 |
|  | - or - |  |
| MNFG 156B | Intermediate Robotic Welding | 3 |
| WELD 156C | Advanced Robotic Welding | 3 |
|  | - or - |  |
| MNFG 156C | Advanced Robotic Welding | 3 |
| WELD 157A | Basic Robotic Programming | 3 |
|  | - or - |  |
| MNFG 157A | Basic Robotic Programming | 3 |
| WELD 157B | Intermediate Robotic Programming | 3 |
|  | - or - |  |
| MNFG 157B | Intermediate Robotic Programming | 3 |
| WELD 157C | Advanced Robotic Programming Welding | 3 |
|  | - or - |  |
| MNFG 157C | Advanced Robotic Programming Welding | 3 |

Total Units
18

## Automated Laser Welding System Certificate (Untranscripted)

## Program code: sac.welal.cert

The certificate curriculum in laser welding technology is designed to provide occupational training in automated laser welding. The program provides students with training in process validation and verification of laser welding; planning process validation and verification of laser welding; and executing process validation and verification of laser welding process. Students will also learn set up, programming and operation in automated laser systems. These classes are designed to meet both current and future needs in the laser welding industry. The program provides the students with the knowledge of the laser welding process. In addition, students will be prepared for certification as required by employment in the laser welding industry. Employment opportunities available are laser welder, robotic laser technician, inspector and production welder in manufacturing. The Santa Ana College Welding Program is a Los Angeles Certified Testing Lab Facility

## Learning Outcome(s):

1. Students will successfully pass a comprehensive online course on shop safety.
2. Students will successfully pass a comprehensive online course on Shop Environment Concerns.

| Required Core Courses: | Units |  |
| :--- | :--- | :--- | ---: |
| MNFG 120 | Introduction to Medical Device Quality | 2 |
| MNFG 121 | Quality Control for Medical Devices | 2 |
| WELD 160 | Introduction to Process Validation and <br> Verification of Laser Welding Process: Level 1 | 3 |
| WELD 161 | Planning Process Validation and Verification of <br> Laser Welding Process: Level 2 | 3 |
| WELD 162 | Executing Process Validation and Verification of <br> Laser Welding Process: Level 3 | 3 |

## WOMEN'S STUDIES

## Women's Studies Degree

## Program code: sac.wmns.aa

The associate degree curriculum in women's studies is a liberal arts major which is designed to meet the following needs:

1. To help women develop a perspective pertaining to their own self-interest and relate those views to social and cultural factors such as economic necessity, political participation, historical patterns, and ethics;
2. To develop their self-awareness in relation to others;
3. To develop skills of communication and analysis;
4. To prepare for transfer to four-year colleges and schools of professional training;
5. To enrich women's knowledge of their culture and the rapid developments that are taking place within it.

## Learning Outcome(s):

Students will utilize a feminist theoretical analysis of social interactions and social structures, explaining the formation, maintenance, and change of socio-cultural identities.

| Required Core Courses: | Units |  |
| :--- | :--- | ---: |
| WMNS 101 | Introduction to Women's Studies | 3 |
| WMNS 102 | Women in America: Work, Self, Family | 3 |
| WMNS 201 | Contemporary Women's Issues | 3 |
| ENGL 278 | Survey of Literature by Women | 3 |
| KNHE 102 | Women's Health Issues | 3 |
| IDS 155 | Human Sexuality | 3 |
| HIST 127 | Women in U.S. History | 3 |
| Electives |  |  |
|  | Total Units | 27 |


| Recommended Electives: | Units |  |
| :--- | :--- | ---: |
| CNSL 116 | Career/Life Planning and Personal Exploration | 3 |
| CNSL 117 | Job Search Techniques | 3 |
| HIST 181 | Survey of Chicana/Latina Women's History | 3 |
| PHIL 108 | Ethics | 3 |
| PSYC 140 | Introduction to Psychology of Adulthood and | 3 |
| SOC 112 | Rging | Relationships, Marriages, and Family Dynamics |
| WMNS 198 | Topics | 3 |

## ANNOUNCEMENT OF COURSES

Each course is designated by a number. A descriptive title and the units allowed for the course follow the course number. Courses numbered 100 and above are university parallel courses and are offered for transfer to colleges and universities. See page 38 Transferability of Courses. Courses numbered 100 and above followed by the letter "H" are university parallel courses for transfer to colleges and universities and are offered as part of the Santa Ana College Honors Program. Students enrolling in these courses must meet the designated prerequisites. Courses numbered less than 100 are not designed for transfer. Since these courses are not ordinarily offered in the universities and four-year colleges, they are not always applicable
to the requirements for the bachelor of arts or bachelor of science degrees; however, courses numbered below 100 are applicable to the associate degree unless preceded by the letter "N". Courses numbered less than 100 preceded by the letter "N" are not applicable to the associate degree and do not count toward graduation but do count toward course load.

Required sequences and frequency of course offerings as well as length of time required to obtain a degree or certificate can be found on the college website at
www.sac.edu/academicaffairs/coursesequences.

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

| C-ID | SAC COURSE |  |
| :--- | :--- | :--- |
| ACCT 110 | ACCT 101 | Financial Accounting |
| ACCT 120 | ACCT 102 | Managerial Accounting |
| AJ 110 | CJ 101 or <br> CJ 101H | Introduction to Criminal Justice or <br> Honors Introduction to Criminal Justice |
| AJ 120 | CJ 103 or <br> CJ 103H | Concepts of Criminal Law or Honors <br> Concepts of Criminal Law |
| AJ 122 | CJ 107 or <br> PARA 107 | Principles and Procedures in the <br> Criminal Justice System |
| AJ 124 | CJ 105 | Legal Aspects of Evidence |
| AJ 140 | CJ 205 | Criminal Investigation Principles |
| AJ 150 | CJ 108 | Crime Scene Investigation |
| AJ 160 | CJ 109 or <br> CJ 109H | Community Interaction or Honors <br> Community Interaction |
| AJ 200 | CJ 102 | Introduction to Corrections |
| AJ 220 | CJ 220 | Juvenile Delinquency and Control |
| ANTH 110 | ANTH 101 | Introduction to Physical Anthropology |
| ANTH 120 | ANTH 100 <br> or ANTH 100H | Introduction to Cultural Anthropology <br> or Honors Introduction to Cultural <br> Anthropology |
| ANTH 130 | ENGL 104 or <br> ENGL 104H or <br> ANTH 104 or | Language and Culture or <br> Honors Language and Culture |
| ANTH 104H |  |  |

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.
Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can always help students interpret this information.

> Additional SAC courses were pending C-ID approval at the time of catalog publication. Please consult a counselor for the latest C-ID information.

| SAC COURSE |  |  |
| :---: | :---: | :---: |
| BIOL 130S | $\begin{aligned} & \text { BIOL } 212 \\ & + \text { BIOL } 214 \end{aligned}$ | Animal Diversity and Ecology + Plant Diversity and Evolution |
| BIOL 190 | BIOL 211 | Cellular and Molecular Biology |
| BIOT 101 X | $\begin{aligned} & \text { BIOL 190 } \\ & + \text { BIOL 190L } \end{aligned}$ | Introduction to Biotechnology \& Introduction to Biotechnology Lab |
| BIOT 150 X | $\begin{aligned} & \text { BIOL } 191 \\ & + \text { BIOL } 193 \end{aligned}$ | Biotech A: Basic Skills + Biotech C: <br> Nucleic Acids |
| BIOT 210 X | BIOL 194 | Quality and Regulatory Compliance in Biosciences |
| BIOT 220 X | BIOL 192 | Biotech B: Proteins |
| BUS 110 | BUS 100 | Fundamentals of Business |
| BUS 115 | BUS 222 | Business Writing |
| BUS 120 | BUS 105 | Legal Environment of Business |
| BUS 125 | BUS 101 | Business Law |
| BUS 140 | BUS 150 | Introduction to Information Systems and Applications |
| CDEV 100 | CDEV 107 | Child Growth and Development |
| CDEV 100 | PSYC 157 | Introduction to Child Psychology |
| CDEV 110 | CDEV 110 | Child, Family and Community |
| CHEM 101 | CHEM 209 | Introductory Chemistry |
| CHEM 110 | $\begin{aligned} & \text { CHEM } 219 \\ & \text { or CHEM } 219 \mathrm{H} \end{aligned}$ | General Chemistry or Honors General Chemistry |
| CHEM 120 S | ```CHEM (219 or CHEM 219H) + CHEM 229``` | General Chemistry or Honors General Chemistry + General Chemistry and Qualitative Analysis |
| CHEM 150 | CHEM 249 | Organic Chemistry 1 |
| CHEM 160S | $\begin{aligned} & \text { CHEM } 249+ \\ & \text { CHEM } 259 \end{aligned}$ | Organic Chemistry I + Organic Chemistry II |
| COMM 110 | CMST 102 | Public Speaking |
| COMM 120 | CMST 140 | Argumentation and Debate |
| COMM 130 | CMST 101 <br> or CMST 101H | Introduction to Interpersonal Communication or Honors Introduction to Interpersonal Communication |
| COMM 140 | CMST 145 | Group Dynamics |
| COMM 150 | CMST 103 or CMST 103H | Introduction to Intercultural <br> Communication or Honors Introduction <br> to Intercultural Communication |
| COMM 170 | CMST 152 | Oral Interpretation |
| COMP 112 | CMPR 120 | Introduction to Programming |
| COMP 122 | CMPR 121 | Programming Concepts |
| COMP 132 | CMPR 131 | Data Structures Concepts |

194 | ANNOUNCEMENT OF COURSES

COURSE IDENTIFICATION NUMBERING SYSTEM (C-ID)
Continued)

| ID SAC COURSE |  |  | C-ID SAC COURSE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMP 142 | CMPR 129 | Introduction to Computer Organization | GEOG 155 | $\text { GEOG } 155$ | Introduction to Geographic Information Systems |
| COMP 152 | CMPR 140 | Discrete Structures for Computer Science |  | or BA 150 |  |
|  |  |  | GEOL 100 | GEOL 101 | Introduction to Geology |
| ECE 120 | CDEV 111A | Principles and Practices of Teaching Young Children | GEOL 100L | GEOL 101L | Introduction to Geology Lab |
|  |  |  | GEOL 111 | GEOL 201 | Introduction to Historical Geology |
| ECE 130 | CDEV 111B | Introduction to Curriculum for Young Children | GEOL 120 | ERTH 110 or ERTH 110H | Introduction to Earth Science or Honors Introduction to Earth Science |
| ECE 200 | CDEV 108 | Observation and Assessment for Early Learning and Development | GEOL 130 | ENVR 140 | Environmental Geology |
| ECE 210 | CDEV 298A | Practicum in Early Childhood Programs | GEOL 130 | GEOL 140 | Environmental Geology |
| ECE 220 | CDEV 112 | Health, Safety and Nutrition for Children | HIST 140 | HIST 121 or HIST 121H | The United States Since 1865 or Honors The United States Since 1865 |
| ECE 230 | CDEV 221 | Teaching in a Diverse Society | HIST 150 | HIST 101 or HIST 101H | World Civilizations to the 16th Century or Honors World Civilizations to the 16th Century |
| ECON 201 | ECON 121 | Principles/Micro |  |  |  |
| ECON 202 | ECON 120 | Principles/Macro | HIST 160 | HIST 102 or HIST 102H | World Civilizations Since the 16th Century or Honors World Civilizations Since the 16th Century |
| EDUC 200 | EDUC 100 | Introduction to Education |  |  |  |
| ENGL 100 | ENGL 101 or ENGL 101H | Freshman Composition or Honors Freshman Composition | ITIS 120 | BUS 150 | Introduction to Information Systems and Applications |
| ENGL 105 | ENGL 102 or ENGL 102H | Literature and Composition or Honors Literature and Composition | JOUR 100 | CMSD 105 or CMSD 105H | Mass Media and Society or Honors Mass Mediaand Society |
| ENGL 105 | ENGL 103 or ENGL 103H | Critical Thinking and Writing or Honors Critical Thinking and Writing | JOUR 110 | CMSD 121 | Introduction to Reporting and Newswriting |
| ENGL 110 | ENGL 102 or ENGL 102H | Literature and Composition or Honors Literature and Composition | JOUR 130 | CMSD 123A | News Media Production |
| ENGL 120 | ENGL 102 <br> or ENGL 102H | Literature and Composition or Honors Literature and Composition | JOUR 131 | CMSD 123B | News Media Production |
|  |  |  | JOUR 160 | CMSD 160 | Introduction to Photojournalism |
| ENGL 130 | ENGL 241 | Survey of American Literature 16001865 | JOUR 170 JOUR 210 | CMSD 103 | Introduction to Visual Communication |
|  |  |  |  | CMSD 210 | Intermediate Reporting and Newswriting |
| ENGL 135 | ENGL 242 | Survey of American Literature 1865-Present |  |  |  |
|  |  |  | KIN 100 | KNPR 101 | Introduction to Kinesiology |
| ENGL 140 | ENGL 271 | Survey of World Literature I | KIN 101 | KNHE 106 | Cardiopulmonary Resuscitation and First Aid |
| ENGL 145 | ENGL 272 | Survey of World Literature II |  |  |  |
| ENGL 160 | ENGL 231 | Survey of English Literature I | KIN 101 | KNHE 105 + KNHE 107 | First Aid and Personal Safety + Cardiopulmonary Resuscitation |
| ENGL 165 | ENGL 232 | Survey of English Literature II |  |  |  |
| ENGL 180 | ENGL 270 | Children's Literature | LPPS | LAW 100 | Introduction to Legal Studies |
| ENGL 200 | ENGL 213 | Creative Writing | MATH 110 | MATH 219 or MATH 219H | Statistics and Probability or Honors Statistics and Probability |
| ENGR 110 | ENGR 100A | Introduction to Engineering | MATH 110 | PSYCH 210 | Statistics for the Behavioral Sciences |
| ENGR 150 | ENGR 125 | Engineering Graphics | MATH 120 | MATH 204 | Mathematical Concepts for Elementary School Teachers |
| ENGR 180 | ENGR 118 | Surveying |  |  |  |
| ENGR 230 | ENGR 240 | Dynamics | MATH 130 | MATH 145 | Finite Mathematics |
| FIRE 100 X | FTC 101 | Fire Protection Organization | MATH 140 | MATH 150 | Calculus for Biological, Management, |
| FIRE 110 X | FTC 104 | Fire Prevention |  |  |  |
| FIRE 120 X | FTC 106 | Fire Protection Systems | MATH 155 | MATH 170 | Pre-Calculus Mathematics |
| FIRE 130 X | FTC 105 | Building Construction for Fire Protection | MATH 210 | MATH 180 or MATH 180H | Single Variable Calculus I or Honors Single Variable Calculus I |
| FIRE 140 X | FTC 102 | Fire Behavior and Combustion | MATH 220 | MATH 185 | Single Variable Calculus II |
| FIRE 150 X | FTC 103 | Principles of Fire and Emergency Service Safety and Survival | MATH 230 | MATH 280 | Intermediate Calculus |
|  |  |  | MATH 851 | MATH 162 | Trigonometry |
| FTVE 130 | TELV 115A | Single-Camera Production and Editing | MATH 900S | $\begin{aligned} & \text { MATH (180 or } \\ & 180 H)+ \text { MATH } \\ & 185 \end{aligned}$ | Single Variable Calculus I or Honors Single Variable Calculus I + Single Variable Calculus II |
| GEOG 110 | GEOG 101 | Physical Geography |  |  |  |
| GEOG 111 | GEOG 101L | Physical Geography Laboratory | MATH 910S | MATH 287 | Introduction to Linear Algebra and Differential Equations |
| GEOG 120 | GEOG 102 | Cultural Geography |  |  |  |
| GEOG 125 | GEOG 100 or GEOG 100H | World Regional Geography or Honors World Regional Geography | MUS 100 | MUS 101 or MUS 101H | Music Appreciation or Honors Music Appreciation |


| GEOG 130 | GEOG 130 | Introduction to Weather and Climate |
| :--- | :--- | :--- |
| GEOG 140 | GEOG 140 | California Geography |


| SAC COURSE |  |  |
| :---: | :---: | :---: |
| MUS 110 | MUS 110 or MUS 110H | Music Fundamentals and Culture or Honors Music Fundamentals and Culture |
| MUS 120 | MUS 111 | Basic Music Theory and Musicianship I |
| MUS 125 | MUS 111 | Basic Music Theory and Musicianship I |
| MUS 130 | MUS 112 | Music Theory and Musicianship II |
| MUS 135 | MUS 112 | Music Theory and Musicianship II |
| MUS 140 | MUS 213 | Theory 3 |
| MUS 145 | MUS 114A | Musicianship |
| MUS 150 | MUS 214 | Theory 4 |
| MUS 155 | MUS 114B | Musicianship |
| MUS 160 | MUS 115A | Applied Music (Private Instruction) |
| MUS 160 | MUS 115B | Applied Music (Private Instruction) |
| MUS 160 | MUS 115C | Applied Music (Private Instruction) |
| MUS 160 | MUS 115D | Applied Music (Private Instruction) |
| MUS 180 | MUS 135 | Concert Chorale |
| MUS 180 | MUS 137 | Chamber Choir |
| MUS 180 | MUS 171 | Concert Band |
| MUS 180 | MUS 175 | Jazz Ensemble |
| MUS 180 | MUS 181 | Chamber Orchestra |
| MUS 180 | MUS 271 | Symphonic Band |
| NUTR 110 | NUTR 115 or NUTR 115H | Nutrition or Honors Nutrition |
| NUTR 120 | NUTR 116 | Principles of Food Preparation |
| PHIL 100 | $\begin{aligned} & \text { PHIL } 106 \\ & \text { or PHIL 106H } \end{aligned}$ | Introduction to Philosophy or Honors Introduction to Philosophy |
| PHIL 110 | PHIL 111 | Introductory Logic |
| PHIL 120 | PHIL 108 | Ethics |
| PHYS 105 | PHYS 210 | Principles of Physics I |
| PHYS 105 | PHYS 279 | College Physics I |
| PHYS 110 | PHYS 289 | College Physics II |
| PHYS 110 | PHYS 211 | Principles of Physics II |
| PHYS 205 | PHYS 210 | Principles of Physics I |
| PHYS 205 | PHYS 217 | Engineering Physics I |
| PHYS 210 | PHYS 227 | Engineering Physics II |
| POLS 110 | POLT 101 or POLT 101H | American Government and Politics or Honors American Government and Politics |
| POLS 120 | POLT 200 <br> or POLT 200H | American Political Thought or Honors American Political Thought |
| POLS 130 | POLT 201 | Introduction to Comparative Politics |
| POLS 140 | POLT 220 | International Politics |
| PSY 110 | PSYC 100 or PSYC 100 H | Introduction to Psychology or Honors Introduction to Psychology |
| PSY 115 | PSYC 230 | Psychology and Effective Behavior |
| PSY 150 | PSYC 200 | Introduction to Biological Psychology |
| PSY 170 | PSYC 240 | Introduction to Social Psychology |
| PSY 170 | SOC 240 | Introduction to Social Psychology |
| PSY 180 | PSYC 180 | Introduction to Lifespan Psychology |
| PSY 200 | PSYC 219 | Introduction to Research Methods in Psychology |
| SJS 110 | ETHN 101 or <br> ETHN 101H | Introduction to Ethnic Studies or Honors Introduction to Ethnic Studies |


| C-ID | SAC COURSE |  |
| :---: | :---: | :---: |
| SOCI 110 | $\begin{aligned} & \text { SOC } 100 \\ & \text { or SOC } 100 \mathrm{H} \end{aligned}$ | Introduction to Sociology or Honors Introduction to Sociology |
| SOCI 115 | $\begin{aligned} & \text { SOC } 140 \\ & \text { or SOC } 140 \mathrm{H} \end{aligned}$ | Analysis of Social Trends and Problems or Honors Analysis of Social Trends and Problems |
| SOCI 125 | PSYC 210 | Statistics for the Behavioral Sciences |
| SOCI 125 | MATH 219 or MATH 219 H | Statistics and Probability or Honors Statistics and Probability |
| SOCI 130 | SOC 112 | Relationships, Marriages, and Family Dynamics |
| SPAN 100 | SPAN 101 or SPAN 101H | Elementary Spanish I or Honors Elementary Spanish I |
| SPAN 110 | SPAN 102 or SPAN 102H | Elementary Spanish II or Honors Elementary Spanish II |
| SPAN 200 | SPAN 201 or SPAN 201H | Intermediate Spanish I or Honors Intermediate Spanish I |
| SPAN 210 | SPAN 202 or SPAN 202H | Intermediate Spanish II or Honors Intermediate Spanish II |
| THTR 111 | THEA 100 | Introduction to Theatre |
| THTR 113 | THEA 105 | Theatre History I |
| THTR 151 | THEA 110 | Acting Fundamentals |
| THTR 152 | THEA 111 | Intermediate Acting |
| THTR 171 | THEA 131 | Stagecraft |
| THTR 173 | THEA 133 | Lighting Fundamentals |
| THTR 174 | THEA 136 | Fundamentals of Costume Design |
| THTR 174 | FDM 136 | Fundamentals of Costume Design |
| THTR 175 | THEA 132 | Stage Makeup |
| THTR 191 | THEA 150 | Theatre Production |
| THTR 191 | THEA 150A | Rehearsal and Performance in Production |
| THTR 191 | THEA 151 | Showcase |
| THTR 191 | THEA 152 | Tour Ensemble |
| THTR 191 | THEA 154 | Performance Ensemble |
| THTR 191 | THEA 155 | Children's Theatre Ensemble |
| THTR 192 | THEA 135 | Technical Production |
| THTR 192 | THEA 150 | Theatre Production |
| THTR 192 | THEA 150B | Technical Theatre in Production |
| Prerequisites Definition |  |  |
| Prerequisites are courses, skills, or background experiences that are considered necessary in order for a student to be successful in a course. They are required prior to enrolling in the course. <br> Course Materials and Service Fees |  |  |
| Certain courses require additional costs to the student in excess of normal book and supply expense. Such courses will be designated in the published class schedules. |  |  |
| THE COLLEGE RESERVES THE RIGHT TO CANCEL SCHEDULED CLASSES. |  |  |
| Note on Topics Courses 098 and 198: The college may offer Topics courses, either under 098 (non-transfer) or 198 (transfer) under any discipline listed in the announcement of courses. Topics courses are specialized courses on topics related to the immediate and changing needs of students. They may not be offered every semester, and, after no more than two scheduled offerings, they must be either converted to regular ongoing course status or be deleted. |  |  |

## ACCOUNTING (ACCT)

## Accounting 010

## Accounting Procedures

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course introduces the students to the accounting cycle including journal entries, general ledger, the adjustment process, and the related financial statements. The course is designed to prepare students for Accounting 101 and/or occupations in bookkeeping.

## Accounting 032

Payroll Accounting
Unit(s): 1.0 Class Hours: 18 Lecture total.
This course covers accounting for payroll and worker's compensation. Calculation of payroll, payroll taxes, and the related forms and deposit requirements are covered.

## Accounting 035

Quickbooks I
Unit(s): 2.0 Class Hours: 36 Lecture total.
This is an introductory course on using Quickbooks software in the business environment for preparation of accounting information. The course will cover accounting theory and practical knowledge of Quickbooks on topics that include company file setup, customizing Quickbooks, recording customer and vendor transactions, bank reconciliations, creation of accounting reports and customization.

## Accounting 036

Quickbooks II
Unit(s): 2.0 Class Hours: 36 Lecture total.
This is an intermediate course on using Quickbooks software in the business environment for preparation of accounting information. Students will cover accounting theory and practical knowledge of Quickbooks on more advanced topics such as inventory management, time and billing, payroll setup, payroll processing, estimates and adjustments and year-end procedures. This course will prepare students for the Quickbooks Certified User exam.

Accounting 101 (C-ID ACCT 110) Financial Accounting
Unit(s): 4.0 Class Hours: 72 Lecture total.
The study of accounting as an information system, examining why it is important, and how it is used by investors and creditors to make decisions. Coverage includes the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. It also includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics. CSU/UC

## Accounting 102 (C-ID ACCT 120)

## Managerial Accounting

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Accounting 101 with a minimum grade of C .
Study of the use and reporting of accounting data for managerial planning, cost control, and decision making purposes. The course includes broad coverage of concepts, classifications, and behaviors of costs. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, relevant costs, and capital budgeting. CSU/UC

## Accounting 104

## Federal and California Taxes

Unit(s): 4.0 Class Hours: 72 Lecture total.
Learn how to prepare federal and California state income tax returns for the individual. Learn tax theory and rules behind the Form 1040 and the most common IRS Schedules, such as Schedules A, B, C, D, E, and common income adjustments and tax credits. This course is CTEC qualified. This course may be repeatable as continuing education for professional certification. CSU

## Accounting 106

Cooperative Work Experience Education - Occupational Unit(s): 1.0-4.0 Class Hours: 300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Accounting 108

## Tax Practices and Procedures

Unit(s): 3.0 Class Hours: 54 Lecture total.
The course covers various special topics in tax, including specialized returns and taxpayers; practices, procedures and representation before the IRS and completion of the tax filing process. This course may be repeatable as continuing education for professional certification. CSU

## Accounting 113

## Intermediate Income Taxes - Corporations

Unit(s): 2.0 Class Hours: 36 Lecture total.
This course covers income tax theory, concepts and regulations relating to corporations. The course includes the federal and California tax systems and income taxation relating to Corporations as well as basic tax research and ethical implications. This course includes coverage of both C Corporations and S Corporations. CSU

## Accounting 114

Intermediate Income Taxes - Partnership and LLCs
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course covers income tax theory, concepts, and regulations relating to partnerships. The course includes the federal and California tax systems and income taxation relating to partnerships and other forms of business such as LLCs as well as basic tax research and ethical implications. CSU

## Accounting 124

## Computerized Income Tax Preparation

Unit(s): 1.0 Class Hours: 18 Lecture total.
This course provides a student with the practical knowledge of income tax preparation and the income tax formula using commercial tax software. CSU

## Accounting 125 <br> Volunteer Income Tax Assist. (VITA) I Accounting Operations and Analysis

Unit(s): 2.0 Class Hours: 36 Lecture total.
Recommended Preparation: Accounting 104 with a minimum grade of C.
This course will cover Federal and California individual income tax theories and laws to prepare students to successfully pass the IRS-provided online Basic, Advanced, and additional tax exams and be eligible to volunteer in the IRS-sponsored Volunteer Income Tax Assistance (VITA) program. The successful completion of the course and passing the exams will prepare students to work as an intern or volunteer at a VITA site to prepare tax returns and have face-to-face interaction with taxpayers. CSU

## Accounting 198 <br> Topics

Unit(s): 1.0-4.0 Class Hours: 18-72 Lecture total.
Courses on a variety of contemporary topics will be offered to meet the interests and needs of students in Accounting. CSU

## Accounting 204

## Managerial Cost Accounting

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Accounting 102 with a minimum grade of C .
Study of cost behavior, cost accounting, and cost control; the use of accounting information for management planning and decision making; cost systems, budgeting, and financial performance analysis. CSU

## Accounting 205

## Intermediate Accounting I

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Accounting 102 with a minimum grade of C .
An intermediate study of accounting theory and the conceptual framework; preparation of income statements and comprehensive income, balance sheets and statements of cash flows. Coverage includes present value; and accounting concepts related to the asset side of the balance sheet. CSU

## Accounting 206

## Intermediate Accounting II

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Accounting 205 with a minimum grade of $C$.
Second course in intermediate series in financial accounting that covers current and long-term liabilities, income taxes, pensions and post-retirement benefits, leases, stockholders' equity, earnings per share, and statement of cash flows. In addition, changes and/or in accounting methods, accounting estimates, or reporting entity are analyzed. Disclosure issues in financial statements are also addressed. CSU

## Accounting 210

## Accounting Information Systems

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Accounting 101 with a minimum grade of C . Introductory course to accounting information systems that applies accounting principles using database and spreadsheet software. Designed to develop employable accounting analysis skills; evaluate and compare commercial software; analyze financial statements and understand role of internal controls. CSU

## Accounting 211

## Auditing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Accounting 102 with a minimum grade of C .
This course examines the use of financial statement audits and details the audit process. Topics include professional responsibilities of auditors, audit design, sampling approaches, substantive testing, testing controls, and audit report formulation and communication. CSU

## Accounting 212

## Accountants' Ethics and Responsibilities

Unit(s): 4.0 Class Hours: 72 Lecture total.
Focuses on the foundations of ethics \& the professional responsibilities of accountants \& CPAs; including ethical behavior and responding to ethical dilemmas. Topical content will include relevant professional, ethical standards and regulations, as well as research and practice concerning challenging ethical situations. The course will focus on the discussion of ethical cases and study of professional ethical standards set forth by both the AICPA and California State Board of Accountancy. CSU

## AMERICAN SIGN LANGUAGE (ASL)

## American Sign Language 110

American Sign Language I
Unit(s): 4.0 Class Hours: 72 Lecture total.
This entry level course is designed to introduce students to American Sign Language (ASL) and fingerspelling as it is used within American Deaf culture. Instruction includes preparation for visual/gestural communication followed by intensive work on comprehension through receptive language skills, development of basic conversational skills, modeling of grammatical structures, and general information about American Deaf culture. Sign Language 110 is equivalent to two years of high school ASL. Students are required to attend at least one off campus event. CSU/UC

## American Sign Language 111

## American Sign Language II

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: American Sign Language 110 with a minimum grade of C.

The second course in the study of American Sign Language (ASL) focuses on increased vocabulary development, intermediate comprehension and conversational skills, application of grammatical structures and practice in the receptive and expressive aspects of ASL, as well as appreciation of American Deaf culture, and history. Students are required to attend at least one off campus event. CSU/UC

## American Sign Language 113

Introduction to Interpreting for the Deaf
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: American Sign Language 210 with a minimum grade of C.

The study of the history of sign language interpreting and the theoretical foundations and technical skills needed to interpret in professional settings for deaf and hard-of-hearing children and adults. The roles, responsibilities, and ethics of interpreters providing interpreting services in various professional settings will be examined. Students are required to attend two off campus events. CSU

## American Sign Language 114

## Classifiers, Fingerspelling, and Numbering

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: American Sign Language 111 with a minimum grade of C.

This course is designed to provide specialized instruction in the continued development of skills and application of expanded conceptualization of American Sign Language (ASL) classifiers, fingerspelling, and numbering concepts and further exploration and understanding of American Deaf culture. Expressive and receptive techniques will be emphasized. Students are required to attend one off campus event. CSU

## American Sign Language 116 Introduction to Deaf Studies

Unit(s): 3.0 Class Hours: 54 Lecture total.
This is an introductory course exploring the cultural, educational, linguistic, and audiological experiences of people who are deaf, hard of hearing, deaf/blind, and late-deafened in America. Students will be exposed to historical and current perspectives in trends, philosophies, ideologies, and the Deaf community as a subculture of American society. CSU/UC

## American Sign Language 210

American Sign Language III
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: American Sign Language 111 with a minimum grade of C.

The third course in the study of American Sign Language (ASL) emphasizes advanced ASL syntax, non-manual markers, vocabulary, and fingerspelling enabling students to participate in more complex conversations with Deaf community members. Students will have emphasis on expressive skills in narrative form. Students are required to attend at least one off campus event. CSU/UC

## American Sign Language 211

## American Sign Language IV

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: American Sign Language 210 with a minimum grade of C.

This course continues the study and development of American Sign Language receptive and expressive linguistic competence. Emphasis on production/conversational skills in American Sign Language, along with continued focus on grammatical and cultural features. Students are required to attend at least one off campus event. CSU

## ANTHROPOLOGY (ANTH)

## Anthropology 100 (C-ID ANTH 120)

Introduction to Cultural Anthropology
Unit(s): 3.0 Class Hours: 54 Lecture total.
A cross-cultural survey of the major areas of cultural anthropology including subsistence patterns, economic and political systems, family and kinship, religion, and cultural change. Also includes contemporary issues facing humankind such as the environment, resource depletion, ethnic conflict, globalization, and warfare. Emphasis is on understanding cultural diversity and cultural universals. Field trips may be required. CSU/UC

## Anthropology 100H (C-ID ANTH 120) <br> Honors Introduction to Cultural Anthropology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Seminar style, content enriched for honors students, to provide a critical and extensive exploration of the major areas of cultural anthropology. Includes contemporary issues such as globalization, gender, and ethnic conflict. Field trips may be required. CSU/UC

## Anthropology 101 (C-ID ANTH 110)

Introduction to Physical Anthropology
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to humankind's place in nature including evolutionary theory, principles of genetics, primate evolution and behavior, fossil evidence for human evolution, human biology and variation, growth and adaptability, and biomedical anthropology. Includes practical application of biological anthropology to human problems. CSU/UC

## Anthropology 101L

## Physical Anthropology Laboratory

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Anthropology 101 with a minimum grade of C or concurrent enrollment.
Laboratory exercises and experiments designed to explore and understand the primary areas of physical anthropology: evolutionary theory, principles of genetics, comparative anatomy, physiology, behavior and ecology of vertebrates with an emphasis on nonhuman primates, analysis of fossil evidence for human evolution, human biology and variation, growth and adaptability, and biomedical anthropology. Includes both traditional and virtual laboratory experiences. CSU/UC

## Anthropology 103 (C-ID ANTH 150) Introduction to Archaeology

Unit(s): 3.0 Class Hours: 54 Lecture total.
This is a survey course in world archaeology. Methods of archaeological survey and excavation will be discussed as well as past and current concepts and theories. Material remains such as lithics, bone, ceramics and ecofacts will be discussed as to how they can be interpreted into social, political, economic, religious, and ethnic terms. CSU/UC

## Anthropology 104 (C-ID ANTH 130) Language and Culture

Unit(s): 3.0 Class Hours: 54 Lecture total.
General introduction to the processes of human communication, emphasizing coextensive aspects of language and culture. Surveys core areas of linguistic anthropology: structural linguistics; biological basis of language; and sociolinguistics. Topics include acquisition of first and second languages, languages in contact, and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as basis of study. CSU/ UC

## Anthropology 104H (C-ID ANTH 130) Honors Language and Culture

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
General introduction to the processes of human communication, emphasizing coextensive aspects of language and culture. Surveys core areas of linguistic anthropology: structural linguistics, biological basis of language, and sociolinguistics. Topics include acquisition of first and second languages, languages in contact, and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as basis of study. Requires individual research and oral presentation of readings in a seminar setting. CSU/UC
Anthropology 105
Ancient Mesoamerican Civilization
Unit(s): 3.0 Class Hours: 54 Lecture total.
An archeological and ethnohistorical survey of the origin and development of pre-Columbian civilizations in ancient Mesoamerica from Paleo-Indian times to the Spanish conquest. (Same as History 105). CSU/UC

## Anthropology 108

Religion, Magic, and Witchcraft
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the anthropology of religion, magic, and witchcraft. A cross cultural study focusing on the beliefs and practices of early, non-western, and traditional religious systems with emphasis on the forms, functions, structures, symbolism, history, and evolution. CSU/UC

## Anthropology 125

Native Americans in the U.S.
Unit(s): 3.0 Class Hours: 54 Lecture total.
An historical and contemporary survey of Native Americans in the United States including the development of tribes and nations and the cultural practices of Native Americans today. Field trips may be required. CSU/UC

## ART (ART)

Art 009
Art Lab
Unit(s): 0.5 Class Hours: 27 Laboratory total.
An open lab for studio art students for the purpose of devoting additional hours outside of class time on projects. Projects, determined by class assignments, vary by semester. Twenty-four lab hours per semester earn 0.5 unit. May be repeated. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Art 010

## Advanced Art Lab

Unit(s): 0.5 Class Hours: 27 Laboratory total.
An open lab for studio art students devoting additional hours on projects. Projects, determined by class assignments, vary by semester. 24 lab hours per semester earn 0.5 unit. Requires concurrent enrollment in another art course. May be repeated. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Art 011

## Intro to 3D Modeling \& Animation

Unit(s): 0.5 Class Hours: 9 Lecture, 4.50 Laboratory total. Introduction to digital 3D modeling \& animation basics. This hands-on class will focus on modeling and animating a cartoon character and environment from an instructor provided drawing, using 3D Studio Max software.

## Art 100 (C-ID ARTH 100)

## Introduction to Art Concepts

Unit(s): 3.0 Class Hours: 54 Lecture total.
A study of the visual arts in relation to both personal and cultural expressions. Fundamentals of visual organization, color theory, terminology, historical art movements and concepts will be studied. Required for art majors. CSU/UC

## Art 100H (C-ID ARTH 100)

## Honors Introduction to Art Concepts

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Enriched exposure to a study of the visual arts in relation to personal and cultural expression with an emphasis on critical thinking and writing. Fundamentals of visual organization, color theory, terminology, historical art movements and concepts will be studied in a seminar format. CSU/UC

## Art 101 (C-ID ARTH 110) <br> Survey of Western Art History I: Prehistory Through the Middle Ages

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Completion of or concurrent enrollment in English 101 or English 101H.
The study of art from Prehistory through Middle Ages. Cultures and Civilizations are studied through visual imagery, lecture, class discussion, reading, research, and field trips. Recommended sequence of courses: Art 100, Art 101, Art 102. CSU/UC

## Art 102 (C-ID ARTH 120)

## Survey of Western Art History II: Renaissance Through the Twentieth Century

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: English 101 or English 101H is recommended.

The study of Western art history from the Renaissance through the 20th century. Art movements and individual painters, sculptors, architects, and printmakers will be presented within the context of the social, political, and intellectual histories of their respective periods. Required for art majors. CSU/UC

Art 103 (C-ID ARTH 140)
Arts of Africa, Oceania, and Indigenous North America Unit(s): 3.0 Class Hours: 54 Lecture total.
History and appreciation of the arts of Africa, Oceania, and indigenous North America. Examines the visual arts of these vast and varied cultures within socio-political, aesthetic, religious contexts and their impact on Western art in Europe and the Americas. CSU/UC

## Art 104

## Mexican and Chicano Art History

Unit(s): 3.0 Class Hours: 54 Lecture total.
The history and appreciation of Mexican and Chicano art from the preColumbian to the present including the modern murals of Mexico and the United States. CSU/UC

## Art 105

History of Modern Art
Unit(s): 3.0 Class Hours: 54 Lecture total.
History of painting, sculpture, architecture, prints, and applied arts from the late nineteenth century through the twentieth century. Covers the formal philosophic, spiritual, and historical background of art from Post Impressionism to Post Modernism. For general students and art majors. CSU/UC

## Art 106 (C-ID ARTH 130)

## Asian Art History

Unit(s): 3.0 Class Hours: 54 Lecture total.
Historical survey of the visual arts of India, China, Japan, India, Korea and Southeast Asia. Includes relationship of Far Eastern philosophy and culture to artistic achievement. Emphasizes works of art in terms of style, technique, and content. CSU/UC

## Art 107

## History of Animation

Unit(s): 3.0 Class Hours: 54 Lecture total.
Critical and historical survey of animation as a form of communication and cultural expression, from prehistoric origins to present digital formats. Animation history is studied in relation to the background for its creation in contemporary culture and society including the U.S.A., Europe, and Japan. Students analyze and evaluate a large crosssection of animated works. CSU/UC

## Art 108 <br> Contemporary Art History: Art Since Mid-Twentieth Century

Unit(s): 3.0 Class Hours: 54 Lecture total.
A survey course exploring post World War II styles, trends, ideas, and innovations in architecture and the visual arts in Europe and North America with references to globalization. CSU/UC

## Art 109

## Introduction to Woodworking

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
An introduction to the fundamentals of woodworking with a focus on wood as a medium for creative expression. Emphasizes knowledge of and proficiency with hard to soft woods; grain patterns; finishing techniques; fabrication; and joinery. Students learn and observe safety standards as they gain skills with hand tools, small power tools and larger machinery in the shop. CSU/UC

## Art 110 (C-ID ARTS 100)

## Two-Dimensional Design

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Introduction to the principles and elements of two-dimensional design. Provides instruction in the fundamentals of visual communication including color theory, composition, and expression. Application of concepts through creative projects. Required for art majors. A combination of Art 110 and Art 111 may be taken a maximum of four enrollments. CSU/UC

## Art 111 (C-ID ARTS 101)

## Three-Dimensional Design

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Fundamentals of visual organization as applied to objects in-theround. Visual space problems, structure, and dimensional terminology through creative projects in various media. Required for art majors. A combination of Art 110 and Art 111 may be taken a maximum of four enrollments. CSU/UC

## Art 121A

## Fundamentals of Typography

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 195 with a minimum grade of C .
Introduction to the use of type styles, appropriate type selection and their characteristics as a means toward understanding design and communication through type solutions. Projects will explore current graphics industry practices and standards, including the use of digital technology and traditional hand skills. Art 122, Art 162, Art 191A, Art 192A recommended. CSU/UC

## Art 121B

## Advanced Typography

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 121A with a minimum grade of C.
This course provides continued study in typography and appropriate type selection as a means for solving complex graphic design problems, such as illustrative type or multiple page layout using traditional hand skills, digital technology and portfolio presentations. CSU/UC

## Art 122

## Graphic Design I

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 195 with a minimum grade of C.
Introduction to basic graphic design concepts, techniques and practices resulting in the production of effective visual communications. Projects combine text with images, using current industry standards and technology in print media and other design applications. Art 110, Art 162, Art 191A, and Art 192A recommended. A combination of Art 121A, Art 121B, Art 122, and Art 221 may be taken a maximum of four enrollments. CSU/UC

## Art 124

Gallery Production
Unit(s): 2.0 Class Hours: 108 Laboratory total.
Instruction in preparation and installation of art exhibits, gallery management, and working on a museum exhibition staff. Includes lectures, visits to artists' studios, and opportunities to work on art shows in two college galleries. Field trips include visits to local galleries and behind-the-scenes museum tours of collections and exhibition preparation areas. May be repeated. Grade: Pass/No Pass Only. A combination of Art 124, Art 133, Art 134, and Art 135 may be taken a maximum of four enrollments. CSU

## Art 125

Cooperative Work Experience - Occupational
Unit(s): 1.0-6.0 Class Hours: 60-450 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

Art 129
Introduction to Web Design
Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
Introduction to the development and design of web sites with an emphasis on the elements and principles of design as they relate to web interfaces. Includes learning the technical requirements for colors, fonts, file optimization, effects, image resolution, and special effects. Includes creative Web design projects. CSU/UC

## Art 130 (C-ID ARTS 110) Introduction to Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Introductory course in observational drawing, exploring line, form, proportion, composition, and a variety of media. Drawing from manmade and natural objects. Required for art majors. A combination of Art 130, Art 230, Art 233, and Art 250 may be taken a maximum of four enrollments. CSU/UC

## Art 131 (C-ID ARTS 200) <br> Beginning Life Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Recommended Preparation: Art 130 with a minimum grade of C. Introduction to drawing the human form by observing live models for studies in anatomy, structure, and composition. Exposure to traditional and contemporary figurative drawing while exploring media and methods. Required for art majors. A combination of Art 131, Art 231, Art 232, and Art 243 may be taken a maximum of four enrollments. CSU/UC

Art 132A

## Beginning Pastel Drawing and Painting

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 130 with a minimum grade of $C$.
Development of pastel drawing and painting skills using various techniques. Strong emphasis on color theory, value, and composition. Preparation of grounds using various papers. Study of historical and contemporary pastel styles and techniques. A combination of Art 132A and 132B may be taken a maximum of four enrollments. CSU/ UC

## Art 132B

Intermediate Pastel Drawing and Painting
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 132A with a minimum grade of C.
Intensive exploration of contemporary uses of pastels. Intermediate and advanced projects emphasizing pastel drawing/painting concepts in conjunction with other media. Emphasis on creative, personal expression, content, and style development. A combination of Art 132A and 132B may be taken a maximum of four enrollments. CSU/ UC

## Art 133

## Introduction to Gallery Production

Unit(s): 2.0 Class Hours: 108 Laboratory total.
Introduction to the practices of art exhibit preparation and installation. Students will gain knowledge in the history and theory of art exhibition, as well as the current state of gallery management and museum work. Emphasis is on learning and utilizing industry-standard terminology, materials and tools. Students will move from observation to practical experience as they support the daily operations and special events of two college galleries. Grade: Pass/No Pass Only. A combination of Art 124, Art 133, Art 134, and Art 135 may be taken a maximum of four enrollments. CSU

## Art 134

Intermediate Gallery Production
Unit(s): 2.0 Class Hours: 108 Laboratory total.
Prerequisite: Art 133 with minimum grade of $P$.
An intermediate course designed to build on knowledge and skills gained in Art 133. Students have opportunities to increase experience with new exhibitions and installations. Emphasis is on solving art gallery problems using current industry-standard communication and practices. Visits to local galleries and behind-the-scenes museum tours of collections and exhibition preparation areas. Students will also use woodshop equipment to build pedestals as well as draft an exhibition proposal and artwork layout. Grade: Pass/No Pass Only. A combination of Art 124, Art 133, Art 134, and Art 135 may be taken a maximum of four enrollments. CSU

## Art 135

## Advanced Gallery Production

Unit(s): 2.0 Class Hours: 108 Laboratory total. Prerequisite: Art 134 with minimum grade of $P$
Students produce a unique exhibition on campus using knowledge and skills gained in Art 133 and Art 134. Emphasis will be on independently curating, designing, lighting, writing didactic material, and publicizing their exhibition. Grade: Pass/No Pass Only. A combination of Art 124, Art 133, Art 134, and Art 135 may be taken a maximum of four enrollments. CSU

## Art 140A

## Watercolor Painting

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Introduction to watercolor painting as a creative art form with emphasis on transparent watercolor techniques. Course includes principles of composition and color theory, materials selection, tools, terminology, and various watercolor techniques. Students develop basic watercolor skills while painting from simple forms and progressing to a variety of subjects. A combination of Art 140A, Art 140B, Art 143, and Art 240 may be taken a maximum of four enrollments. CSU/UC

## Art 140B

## Watercolor Painting

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Art 140A with a minimum grade of C.
A continuing course in transparent watercolor techniques providing the opportunity to advance the creativity of those with basic skills in watercolor. Further study of formal elements and composition while painting from varied subject matter. Emphasis on refinement of methods and techniques for more expressive painting. A combination of Art 140A, Art 140B, Art 143, and Art 240 may be taken a maximum of four enrollments. CSU/UC

## Art 141

## Beginning Painting

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Recommended Preparation: Art 110 or Art 130 with a minimum grade of C.
Introduction to acrylic and/or water soluble oil painting as a creative art form with exposure to historical, traditional and contemporary painting styles. Course includes principles of composition and color theory, materials selection, tools, terminology, and techniques. Students develop basic skills painting a variety of subjects. Required for art majors. A combination of Art 141, Art 241, and Art 242 may be taken a maximum of four enrollments. CSU/UC

## Art 143

## Landscape Watercolor

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Art 140A with a minimum grade of C.
Intermediate course in transparent watercolor using the Southern California landscape as studio and subject for paintings. Explores a variety of techniques, papers, brushes, and pigments. Further study of compositional/conceptual elements leading to development of individual expression. A combination of Art 140A, Art 140B, Art 143, and Art 240 may be taken a maximum of four enrollments. CSU/UC

## Art 150

## Primitive Pottery Techniques

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Primitive techniques in pottery construction and firing. Emphasizes handbuilt forms. Students will construct tools. Sawdust, raku, dung, low temperature salt, and other pit firings will be utilized. CSU/UC

## Art 151

## Ceramics-Introductory Level

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Exploration of clay as a structural and creative material. Experiences include throwing on the potter's wheel and hand building. Instruction includes surface design, glazing, and experience in utilitarian forms. Students provide clay and tools. A combination of Art 151, Art 152 and Art 153 may be taken a maximum of four enrollments. CSU/UC

## Art 152

## Ceramics-Intermediate Throwing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 151 with a minimum grade of $C$.
Further study of wheel thrown techniques with an emphasis on functional, utilitarian forms. Students provide own clay and tools. A combination of Art 151, Art 152, and Art 153 may be taken a maximum of four enrollments. CSU/UC

## Art 153

## Ceramics-Intermediate Handbuilding

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 151 with a minimum grade of $C$.
Further study of handbuilding techniques with emphasis on one-of-a-kind sculptural forms. Non-traditional alternatives to glazes are explored. Students provide own clay and tools. A combination of Art 151, Art 152, and Art 153 may be taken a maximum of four enrollments. CSU/UC

## Art 154

## Ceramics Summer Workshop

Unit(s): 3.0 Class Hours: 27 Lecture, 81 Laboratory total.
Prerequisite: Art 151 with a minimum grade of $C$.
For intermediate/advanced students interested in a self-guided study/ exploration in the ceramic medium. Emphasizes technical aspects and artistic imageries. Invited artists will provide supplementary guidance. Students provide own clay and tools. CSU/UC

## Art 155

## Plaster Mold Making

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 151 with a minimum grade of C .
Basic aspects of plaster of Paris mold making: production of molds from original models in order to reproduce those models; alteration of those plaster mold castings into a more artistic, personalized imagery. A combination of Art 155 and Art 157 may be taken a maximum of four enrollments. CSU/UC

## Art 156

## Clay Calculation: an Approach in Color Study

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 151 with a minimum grade of $C$.
Basic uses of color clays as a decorative tool in making pottery forms. Techniques of sprigging, incising, inlay, and lamination are utilized with wheel-thrown, handbuilding, and plaster mold construction methods. A combination of Art 156, Art 159A, and Art 159B may be taken a maximum of four enrollments. CSU/UC

## Art 157

## Ceramics-Raku and Saggar Firing Techniques

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 151 with a minimum grade of $C$.
Use of the potter's wheel and/or handbuilding techniques as methods for constructing vessel forms. Includes a study of surface coloration from natural organic materials. Several firing techniques will be utilized. A combination of Art 155 and Art 157 may be taken a maximum of four enrollments. CSU/UC

## Art 158

## Ceramic Mural Project

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Prerequisite: Art 151 with a minimum grade of $C$.
Students will work collaboratively to design, construction, and installation of a tile mural. Includes various techniques of surface textures, glaze colors, spatial compositions, and technical processes of installation. Students provide own clay and tools. Projects vary each semester. CSU/UC

## Art 159A

## Ceramic Color Decoration: Low Temperature

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 151 with a minimum grade of C .
Exploration of surface color decoration on ceramic vessels.
Emphasizes glazing techniques (low temperatures only) such as underglazes, lusters, engobes, sgraffito, decals, slip trailing, wax resist, burnishing and ceramic pencils/crayons. A combination of Art 156, Art 159A, and Art 159B may be taken a maximum of four enrollments. CSU/UC

## Art 159B

## Ceramic Color Decoration: High Temperature

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Prerequisite: Art 151 with a minimum grade of C .
Exploration of surface color decoration on ceramic vessels within the realm of high stoneware temperatures. Emphasizes glazing techniques such as marbling, feathering, mishima, brush decoration, stencils, stamp printing, spraying, slip painting, glaze trailing, wax resist, and terra sigallata. A combination of Art 156, Art 159A, and Art 159B may be taken a maximum of four enrollments. CSU/UC

## Art 162

## Digital Illustration I

Formerly: Digital Design with Photoshop-I
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 195 with a minimum grade of C or portfolio approval. Explores the essentials of Adobe design software and production tools for graphic designers. Focuses on professional studio techniques to master this essential design tool for the creation of sophisticated graphics. Emphasizes efficient workflow, technical proficiency and aesthetic judgment. Students produce portfolio-ready projects using a broad range of imaging skills. Primary software used includes Adobe Photoshop, supplemented with Adobe Illustrator and some timebased media software. A combination of Art 191A, Art 192A, and Art 162 may be taken a maximum of four enrollments. CSU/UC

## Art 164

## Web Design

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Introduction to web design using digital media tools; graphics, illustrations, text, sound, motion, using software programs for the web. Students research how software programs are used in business presentations, advertising, entertainment, and self-promotion.
Overview of elements and principles of design and motion. CSU

## Art 165

## 3D Character Animation

Unit(s): 3.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Art 197A or TV/Video Communications 185 with a minimum grade of $C$.
Instruction in theories and practice of character animation using 3D software. May be repeated. A combination of Art 165, Art 167, and Art 185 may be taken a maximum of four enrollments. CSU

## Art 166A

## 3D Texturing and Lighting Fundamentals

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Prerequisite: Art 196A with a minimum grade of C. Instruction in the fundamentals of making and applying surface textures and lighting effects for digital 3D objects and scenes as used in video games, interactive media, television, film, previz, product illustration, architectural and bioscience visualization. A combination of Art 166A and Art 180A may be taken a maximum of four enrollments. CSU/UC

## Art 166B

## Texturing \& Lighting Intermediate

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 166A with a minimum grade of $C$.
Instruction in intermediate making and applying surface textures and lighting effects in digital 3D scenes as used in video games, interactive media, television, film, previz, product illustration, architectural and bioscience visualization. Students are to work on projects geared to their chosen area of interest, and then are provided with instruction and guidance to increase proficiency, speed and communication skills required as a professional digital 3D artist. CSU/UC

## Art 167

3D Commercial Applications
Unit(s): 3.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Art 197A or TV/Video Communications 185 with a minimum grade of $C$.
Capstone course focusing on developing 3D artwork for specific commercial purposes and formats. Includes field trips and developing a web-based portfolio. May be repeated. A combination of Art 165, Art 167, and Art 185 may be taken a maximum of four enrollments. CSU

## Art 168

## Graphic Design II: Branding \& Strategies

Formerly: Digital Media: Portfolio \& Business Development Unit(s): 3.0 Class Hours: 36 Lecture, 18 Laboratory total. Prerequisite: Art 195 with a minimum grade of C.
Recommended Preparation: 6 units of digital design-based coursework prior to enrollment.
A comprehensive design course serving as the capstone for all Digital Media Arts \& Graphic Design programs. Students develop a career/transfer-ready digital portfolio through team-based branding and identity design development for multiple media applications. Focus is on both business and personal branding. Career goals, resumes, online portfolios, interviewing skills and customer service needs are addressed. 6 units of digital media oriented coursework recommended. CSU

## Art 169

## Game Design \& Development Team

Unit(s): 1.5 Class Hours: 9 Lecture, 54 Laboratory total. Prerequisite: Art 180A with a minimum grade of C. Students design and develop original video game projects in a team setting and in a simulated video game production studio setting. The working game(s) and/or working prototypes will be entered into the annual IEEE Intercollegiate Computer Game Competition. Can be repeated up to 3 times. May be repeated. CSU

## Art 180A

## Video Game and Interactive Media Art Fundamentals

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Art 196A with a minimum grade of C.
Hands-on overview of art production for games and interactive media. Focus on how to use digital 3D art for creating environments for games. Instruction in industry standard graphics software and techniques in art production from concept to finished art assets for games. A combination of Art 166A and Art 180A may be taken a maximum of four enrollments. CSU

## Art 182

## Introduction to Jewelry

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Basic instruction in jewelry fabrication including silver soldering, direct casting and forging, patinas, cold connection, and piercing. A combination of Art 182, Art 284, and Art 285 may be taken a maximum of four enrollments. CSU

## Art 184

## Art of Animation I

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Recommended Preparation: Art 130 with a minimum grade of $C$. This course is a beginning-level animation production class for those with little or no prior animation or digital art experience. Through lectures and research projects, students learn about the history and aesthetics of animation, while concurrently gaining hands-on experience in how to create animations through in-class step-bystep projects. Students will produce basic 2D and 3D animations and assets using Adobe Photoshop, Gimp and 3D animation software. A combination of Art 165, Art 167, Art 184, and Art 185 may be taken a maximum of four enrollments. CSU/UC

## Art 185

## Fundamentals of Cartooning and Storyboarding

Unit(s): 3.0 Class Hours: 27 Lecture, 54 Laboratory total.
Introduction to basic cartooning, character development, and story boarding as used in television, film, and electronic games. Includes sketching, inking, the development of characters, storyboard development, and an overview of cartoon and storyboard history. A combination of Art 165, Art 167, and Art 185 may be taken a maximum of four enrollments. CSU/UC

## Art 190

## Introduction to Mural Painting and Design

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
A directed field studies course in designing and painting large-scale public art murals. Students will work collaboratively in groups and with the community to create designs. This class explores the various processes involved in the construction of large-scale public art while painting a variety of subject matter. Students will learn about historical, traditional and contemporary mural painting styles. CSU/UC

## Art 191A

## Layout Design

Formerly: Digital Publishing with InDesign
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
An introduction to digital publishing and page layouts. Projects explore the design and development of single and multiple page documents. Includes advanced techniques in complex documents, interactive, and web-ready pages. Primary software: Adobe InDesign. A combination of Art 191A, Art 192A, and Art 162 may be taken a maximum of four enrollments. CSU

## Art 192A

## Digital Illustration II: Advanced Topics

Formerly: Digital Illustration with Illustrator
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 195 with a minimum grade of C or portfolio approval. Examines intermediate design and illustration techniques using industry standard software via Adobe Creative Cloud. Addresses contemporary illustrative problems, concepts, and skills development within the digital media and graphic arts industries for creation of unique illustrations. Technical needs for graphic illustration for print, animation, and the web will also be addressed. Primary software: Adobe Illustrator, supplemented with Adobe Photoshop. A combination of Art 191A, Art 192A, and Art 162 may be taken a maximum of four enrollments. CSU/UC

## Art 193

## Motion Graphics with Adobe After Effects

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
This graphics animation course covers the development of original motion graphics. Video editing skills are refined within the animation software to create animated clips for use in multiple media applications. Some experience in non-linear digital video editing is recommended, as well as some graphic design experience. (Same as Same as TV/Video Communications 193.). CSU/UC

## Art 195 (C-ID ARTS 250) <br> Introduction to Digital Media Arts

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total. Foundation-level course designed for graphic designers, artists, photographers, web designers, programmers, and animation artists working in the digital realm. This course includes an overview of industry-standard software, including Adobe Creative Cloud for digital design in montage, vector, layout and time-based media. CSU/UC

## Art 196A

## 3D Modeling Fundamentals

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total. Prerequisite: Art 195 or Art 184 with a minimum grade of $C$. This is an introductory course in developing digital 3D art for video games, film, advertising and pre-visualization for product and architectural design. Focus is placed on building digital 3d characters, props and environments that will be used in students' own animated short film or video game ideas. By employing the teacher-provided project management tools, students gain hands-on experience in how animated and interactive media projects are developed. Industrystandard low and high poly modeling methods, which utilize normal map application, is emphasized to ensure optimized models with stunning detail. A combination of Art 196A and Art 197A may be taken a maximum of four enrollments. CSU/UC

## Art 196B

## 3D Modeling Intermediate

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 196A with a minimum grade of C.
Instruction in intermediate-level digital 3D modeling methods as used in video games, interactive media, television, film, previz, product illustration, architectural and bioscience visualization. Students are to model subjects geared to their chosen area of interest and then are provided instruction and guidance to increase proficiency, speed and communication skills required for professional 3D modelers. CSU/UC

## Art 197A

## 3D Animation Fundamentals

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Art 196A with a minimum grade of C.
Instruction in using 3D animation software for the purpose of linear storytelling. Emphasis on the incorporation of the classic principles of animation, and in learning the core components of the software that are necessary for effective visual communication. A combination of Art 196A and Art 197A may be taken a maximum of four enrollments. CSU/UC

## Art 197B

## 3D Animation Intermediate

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Prerequisite: Art 197A with a minimum grade of C.
Instruction in intermediate-level 3D animation techniques for linear and non-linear storytelling (e.g. film or video games). Emphasis is on the incorporation of the classic principles of animation, and learning the core components of the software that are necessary for effective visual communication. CSU/UC

## Art 197C

## 3D Animation Advanced

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Art 197B with a minimum grade of C.
Instruction in advanced level 3D animation techniques for linear and non-linear storytelling (e.g. film or video games). Emphasis is on the incorporation of the classic principles of animation, and in learning the core components of the software that are necessary for effective visual communication. CSU/UC

## Art 198

Topics
Unit(s): 2.5 Class Hours: 27 Lecture, 54 Laboratory total.
This course provides an introduction to a basic hands-on experience of compositing for special effects as used in television, film and electronic games. There will be an emphasis on how digital 3D elements can be incorporated into the composite and how 3D scenes can be enhanced with the use of compositing techniques. CSU

Art 230 (C-ID ARTS 205)
Intermediate Drawing
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 130 with a minimum grade of C.
An intermediate course in the study of drawing designed to give students who have completed an introductory drawing course additional opportunity in graphic expression. Further exploration of materials including a wide variety of both drawing and mixed media. Students continue the development of composition and more intermediate concepts. The class emphasizes individual expression. A combination of Art 130, Art 230, Art 233, and Art 250 may be taken a maximum of four enrollments. CSU/UC

## Art 231

## Intermediate Life Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 131 with a minimum grade of $C$.
Continued experience in drawing from the live model with opportunity for development of self-expression. Further exploration of media and techniques. A combination of Art 131, Art 231, Art 232, and Art 243 may be taken a maximum of four enrollments. CSU/UC

## Art 232

## Advanced Life Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 231 with a minimum grade of C.
Intensive study of the human figure with further advanced level development of drawing skills, composition, technique, and media utilizing the live model. Projects vary each semester. A combination of Art 131, Art 231, Art 232, and Art 243 may be taken a maximum of four enrollments. CSU/UC

## Art 233

Advanced Drawing
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Art 230 with a minimum grade of C or portfolio review. To further develop individual graphic expression, students will plan a series of drawing problems to be executed during the semester under the instructor's direction. Exploration of new materials and techniques. A combination of Art 130, Art 230, Art 233, and Art 250 may be taken a maximum of four enrollments. CSU/UC

## Art 240 <br> Intermediate Watercolor

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Art 140B with a minimum grade of C.
An intermediate level course providing for continuing development of watercolor painting skills. Further refinement of media, technique and expression of style through more advanced painting projects. Subject matter content includes still life, landscape, figurative studies, abstraction, and individual creative expression. Traditional and nontraditional approaches. A combination of Art 140A, Art 140B, Art 143, and Art 240 may be taken a maximum of four enrollments. CSU/UC

## Art 241

## Intermediate Painting

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Prerequisite: Art 141 with a minimum grade of $C$. An intermediate level class designed to promote and advance the creative development of those with basic skills in water-soluble oil and/or acrylic painting. Opportunity for further study of historical and contemporary references and to increase experience with new media, methods, and techniques. Emphasis on artistic expression and individual creative problems. A combination of Art 141, Art 241, and Art 242 may be taken a maximum of four enrollments. CSU/UC

## Art 242

## Advanced Painting

Unit（s）： 3.0 Class Hours： 36 Lecture， 72 Laboratory total． Prerequisite：Art 241 with a minimum grade of C ．
An advanced level studio course providing opportunity for further refinement of painting skills with increasing exposure to contemporary styles．Emphasis on research and individual creative problems in painting．Exploration into a personal mode of expression through development of media，technique，and style．Classroom studio use of oils limited to water－soluble oil paint only．A combination of Art 141， Art 241，and Art 242 may be taken a maximum of four enrollments． CSU／UC

## Art 243

## Portrait and Life Painting

Unit（s）： 3.0 Class Hours： 36 Lecture， 72 Laboratory total．
Prerequisite：Art 131 or Art 141 with a minimum grade of C．
Painting of the human form with study of portraiture and anatomy． Compositions in representation of the life model through interpretive studies in watercolor，pastels，water soluble oil，and acrylic．Study of traditional and contemporary methods and directions．A combination of Art 131，Art 231，Art 232，and Art 243 may be taken a maximum of four enrollments．CSU／UC

## Art 251

## Ceramics－Advanced Throwing and Handbuilding

Unit（s）： 3.0 Class Hours： 36 Lecture， 72 Laboratory total．
Prerequisite：Art 152 with a minimum grade of C ．
Study of thrown and handbuilt sculptural forms．Exploration of decoration and glaze techniques and incorporation of non－traditional materials such as metal／wood／plastics／paints．CSU／UC

## Art 252

## Ceramics－Advanced Study Process in Ceramics With Non－ Traditional Media

Unit（s）： 3.0 Class Hours： 36 Lecture， 72 Laboratory total． Prerequisite：Art 152 or Art 153 with a minimum grade of C． An advanced study in the ceramic process as it relates to a non－ clay media approach．A sculptural form study with non－traditional materials as surface enhancements．CSU／UC

## Art 253

## Electric Kiln Ceramics

Unit（s）： 3.0 Class Hours： 36 Lecture， 72 Laboratory total．
Prerequisite：Art 151 with a minimum grade of $C$ ．
Provides student potters working studio production knowledge of the uses of an oxidizing electric kiln．Emphasizes types of electric kilns， spectrum of glaze formulas，and safety procedures of firing．CSU

## Art 282

Jewelry II
Unit（s）：3．0 Class Hours： 36 Lecture， 54 Laboratory total．
Prerequisite：Art 182 with a minimum grade of C．
Continued instruction in the making of jewelry by means of fabrication， including techniques in silver soldering，die forming，etching，tool making，and hinge mechanisms．A combination of Art 282 and Art 283 may be taken a maximum of four enrollments．CSU

Art 283

## Jewelry III

Unit（s）： 3.0 Class Hours： 36 Lecture， 54 Laboratory total． Prerequisite：Art 282 with a minimum grade of C． Advanced instruction in the making of jewelry by means of complex fabrication．Explores various traditional metal working techniques including mokume，inlay，complex soldering and raising．Gives opportunity for intensive work on projects of individual interest．A combination of Art 282 and Art 283 may be taken a maximum of four enrollments．CSU

## Art 284

## Introduction to Stone Setting－Jewelry

Unit（s）：2．0 Class Hours： 18 Lecture， 54 Laboratory total．
Course is an introduction to basic jewelry hand skills，including sawing filing，soldering，and some fabrication．Emphasis is on cabochon and tube stone setting．Students supply their own stones and metal． A combination of Art 182，Art 284，and Art 285 may be taken a maximum of four enrollments．CSU

## Art 285

## Introduction to Enameling－Jewelry

Unit（s）：2．0 Class Hours： 18 Lecture， 54 Laboratory total．
An introduction to basic jewelry enameling，including some sawing， filing，and metal forming fabrication with emphasis on color and attention to two dimensional design．Emphasis is on enameling on sheet metal and some cloisonne．Students supply their own enamel and metal．A combination of Art 182，Art 284，and Art 285 may be taken a maximum of four enrollments．CSU

## Art 291 <br> Mural Painting and Design II Design

Unit（s）：3．0 Class Hours： 36 Lecture， 72 Laboratory total．
Prerequisite：Art 190 with a minimum grade of $C$ ．
An intermediate level mural art class designed to promote and advance the creative development of those with basic skills in mural painting．Opportunity for further study of historical and contemporary references and to increase experience with new media，methods，and techniques．Students will work collaboratively in groups and with the community to create designs．Intermediate students will take on more leadership roles in the group creative dynamic．CSU／UC

## Art 292

## Mural Painting and Design III Design

Unit（s）：3．0 Class Hours： 36 Lecture， 72 Laboratory total．
Prerequisite：Art 291 with a minimum grade of $C$ ．
An advanced level studio course providing opportunity for further refinement of large scale painting skills with increasing exposure to contemporary styles in mural painting．Exploration into an advanced personal mode of expression through development of media， technique，and style．CSU／UC

## Art 296 <br> Professional Art Production

Unit（s）：1．5 Class Hours： 18 Lecture， 45 Laboratory total．
Prerequisite：Art 196A with a minimum grade of C．
Designed to provide practice in developing digital 3D or multimedia art projects for actual clients or in a simulated setting．Students choose an art project based on strengths，interests and market need to work on during the class．CSU

## Art 298

## Art Practicum

Unit（s）：1．0－2．5 Class Hours：0．5 Lecture， 20 Laboratory total．
Prerequisite：Portfolio review and previous or concurrent enrollment in a 200 level art course．
Directed study at selected locations providing workplace experience such as：gallery assistant，artist＇s apprentice，docent trainee，graphic design apprentice，etc．Before placement，skills assessed to match abilities with project needs．Experience differs each semester．Grade： Pass／No Pass Only．Open Entry／Open Exit．CSU

## ASIAN AMERICAN STUDIES (ASIA)

## Asian American Studies 101 <br> Introduction to Asian American Studies

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is an introduction to the field of Asian Pacific American Studies. An interdisciplinary approach will be employed to study the experiences of various Asian and Pacific Islander groups in the United States utilizing the perspectives of race, nationality, class, gender, and sexuality. The course will cover historical and contemporary issues within Asian Pacific American communities, including immigration, anti-Asian violence, labor, unionization, and stereotypes. CSU/UC

## ASTRONOMY (ASTR)

## Astronomy 109

## Introduction to the Solar System

Unit(s): 3.0 Class Hours: 54 Lecture total.
Surveys history of astronomy, recent research and observations of the planets, moons, and other solar system objects. Exploration of light and gravity to understand formation, properties, and motion of Solar System objects. CSU/UC

## Astronomy 110

## Introduction to Stars and Galaxies

Unit(s): 3.0 Class Hours: 54 Lecture total.
Surveys the development of astronomy, current research and observations of stars, galaxies, and large-scaled structures in the universe. Exploration of light and gravity to understand the properties and evolution of stars, neutron stars, black holes, galaxies, and the universe's structures and changes. CSU/UC

## Astronomy 110H

## Honors Introduction to Stars and Galaxies

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: High school or college GPA of 3.0 or above.
Surveys the development of astronomy, current research and observations of stars, galaxies, and large-scaled structures in the universe. Exploration of light and gravity to understand the properties and evolution of stars, neutron stars, black holes, galaxies, and the universe structures and changes. CSU/UC

## Astronomy 140

## Astronomy Laboratory

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Astronomy 109 or Astronomy 110 or Astronomy 110H with a minimum grade of $C$ or concurrent enrollment.
Utilizes experimental techniques to explore and comprehend properties and motions of celestial objects. Basic naked-eye, binocular, and small telescope observing techniques will be introduced. Field trips to local planetarium and dark sky locations may be included. CSU/UC

## Astronomy 198

Topics
Unit(s): 0.5 Class Hours: 9 Lecture, 9 Laboratory total.
Specialized courses on topics in astronomy. CSU

## AUTOMOTIVE TECHNOLOGY (AUTO)

## Automotive Technology 102

## Auto Essentials

Unit(s): 3.0 Class Hours: 54 Lecture total.
Intended for automotive majors. Introduction to the primary automotive systems used on modern vehicles. Theory, parts nomenclature, and description of system operation are emphasized. CSU

## Automotive Technology 106

## Automotive Maintenance

Unit(s): 4.0 Class Hours: 54 Lecture, 72 Laboratory total. Introduces basic maintenance procedures in the areas of engines, chassis, and electrical systems. This course is recommended for consumers as well as students interested in entering the automotive repair field. Safe and correct hands-on use of tools and equipment by students is emphasized. Students must furnish approved safety glasses. CSU

## Automotive Technology 108 <br> Oxyacetylene-Arc Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Technical knowledge and basic skills needed for occupational oxyacetylene and arc welding processes and applications. Students must furnish safety equipment. (Same as Diesel 108 and Welding 108). CSU

## Automotive Technology 122

## Electronics Fundamentals

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
Introduction to the basic operating principles of electrical and electronic devices used in modern vehicles. Hands-on digital multimeter testing is highlighted. Safe and correct use of tools and equipment by students will be emphasized. Students must furnish approved safety glasses. CSU

## Automotive Technology 124 Electrical Systems

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
Theory, operation, diagnosis, and maintenance of automotive engine and body electrical systems. Use of wiring diagrams is highlighted. Safe and correct use of tools and equipment in the shop by students is emphasized. Students must furnish approved safety glasses.
This course assists the student in preparation for the A6 (Electrical/ Electronics) ASE certification exam. CSU

Automotive Technology 132

## Engine Performance

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
Engine performance procedures including fuel, ignition, oscilloscope, emission control, and computer systems. Hands-on testing and diagnosis is emphasized. Students must furnish approved safety glasses. This course assists the student in preparation for the A8 (Engine Performance) ASE certification exam. CSU

## Automotive Technology 143

## Automatic Transmission Service

Unit(s): 4.0 Class Hours: 36 Lecture, 108 Laboratory total.
Theory, operation, diagnosis, and service procedures of automatic transmissions and transaxles. Hydraulic systems are highlighted. Hands-on testing and service procedures are emphasized. Students must furnish approved safety glasses. This course assists the student in preparation for the A2 (Automatic Transmission/Transaxles) ASE certification exam. CSU

## Automotive Technology 144

## Manual Drive Train and Axles

Unit(s): 4.0 Class Hours: 36 Lecture, 108 Laboratory total.
Theory, operation, diagnosis, and service of manual transmissions, transaxles, clutches, drive shafts, and differentials. This course also covers minor service of automatic transmissions. Safe and correct hands-on procedures are emphasized. Students must furnish approved safety glasses. This course assists the student in preparation for the A3 (Manual Drive Train) ASE certification exam. CSU

## Automotive Technology 145

## Advanced Drive Train Systems

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
Recommended Preparation: Automotive Technology 043 with a minimum grade of $C$.
This course covers fully electronic controlled automatic transmission/ transaxle diagnosis and service. Emphasis is placed on specialized diagnostic equipment and safe hands-on practice. Diagnosis of electronic sensors is highlighted. This course assists the student in preparation for the A2 (Automatic Transmission/Transaxles) and A3 (Manual Drive Train) ASE certification exams. CSU

## Automotive Technology 153 Brakes

Unit(s): 4.5 Class Hours: 54 Lecture, 90 Laboratory total.
Theory of operation, diagnosis, and service of drum, disc, and anti-lock brake systems used on modern vehicles. Safe and correct handson practice is emphasized. Students must furnish approved safety glasses. This course assists the student in preparation for the A5 (Brakes) ASE certification exam. CSU

## Automotive Technology 154

## Steering and Suspension Service

Unit(s): 4.5 Class Hours: 54 Lecture, 90 Laboratory total.
Theory, operation, diagnosis, and service of the steering and suspension systems used on modern vehicles. Wheel alignment procedures are highlighted. Hands-on practice is emphasized.
Students must furnish approved safety glasses. This course assists the student in preparation for the A4 (Steering and Suspension) ASE certification exam. CSU

Automotive Technology 160
Foundations of Mobile Air Conditioning and Refrigeration
Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
This course focuses on the mobile air conditioning and refrigeration systems used on modern vehicles. The systems found on automobiles, light and heavy duty trucks, transport refrigeration units, and transit buses are covered in this course with hands-on practice. Safe handling of refrigerant as well as preparation for EPA 608 and 609 exams are covered. Students must furnish approved safety glasses. This course assists the student in preparation for the A7, T7 and H7 ASE exams. (Same as Diesel 160). CSU

## Automotive Technology 161

Automotive Air Conditioning, Heating and Ventilation Systems
Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
The operation and service of modern automotive air conditioning systems. Practical application of air conditioning theory is presented to enable problem solving. Heating, ventilation, and electronic control systems are also included. Safe hands-on practice is emphasized. Students must furnish approved safety glasses. This course assists the student in preparation for the A7 (Air Conditioning and Heating) ASE certification exam. EPA 609 certification is an integral part of this course. CSU

Automotive Technology 172
Engine Diagnosis and Maintenance
Unit(s): 4.5 Class Hours: 54 Lecture, 90 Laboratory total.
The course deals with the diagnosis and maintenance of modern automotive engines and accessories, primarily while in the vehicle. The safe and correct use of engine testing equipment with hands-on practice is emphasized. Students will furnish approved safety glasses. This course assists the student in preparation for the A1 (Engine Repair) ASE certification exam. CSU

## Automotive Technology 176 <br> Engine Repair

Unit(s): 4.5 Class Hours: 54 Lecture, 90 Laboratory total.
This course deals with teardown, assembly, and repair of modern automotive engines. Accurate engine measurement is highlighted. Hands-on practice of engine repair skills is emphasized. Students must furnish approved safety glasses. This course assists the student in preparation for the A1 (Engine Repair) ASE certification exam. CSU

## Automotive Technology 185 <br> Basic Clean Air Car Course

Unit(s): 5.0 Class Hours: 90 Lecture total.
This is the Bureau of Automotive Repair (B.A.R.) certified Basic Clean Air Car Course. This course fulfills one of the requirements to take the State Smog Technician Exam. Grade: Pass/No Pass Only. CSU

## Automotive Technology 186

Advanced Clean Air Car Course
Unit(s): 2.0 Class Hours: 36 Lecture total.
This is the Bureau of Automotive Repair (B.A.R.) certified Advanced Clean Air Car Course. This course fulfills one of the requirements to take the State Smog Technician Exam. Grade: Pass/No Pass Only. CSU

Automotive Technology 187
BAR Specified Diagnostic and Repair
Unit(s): 5.0 Class Hours: 90 Lecture total.
Bureau of Automotive Repair recognized diagnostic and repair course. This course fulfills one of the required courses the student needs to take the State Smog Technician Exam. Grade: Pass/No Pass Only. CSU

## Automotive Technology 280 <br> Computer Control and OBD-2 Foundations

Unit(s): 3.0 Class Hours: 54 Lecture total.
The operation and diagnosis of automotive computer controlled systems. Sensors, actuators, and networks are discussed. The key segments of OBD-2 are also presented. This course assists the student in preparation for the A8 (Engine Performance) and L1 (Advanced Engine Performance) ASE certification exams. CSU

## Automotive Technology 281 <br> Fuel Injection Systems

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course covers the theory, operation, and diagnosis of import and domestic fuel injection systems. Fuel supply, delivery, and control are emphasized. This course assists the student in preparation for the A8 (Engine Performance) and L1 (Advanced Engine Performance) ASE certification exams. CSU

## Automotive Technology 282

## Automotive Sensors

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course covers the function and testing of computerized engine sensors used on modern vehicles. The use of meters and test equipment will be emphasized. This course assists the student in preparation for the A8 (Engine Performance) and L1 (Advanced Engine Performance) ASE certification exams. CSU

## Automotive Technology 283 <br> Diagnostic Test Equipment

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course covers the use of automotive diagnostic equipment such as scan tools and hand held lab scopes. Test procedures and diagnostics will be emphasized. This course assists the student in preparation for the A8 (Engine Performance) and L1 (Advanced Engine Performance) ASE certification exams. CSU

Automotive Technology 284
OBD-2 Diagnosis and Networks
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course will present problem solving for code and non-code concerns on OBD-2 (On Board Diagnostics) vehicles. This course also covers the function and troubleshooting of automotive networks. CAN systems are emphasized. This course assists the student in preparation for the A8 (Engine Performance) and L1 (Advanced Engine Performance) ASE certification exams. CSU

## Automotive Technology 285

Hybrid Vehicles
Unit(s): 3.0 Class Hours: 54 Lecture total.
Safety, operation, and basic service of modern hybrid vehicles. Safety and special tools for dealing with high voltage are emphasized. System function and components are highlighted. Electric vehicles are introduced. CSU

## Automotive Technology 287

## Alternative Fuels

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course introduces the student to the various types of alternative fuels used in modern vehicles. Safety and operation are highlighted. Compressed Natural Gas (CNG) training is emphasized. LPG, LNG,
Bio-diesel, Ethanol, and Hydrogen are also covered. This course prepares automotive as well as diesel students for industry. (Same as Diesel 287). CSU

## Automotive Technology 288

Diesel Engines: Light-Medium Duty Systems
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course will introduce the applications of modern light and medium duty diesel engines. German as well as domestic engine systems will be covered, including common rail fuel injection, turbo chargers, and diesel emission systems. CSU

## BANKING (BANK)

## Banking 010

Teller Training for Financial Institutions
Unit(s): 2.0 Class Hours: 36 Lecture total.
Course provides prospective bank employees with a broad overview of financial institutions and basic knowledge of teller techniques including bank transactions and customer service.

## BIOLOGY (BIOL)

## Biology 098

Topics
Unit(s): 0.5-4.0 Class Hours: 9-72 Lecture total.
Specialized courses on topics related to the needs of students in biology.

Biology 109
Fundamentals of Biology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Principles of biology stressing the relationship of all organisms from anatomical, physiological, and ecological points of view. Includes cell machinery, genetics, reproduction, embryology, animal behavior, botany, ecology, evolution, and human physiology. Concurrent enrollment in Biology 109L recommended. Designed for non-biology majors. CSU/UC

Biology 109H
Honors Fundamentals of Biology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Traditional Biology, enriched by extensive instructor-prepared study guides for each subject area of curriculum. Additional enhancement by outside reading suggestions and optional student reports. Class participation and discussion is strongly encouraged, as are questions on current reports and news in the popular media and scientific sources. Information will be expanded by reference to research observations and by appropriate references to classical and current literature. Emphasis is on analysis of pertinent topics using critical reading and interpretation skills. Concurrent enrollment in Biology 109L is recommended. Designed for non-biology majors. CSU/UC

## Biology 109L

## Fundamentals of Biology Laboratory

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Biology 109 or Biology 109H with a minimum grade of C or concurrent enrollment.
Laboratory experiments that illustrate important biological concepts at all levels of organization, from molecules and cells, to organisms, populations, communities, and ecosystems. Content complements Biology 109 or Biology 109H lecture material. Fieldtrip required. CSU/ UC

Biology 111
Marine Biology
Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
This course covers basic concepts of marine ecosystems including oceanographic principles, ecology, and a survey of marine habitats and diversity of marine organisms. CSU/UC

## Biology 115 <br> Concepts in Biology for Educators

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
An investigation in the basic principles of Biology and Science with content appropriate for future multiple-subject teachers and secondary through high school. The course material is presented within the context of the human experience and includes cell biology, physiology, genetics, evolution, ecology, animal behavior, and the interaction of humans with the environment. The course is taught from an inquiry-based strategy using active learning. CSU/UC

## Biology 127

## Ecology

Unit(s): 1.0 Class Hours: 18 Lecture total.
Introduction to the basic principles of ecology. Study of ecosystems, biomes, and the relationships of plants and animals in the natural world. This is a field study course and includes overnight camping. CSU

Biology 128
Natural History of the California Coast
Unit(s): 1.0 Class Hours: 18 Lecture total.
An ecological study of plant and animal life of the southern and central California coast. This is a field study course and includes overnight camping. CSU

## Biology 129 <br> Ecology of Southern California

Unit(s): 1.0 Class Hours: 18 Lecture total.
Identification and study of the plants and animals of the ocean, mountain and desert regions of Southern California with emphasis on the organisms' relationship to their environment. This is a field study course and includes overnight camping. CSU/UC

## Biology 131

## Natural History of the Southwest

Unit(s): 3.0 Class Hours: 54 Lecture total.
An ecological study of mountain, canyon, and desert ecosystems of the Southwestern United States. Animal and plant identification, geology, and environmental problems will be emphasized. This is a field study course and includes overnight camping. CSU

## Biology 132 <br> Natural History of Death Valley

Unit(s): 1.0 Class Hours: 18 Lecture total.
Natural history of Death Valley emphasizing the biology of the plants and animals, their ecology, adaptations and evolutionary history, as well as the history of environmental change and human activities. This is a field study course and includes overnight camping. CSU

## Biology 133

## Desert Biology

Unit(s): 1.0 Class Hours: 18 Lecture total.
Study of desert organisms, their adaptations to arid conditions, their evolution, identification and ecology, and the impact of human activities on desert organisms, communities, and ecosystems. This is a field study course and includes overnight camping. CSU

## Biology 139 <br> Health Microbiology

Unit(s): 4.0 Class Hours: 48 Lecture, 64 Laboratory total.
Presents practical and theoretical aspects of medical microbiology to meet the needs of those in allied health professions. Provides basic knowledge of the microbial world by covering diversity, structure, metabolic and genetic characteristics, cultivation and control. Emphasis is placed on human-microbe interactions especially infectious diseases. Laboratory deals with identification, growth, and control of microorganisms. Field trips may be required. CSU/UC

## Biology 149

## Human Anatomy and Physiology

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Structural organization of the human body: gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems, from cellular to organ system levels of organization. This course is primarily intended for nursing, allied health, kinesiology, and other health related majors. CSU/UC

## Biology 169 <br> Natural History of the Sierra Nevadas

Unit(s): 1.0-3.0 Class Hours: 54 Lecture total.
A field study of the ecology, geology, and history of the Sierra Nevada mountains. Animal and plant studies, environmental problems, and wilderness preservation will be emphasized. This is a field study course and includes overnight camping. CSU

## Biology 177 <br> Human Genetics

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course in human genetics which explores basic principles, patterns of inheritance, gene structure, function and regulation, current advances in genetics and gene technology, as well as social and ethical issues in contemporary genetics. CSU/UC

## Biology 190 (C-ID BIOT 101X = 190 + 190L) <br> Introduction to Biotechnology

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is a general examination of biology as it relates to the field of biotechnology. Topics include the fundamental chemical processes common in prokaryotic and eukaryotic biology, chemistry of bio-molecules (proteins, enzymes, nucleic acids and lipids), cellular and molecular biology, basic immunology, and classical and molecular genetics with an emphasis on gene expression and genetic engineering. CSU/UC

Biology 190L (C-ID BIOT 101X = 190 + 190L) Introductory Biotech Lab
Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Biology 190 with a minimum grade of C or Concurrent enrollment in Biology 190.
This laboratory is a general examination of biology as it relates to the field of biotechnology. The laboratory addresses basic skills and techniques common to the biotechnology industry. Topics include the measurement of activity and quantity of proteins, growth and manipulation of bacteria, genetic engineering and antibody methods. This course is intended as a laboratory class for students majoring in applied biology and as a general education laboratory option for all students. CSU/UC

## Biology 191 (C-ID BIOT 150X=191 + 193) Biotech A: Basic Skills

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
This course prepares students for entry-level work in the biotechnology industry by emphasizing the core concepts needed to work effectively in a bioscience laboratory. Topics include laboratory math, basic chemistry of buffers, healthy and safety, metrology and quality control. This course introduces students to standard biotechnology laboratory skills including laboratory measurement, maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents and media, proper use and maintenance of laboratory equipment, adherence to quality control protocols and lab safety regulations, data collection and evaluation, basic separation methods, aseptic technique and documentation. CSU

## Biology 192 (C-ID BIOT 220X) <br> Biotech B: Proteins

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Biology 191 with a minimum grade of C .
This course is an introduction to protein purification techniques including sample preparation, protein separation and purification, column chromatography, large-scale recovery, and use of assays for recovery analysis. It provides hands-on training with chromatography systems and assays used in industry and research laboratories. Application of current Good Manufacturing Process (cGMP), Good Laboratory Practice (GLP), and Standard Operating Procedures (SOP's) in relation to these techniques will be addressed. This course covers methods utilized for eukaryotic cell culture protein purification. CSU

Biology 193 (C-ID BIOT 150X = 191 + 193)<br>\section*{Biotech C: Nucleic Acids}<br>Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total. Prerequisite: Biology 191 with a minimum grade of $C$.

This course introduces the fundamental skills in applied biotechnology focusing on the upstream research and development process. Skills include maintenance of an industry standard notebook; preparation and sterilization of solutions, reagents and media; utilization of good aseptic technique; proper use and maintenance of laboratory equipment; adherence to quality control protocols, lab safety regulations; biomolecules, cell structure, gene expression, molecular techniques including DNA/RNA extraction and purification, bioinformatics, polymerase chain reaction, electrophoresis, DNA sequencing, recombinant DNA technology, DNA cloning, fluoresence in situ hybridization, and Southern blot analysis, and in vitro transcription. Compliance with industry standards and regulations will be incorporated into course procedures. CSU

## Biology 194 (C-ID BIOT 210X)

Quality and Regulatory Compliance in Biosciences
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course will cover quality assurance and regulatory compliance for the bioscience industries. Topics will span quality control and Federal Drug Administration (FDA) regulations for the biotechnology, biopharmaceutical, biomedical device, and food industries. Theories and application of quality assurance and quality control will be presented and several different quality systems will be discussed such as cGXP (current Good Practices), ISO9000 (International Standards Organization), Six Sigma and Lean. CSU

## Biology 195

## Biotech: QC Microbiology

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Biology 229 with a minimum grade of C .
This course will cover the skills necessary to work in a regulated quality control microbiology laboratory. CSU

## Biology 197

## STEM Internship/Work Experience

Unit(s): 1.0-16.0 Class Hours: 1200 Lecture total.
Prerequisite: Successful completion of 10 units from Biotech course series.
Supervised paid or volunteer experience in student's major including new or expanded responsibilities. 75 hours of paid work or 60 hours of unpaid work equals one unit. Course may be taken 4 times for a maximum of 16 units of occupational cooperative work experience credit. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Biology 200

## Environment of Man

Unit(s): 3.0 Class Hours: 54 Lecture total.
A biological and physical science introduction to environmental problems such as energy, resources, pollution, land use, population and food, including economic and political factors. A natural science elective. (Same as Environmental Studies 200). CSU/UC

## Biology 202

## Cell Culture Techniques

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Prerequisite: Biology 191 with a minimum grade of $C$.
Students will learn eukaryotic cell culture techniques that include working under aseptic conditions, sterile techniques, media preparation, quantification and passage of cell lines. Laboratory experience prepares students for work in industry. CSU

## Biology 211 (C-ID BIOL 190)

Cellular and Molecular Biology
Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Mathematics 080 or Mathematics 081 or Mathematics 84 and Chemistry 219 or Chemistry 219H with a minimum grade of C.
An investigation into the molecular and cellular basis of life, including the evolution of cells, cell structure and function, energy and information flow, cellular reproduction, genetics, and the molecular basis of inheritance. Required of majors in biology, medicine, forestry, and agriculture. This course is a Prerequisite for Biology 212 and Biology 214. CSU/UC

## Biology 212 (C-ID BIOL 130S = 212 + 214) Animal Diversity and Ecology

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total. Prerequisite: Biology 211 with a minimum grade of $C$.
A study of ecological principles and relationships between animal diversity and ecosystems. Habitat, populations, ecological interactions, and environmental influences are stressed while surveying animal diversity and addressing structure, function, behavior, and adaptation of major taxonomic groups. Required of majors in biology, medicine, forestry and agriculture. Field trips required. CSU/UC

## Biology 214 (C-ID BIOL 130S = 212 + 214) Plant Diversity and Evolution

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Biology 211 with a minimum grade of $C$.
Principles and processes of evolution leading to biodiversity. Survey of the organisms, viruses, prokaryotes, fungi, algae, and plants with emphasis on evolutionary adaptations of the anatomy, physiology, and life cycles of these organisms. Field trips required. CSU/UC

Biology 217
Pathophysiology
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Biology 149, Biology 239 or Biology 249 with a minimum grade of $C$.
Covers dynamic aspects of human disease. Links sciences of anatomy, physiology, and biochemistry with their application to clinical practice for health professionals. CSU

## Biology 229

## General Microbiology

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Biology 109 or Biology 109H and Biology 109L, or Biology 139, or Biology 149, or Biology 211, or Biology 239, or Biology 249 , or Chemistry 119 or Chemistry 209 with a minimum grade of $C$. Introduction to microorganisms, their classification, structure, biochemistry, growth, control, and interactions with other organisms and the environment. Designed for biology, preprofessional, and prenursing (BSN)majors. CSU/UC

## Biology 239 (C-ID BIOL 110B) General Human Anatomy

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Structure of the human body. Systems, organs, and tissues are studied from human skeletons, models, charts, slides and various electronic programs. Laboratory includes the dissection of a cat and periodic demonstrations of a prosected cadaver as available. CSU/UC

Biology 249 (C-ID BIOL 120B)

## Human Physiology

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Biology 239 with a minimum grade of C or similar Human Anatomy course.
Microscopic, macroscopic, and dynamic view of the human physiological processes. The lecture portion includes a thorough consideration of both "cell and systems" physiology. Laboratory work includes the use of techniques used in basic research, an introduction to the use of standard medical equipment, and the performance of medical laboratory tests. Non-invasive experiments are performed on students enrolled in the class. CSU/UC

## Biology 259

Environmental Biology
Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Introduction to Environmental Biology. Includes study of ecosystems, population dynamics, classification, diversity of plant and animal species, effects of pollutants at both the cellular and organismal levels, and principles of ecology. (Same as Environmental Studies 259). CSU/ UC

## Biology 290

## Biochemistry and Molecular Biology

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Biology 211 and Chemistry 209 with a minimum grade of C .
Introduction to biochemistry and molecular biology. Included are discussions of biological macromolecules, energy production, metabolic pathways and regulation, genetic code, genomics, DNA replication, transcription and RNA processing, translation, and gene regulation. Laboratory activities will include use of visible and UV spectroscopy, chromatography, cell fractionation, ultracentrifugation, protein purification, electrophoresis, and recombinant DNA methods. This course is designed for biology majors, health pre-professionals, and biotechnology majors. CSU/UC

## BLACK STUDIES (BLST)

## Black Studies 101 <br> Introduction to African American Studies

## Unit(s): 3.0 Class Hours: 54 Lecture total.

This course is an introduction to the field of African American Studies. An interdisciplinary approach will be employed to study the various experiences of African Americans and their contributions to American society and culture. The course will cover historical and contemporary issues including African origins, the development of African American culture, the struggles of the African American family, African American political life, and the socio economic empowerment of African American people in the United States. CSU/UC

## BUSINESS (BUS)

## Business 080

## Business Mathematics

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is designed to enable students to learn and apply mathematics skills in business including review of fractions, decimals, percents, banking, discounts, markups, payroll, interest calculation, installment buying, mortgages, depreciation, taxes, insurance, stocks, bonds, and mutual funds.

## Business 100 (C-ID BUS 110)

## Fundamentals of Business

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the basic fundamentals of business. A survey of marketing, management, production, accounting, finance, and economics and how they interrelate in the business environment. CSU/UC

## Business 101 (C-ID BUS 125)

Business Law
Unit(s): 3.0 Class Hours: 54 Lecture total.
Fundamental legal principles pertaining to business transactions. Introduction to the legal process. Topics include sources of law and ethics, contracts, torts, agency, criminal law, business organizations, and judicial and administrative processes. CSU/UC

## Business 103

Cooperative Work Experience-Occupational EducationOccupational
Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work. equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Business 104 <br> Cooperative Work Experience-General Education-General

 Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field not related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Business 105 (C-ID BUS 120)

## Legal Environment of Business

Unit(s): 3.0 Class Hours: 54 Lecture total.
Fundamental legal principles pertaining to business transactions. Introduction to the law as an instrument of social and political control in society. Topics include sources of law and ethics, contracts, torts, agency, judicial and administrative processes, employment law, forms of business organizations, and domestic and international governmental regulations. (Same as Law 105). CSU/UC

## Business 106 <br> Culture and International Business-Kiss, Bow Or Shake Hands

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to different cultures and their effects on international business. Analysis of cross-cultural attitudes towards management, status, rules, relationships, motivating employees, and negotiation. CSU

Business 110

## Export Pricing, Quotations and Terms of Trade

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn how to respond to trade inquiries. Learn international trade terms of sale, international pricing and supply chain management. Learn how to calculate landed costs and export pricing. CSU

## Business 111

International Business Documentation-Beginning
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn how to create and issue international documents used in selling or buying products. Includes the creation and use of actual documents used in international business. CSU

## 212 | ANNOUNCEMENT OF COURSES

## Business 113 <br> International Transportation

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn how to ship products internationally and develop a transportation strategy. Includes transportation terminology, the role of the freight forwarder, transportation documentation, freight cost calculations, major ports of the world, and distribution issues. CSU

## Business 114 <br> International Documentation and Supply Chain Management

Unit(s): 1.0 Class Hours: 18 Lecture total.
International documents for product inspection, health/agricultural registrations, and hazardous materials shipments. Utilizes actual documents, software, and resources necessary to effectively complete documentation. Introduces the need for supply chain management and inventory control. CSU

## Business 120

Principles of Management
Unit(s): 3.0 Class Hours: 54 Lecture total.
Principles, methods, and procedures essential to the successful management of human and financial resources. Planning, decision making, staffing, directing, motivating, leading, communicating, controlling and the application of managerial skills. (Same as Management 120). CSU

## Business 121

Human Relations and Organizational Behavior
Unit(s): 3.0 Class Hours: 54 Lecture total.
The role of the manager and management's relationship to employees. Includes the application of motivational theories, communications, leadership, and organizational structure. (Same as Management 121). CSU

Business 125
Introduction to International Business
Unit(s): 3.0 Class Hours: 54 Lecture total.
A survey course previewing international marketing, finance, law, and logistics. Includes how a company decides to go global and how products are made, transported, and sold around the world. CSU

## Business 127

Introduction to E-Commerce
Unit(s): 3.0 Class Hours: 54 Lecture total.
Electronic commerce from a managerial perspective focusing on the retailing, business-to-business, and service industries. Topics include e-commerce infrastructure, intranets and extranets, electronic payment systems, marketing research, advertising, e-commerce strategies, and privacy issues. (Same as Marketing 127). CSU

## Business 130 <br> Personal Finance

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Mathematics N48 with a minimum grade of C or placement into Mathematics 083 according to the Santa Ana College Mathematics Department's placement standards.

This course is designed to empower individuals with various tools to manage their money and make sound lifelong financial decisions. Topics include financial planning, income and expense management investment analysis, retirement planning, consumerism, insurance, estate planning, home ownership and credit management. This course uses financial, tax, and mathematical calculations. Students will take a hands-on approach to such learning and skill development with problem-solving assignments and projects that require them to explain information presented in tax forms and financial statements. They will also obtain the knowledge and skills required to convert financial information into portrayals that contribute to an understanding of present and future personal and family financial needs. Students will also be provided with opportunities to analyze and synthesize on documents and reports. They will develop the logical reasoning skills needed by informed and productive citizens. Moreover, instructors will (a) provide student-centered activity-based instruction, (b) emphasize the conceptual understanding and skills of mathematics and quantitative reasoning, and (c) facilitate the development of competence and confidence in problem-solving abilities. CSU/UC

## Business 140

Principles of Finance
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to corporate financial management and the functioning of global financial markets. Includes financial planning and analysis, working capital management, capital budgeting, time value of money, risk analysis, capital markets, and long term financing. CSU

## Business 141 <br> The Globalization of Marketing

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn how to adapt marketing techniques to international markets, how to develop marketing strategies, and how to target markets based on the cultural, political and economic environments. Learn how to create forecasts and budgets for international markets. CSU

## Business 142 <br> International Market Research and Planning

Unit(s): 1.0 Class Hours: 18 Lecture total.
How to research international markets for opportunities using the Internet, government and private resources as well as in-market surveys. Includes the development of international marketing strategies and the analysis of domestic and international markets for import and export opportunities. CSU

## Business 143

Packaging, Pricing, and Promoting Products/Services for Export
Unit(s): 1.0 Class Hours: 18 Lecture total.
Understand international market requirements. Learn to adapt products and services to meet international market needs. Create competitive price structures. Implement exciting promotion and advertising plans. Learn how to entice international customers to buy U.S. products and services. CSU

## Business 145

## Channels of Distribution in International Markets

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn alternate methods for distributing products in international markets. Learn how to use distributors and agents. Learn channels of distribution for different industries and different countries. Adapt distribution strategies to maintain product quality, positioning, and competitive price structure. CSU

Business 147
International Commercial Agreements and Distribution Law
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn to create business contracts in the global marketplace and how to use the U.N. Convention on Contracts for the International Sale of Goods. Learn about contracts with foreign sales representatives and laws regulating international distribution. Learn about international limited liability companies and foreign direct investment laws. (Same as Paralegal 147). CSU

## Business 148

## International Intellectual Property Law

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn international intellectual property law-patents, copyrights, trademarks, and trade secrets. Learn international treaties relating to intellectual property rights. Learn technology licensing agreements and international franchising. (Same as Paralegal 148). CSU

## Business 149

## The Law of Global Commerce

Unit(s): 1.0 Class Hours: 18 Lecture total.
How countries join together to create trade. Includes NAFTA, GATT, the EU and other trade agreements around the world. Explore law in different legal systems as well as U.S. export regulations. (Same as Paralegal 149). CSU

Business 150 (C-ID ITIS 120) (C-ID BUS 140) Introduction to Information Systems and Applications Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to computer concepts and management information systems. Application software will be used to solve business problems. CSU/UC

## Business 160

Introduction to Stock and Bond Investments
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introductory course in investment decision-making. Topics covered are types of securities, securities markets, stocks, bonds, options, mutual funds, value analysis, international investing, portfolio management, and financial planning. CSU

## Business 163 <br> International Methods of Payment and Letters of Credit Unit(s): 1.0 Class Hours: 18 Lecture total.

Analyze international methods of payment to determine risks and benefits. Learn how to initiate and utilize a letter of credit and its role in international transactions. Learn how to check customer credit and assign payment terms. CSU

## Business 164

## Alternative Financing Techniques for International Trade

Unit(s): 1.0 Class Hours: 18 Lecture total.
Explore the alternative financing techniques of bartering, countertrade, and forfeiting for medium-term financing. Learn how the foreign exchange market operates and the risk and management techniques of foreign exchange. CSU

## Business 165

## International Trade Finance and Insurance

Unit(s): 1.0 Class Hours: 18 Lecture total.
Borrowing based on specific import/export transactions-documentary bankers' acceptances, clean bankers' acceptance financing, trade acceptance, borrowing against receivables, sale of receivables, and factoring. Learn to assess risks, hedge risks, and insure international trade transactions. Discover Eximbank. CSU

## Business 166

## Financing an Import/Export Business

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn where and how to obtain financing to operate an international business. Discover domestic and international financing and lending sources, commercial banks and brokers, non-bank lenders, government, and quasi-government lenders. Understand government finance assistance organizations. CSU

## Business 170

## Principles of Small Business Management

Unit(s): 3.0 Class Hours: 54 Lecture total.
Practical business skills needed to start and operate a small business. Includes information on risk management, site location, legal aspects, financing, budgeting, merchandising, promotion, and management techniques. CSU

## Business 180

Finding and Evaluating Products for Import
Unit(s): 1.0 Class Hours: 18 Lecture total.
Evaluate the potential of an import business. Contact vendors and source products. Determine import classification, tariffs and taxes and calculate landed costs to import into the U.S. CSU

Business 182
Classifying Imports and Clearing U.S. Customs
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn to classify products being imported into the U.S. using the Harmonized Tariff Schedule (HTS). Identify applicable duty rates and quotas for products. Learn how the operations and U.S. Customs programs have changed since $9 / 11 / 2001$. CSU

Business 222 (C-ID BUS 115) Business Writing
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Overview of oral and written communication skills used in business. Emphasizes guidelines for improving writing and speaking skills, common solutions to common communication problems, ethical issues facing business communicators today, instructions on how to identify areas of legal vulnerability, and tested techniques for communicating successfully in today's high-tech, international business environment. CSU

## BUSINESS APPLICATIONS (BA)

Business Applications 017
Business Writing Skills
Unit(s): 3.0 Class Hours: 54 Lecture total.
Comprehensive, up-to-date business usage of grammar including punctuation, capitalization, number style, spelling, vocabulary development, and other effective business writing skills. Designed to improve professional written communication including letters, reports, proposals, and email.

## Business Applications 018

## Office Technology \& Professional Skills

Formerly: Office Procedures
Unit(s): 3.0 Class Hours: 54 Lecture total.
Develop and improve professional business skills using current standards and technology including job search and advancement, employment readiness, leadership skills, customer service, effective written and verbal communication, and office management. Instruction includes office technology, business ethics, decision making skills, travel arrangements, effective meetings, time and stress management, and teamwork skills.

## Business Applications 035 Computer Fundamentals

 Unit(s): 1.5 Class Hours: 27 Lecture total. Learn current computer technology, understand hardware components, and software applications using current industry standards. Topics also include Internet, virus protection, networking, cloud computing, and WiFi. Helpful tips to make using the computer easier, faster and more efficient. Course is designed for beginner and experienced users needing to update business technology knowledge and skills.
## Business Applications 051

## Introduction to Spanish Bilingual Interpreting

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introductory course in interpretation/translation in English/
Spanish designed to introduce students to the different career fields that employ bilingual skills such as the business, legal, medical and educational professions. Written translation and oral interpretation skills will be utilized and developed in both English and Spanish. Fluency in Spanish and English is recommended.

## Business Applications 056

## General Foundation for Bilingual Business Interpretation-

## Spanish/English

Unit(s): 3.0 Class Hours: 54 Lecture total.
A course designed to give general foundations for interpreting and translating in Spanish and English for government and business. Fluency in Spanish and English strongly recommended.

## Business Applications 057

## Medical Interpretation and Translation-Spanish/English

Unit(s): 3.0 Class Hours: 54 Lecture total.
A course in medical interpretation/translation designed for employment certification of interpreters for governmental and private health services providers. Fluency in Spanish and English strongly recommended.

## Business Applications 058

## Legal Interpretation and Translation-Spanish/English

Unit(s): 3.0 Class Hours: 54 Lecture total.
A course in legal interpretation/translation designed for employment certification of interpreters for government and private legal
businesses. Fluency in Spanish and English strongly recommended.
Field trips may be required. (Same as Law 058)

## Business Applications 110

Computer Keyboarding Skills
Formerly: Business Applications 110A, Computer Keyboarding Skills I Unit(s): 0.5 Class Hours: 27 Laboratory total.
This course is the first step in learning proper keyboarding techniques with accuracy using correct hand and finger positioning. Students will follow step-by-step instructions for all alphabet, punctuation, enter/ return, and capitalization using shift keys. Typing correctly without errors will provide the skills necessary to develop speed with accuracy. CSU

## Business Applications 115

Computer Keyboarding Speed and Accuracy Development
Unit(s): 0.5 Class Hours: 27 Laboratory total.
After the basic keyboarding skills have been mastered, the most important next step is to take this course to develop and increase speed with accuracy. Students will use drills and timed writing tests to develop speed and accuracy to meet current business employment typing requirements and make the use of business technology faster and easier. Typing skills with a minimum 20 words per minute (WPM) using proper techniques or completion of Business Applications 110 recommended. CSU

## Business Applications 125 Microsoft Word

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn the most efficient methods of creating, editing, formatting, and printing professional business documents faster and easier. Beginners as well as experienced Word users will benefit from learning proper file setup and shortcuts using current business standards. Students will master basic skills and learn advanced features and techniques to produce a wide variety of documents including resumes, newsletters, and brochures. This course will prepare the student for the Microsoft Office Specialist (MOS) exam to earn an industry recognized certification. CSU

## Business Applications 126 Microsoft Outlook

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn how business professionals use all the features in Microsoft Outlook for information management to improve communication and increase productivity. Topics include proper email usage, create meeting invites, schedule appointments, manage contacts, organize emails, manage calendars, email security, customize settings, and create backups. This course will prepare the student for the Microsoft Office Specialist (MOS) exam to earn an industry recognized certification. CSU

## Business Applications 147

## Introduction to Windows

Unit(s): 1.5 Class Hours: 27 Lecture total.
This course is designed for beginning and experienced computer users needing to update business technology skills in using Windows. Customize the Windows environment using the latest features including Start menu tiles, settings, task bar, pin apps, Cortana, Microsoft Edge browser, and OneNote. Learn File Explorer to manage files and folders more efficiently and use OneDrive for Cloud storage. CSU

## Business Applications 155 WordPress

Unit(s): 2.0 Class Hours: 36 Lecture total.
WordPress is one of the most popular Content Management Systems (CMS) used to build professional web sites and blogs for business. Learn proper software and current Search Engine Optimization (SEO) techniques to create and maintain a responsive website and blog. Understand the difference of using WordPress.com and WordPress. org. CSU

## Business Applications 158

Drones for Business
Unit(s): 1.5 Class Hours: 27 Lecture total.
An introduction to using drone technology for business applications. Basic hands-on training to learn how to fly drones safely and legally. Topics include types of drones, how different industries use drones, taking photos and videos, FAA regulations (Part 107 remote pilot license), and flight insurance. Learn about starting a drone business and related careers (real estate, public safety, construction, engineering, media, delivery, insurance). CSU

## Business Applications 160

## Microsoft Publisher

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn to use Microsoft Publisher, a desktop publishing application integrating text and images for professional page layout for business projects including brochures, flyers, newsletters, and multi-page publications. Students will learn proper techniques in creating, editing, formatting, exporting PDF, printing, and preparing a publication for distribution using current business standards. CSU

## Business Applications 163

## Adobe Acrobat

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn to use Adobe Acrobat Pro DC to create, edit, sign, secure, and optimize PDF documents for print, web, and email. Topics include create fillable PDF forms, combine and arrange multiple files, convert PDF to Microsoft Office file formats, insert multimedia (graphics, video, audio), add security (restrictions with passwords), accessibility compliance, digital signatures, review process (add comments, proofing marks), page links, bookmarks, Bates Numbering, and Redact tool for redacting text for legal and business documents. CSU

## Business Applications 164

## Adobe Photoshop

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn to use Adobe Photoshop for photo image editing to enhance print and web business and marketing projects based on current industry standards and proper techniques. Topics include graphics terminology, color correction, stock images, photo repair and restoration, proper file setup, export, masking, filters, special effects, and editing video. This course will prepare the student for the Adobe Certified Associate (ACA) exam to earn an industry-recognized certification. CSU

## Business Applications 166 <br> Adobe Illustrator

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn to use Adobe Illustrator to digitally create, manipulate, and export vector-based graphics, illustrations, drawings, logos, business cards, and simple page layouts to enhance print and web business and marketing projects based on current industry standards and proper techniques. This course will prepare the student for the Adobe Certified Associate (ACA) exam to earn an industry-recognized certification. CSU

## Business Applications 169

## Adobe Dreamweaver

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn to use Adobe Dreamweaver to create, publish, and manage professional web sites for any size screen using current business standards, technology, and proper techniques. The course includes site mapping, wireframes, search engine optimization (SEO), responsive design, HTML5, cascading style sheets (CSS), links, proper setup of web images, cross-browser testing, W3C validation, and publishing. This course will prepare the student for the Adobe Certified Associate (ACA) exam to earn an industry-recognized certification. CSU

## Business Applications 170 <br> Adobe InDesign

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn how to use Adobe InDesign to produce professional page layout projects such as brochures, newsletters, flyers, magazines, and books for print and web digital publications using current business standards and techniques. Topics include typography, paragraph and character styles, importing and linking graphics, integrating Photoshop and Illustrator files, applying color, master pages, frames, proper file setup, fixed-layout EPUB, prepress, and preflight. This course will prepare the student for the Adobe Certified Associate (ACA) exam to earn an industry-recognized certification. CSU

## Business Applications 171

## Adobe Premiere Pro

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn to use Adobe Premiere Pro, the industry-leading video editing software to create professional video presentation projects for today's business marketing and sales via web and social media. Step-by-step, projectbased lessons using proper software techniques and industry standards to effectively use this business application. This course will prepare the student for the Adobe Certified Associate (ACA) exam to earn an industry recognized certification. CSU

## Business Applications 172

## Adobe After Effects

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn how businesses today use After Effects software to create professional motion graphics for corporate presentations, company profiles, and marketing projects for web and social media. Step-by-step, project-based lessons on how to create, manipulate, and optimize motion graphics to grab your audience's attention with a high-quality intro video, animated slide show, or presentations of your business. CSU

## Business Applications 173

## Adobe Animate

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course introduces multimedia design for business using Adobe Animate for web sites, banner ads, presentations, and online tutorials based on current business standards. Topics include animation, importing sound and video, ActionScript, interactivity, testing, and publishing. Knowledge of Photoshop helpful. This course will prepare the student for the Adobe Certified Associate (ACA) exam to earn an industry recognized certification. CSU

## Business Applications 179 <br> Introduction to Microsoft Office

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is designed for beginning and experienced computer users needing to build and update business technology skills in using Microsoft Office Word, Excel, and PowerPoint. Learn to use the essential features and proper techniques to create, edit, format, export PDF, and print professional business documents, spreadsheets, and presentations. This course will prepare the student for the Microsoft Office Specialist (MOS) exam to earn an industry recognized certification in Word, Excel, and PowerPoint. CSU

## Business Applications 181 <br> Everyone Can Code With Apple

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn about mobile business applications, what it takes to develop a mobile app for your business, and how to market your business app successfully. This is an introductory course in using an Apple visualbased application software to create mobile applications for Apple products such as iPhone and Apple Watch. Students will use an iPad to explore fundamental concepts using application technology to build mobile apps for a business and inspire new career possibilities in business technology. CSU

## Business Applications 182

Document Sharing and Collaboration Using The Cloud and Google Apps
Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn how to use cloud computing technology to create, edit, and share documents, photos, forms, and videos online with other users using Google Apps, Google Drive, and Google Docs. Integrate Google Docs with Microsoft Office applications. This class is helpful for business professionals, teachers, and students. Google Classroom makes it easy for learning inside and outside of school. Other cloud computing apps will also be discussed in class such as Microsoft OneDrive and Dropbox. CSU
Business Applications 188
Microsoft Excel
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course is designed for beginning and experienced computer users needing to build and update business technology skills to produce professional Excel worksheets. Learn proper techniques using current business standards to create, edit, format, export PDF, and print worksheets. Topics include insert images, graphics, charts, functions, and formulas. This course will prepare the student for the Microsoft Office Specialist (MOS) exam to earn an industry recognized certification. CSU

## Business Applications 189

Advanced Microsoft Excel
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course builds on the skills and concepts learned in the Business Applications 188 Microsoft Excel course. Students will learn advanced functions and formulas, data analysis, PivotTables, PivotCharts, protecting and sharing workbooks, automating repetitive tasks, and other advanced Excel skills required for managing and presenting data for business. This course will prepare the student for the Microsoft Office Specialist (MOS) Excel and Excel Expert exams to earn industry recognized certifications. CSU

## Business Applications 190 <br> Microsoft Powerpoint

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn the latest features and techniques in creating captivating business slide presentations. Beginning and experienced Powerpoint users will benefit from learning proper file setup and professional presentation tips using current business standards. Topics include slide animation, transitions, and inserting tables, charts, images, videos, and audio. This course will prepare the student for the Microsoft Office Specialist (MOS) exam to earn an industry recognized certification. CSU

## CHEMISTRY (CHEM)

## Chemistry 109

## Chemistry in the Community

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
The non-science major will study practical applications of chemistry and the chemical principles behind them including: the scientific method, atomic structure, molecular models, and chemical reactions. Environmental and community issues will be the focus of student centered laboratories, discussions and field trips. Group work and computer activities will be used in this cooperative learning environment. CSU/UC

## Chemistry 115

## Concepts in Physical Sciences for Educators

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Recommended Preparation: Completion of Mathematics N48 is recommended.
An investigation of basic principles of physics and chemistry including matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The interdependence of chemistry and physics will be emphasized. Designed for non-science majors, concepts are introduced in lab through inquiry and further developed during discussion. (Same as Physical Science 115). CSU/UC

## Chemistry 119

## Fundamentals - General and Organic

Unit(s): 5.0 Class Hours: 72 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 060 or Mathematics 061 with a minimum grade of $C$.
No prior chemistry needed. For majors in nursing, dietetics, family and consumer studies, pharmacy technology, biology, and physical education. Includes atomic structure, nuclear chemistry, bonding, solutions, acids and bases, organic nomenclature, hydrocarbons and alcohols. CSU/UC

## Chemistry 209 (C-ID CHEM 101) Introductory Chemistry

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 080 or Mathematics 081 or Mathematics 083 or Mathematics 084 with a minimum grade of $C$.
Basic concepts of matter: atomic structure, formulas, equation writing, nomenclature, gases and kinetic theory. Emphasizes properties of solutions, and the mole concept in quantitative chemistry. Prepares students for Biology and Chemistry 219. CSU/UC

## Chemistry 210

## General, Organic and Biochemistry

Unit(s): 5.0 Class Hours: 72 Lecture, 54 Laboratory total.
Prerequisite: Chemistry 209 with a minimum grade of C OR passing grade on current chemistry placement exam and Mathematics 080 or Mathematics 081 or Mathematics 083 or Mathematics 084 with a minimum grade of $C$.
An introduction to the fundamental concepts of general, organic and biochemistry for majors in nursing and other allied health majors. Includes atomic structure, nuclear chemistry, bonding, solutions, acids and bases, organic nomenclature, hydrocarbons, alcohol, aldehydes, ketones, carboxylic acids, carbohydrates, proteins, lipids, nucleic acids and metabolism. CSU/UC

## Chemistry 219 (C-ID CHEM 110) <br> (C-ID CHEM 120S = CHEM 219 or $219 \mathrm{H}+229$ ) <br> General Chemistry

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Mathematics 080 or Mathematics 081 or Mathematics 084 with a minimum grade of $C$ and Chemistry 209 with a minimum grade of $C$ or a passing score on current chemistry placement test. Fundamental principles and concepts of chemistry including, but not limited to, atomic structure, quantum theory, periodic properties, stoichiometry, oxidation-reduction, molecular structure and bonding, gas laws, states of matter, solutions, chemical kinetics and chemical equilibrium. CSU/UC

Chemistry 219H (C-ID CHEM 110 )
(C-ID CHEM 120S = CHEM 219 or 219H + 229)

## Honors General Chemistry

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Mathematics 080 or Mathematics 081 or Mathematics 084 with a minimum grade of $C$ and Chemistry 209 with a minimum grade of $C$ or a passing score on current chemistry placement test. Cumulative GPA of 3.0. Transcripts required to verify Prerequisite.
Enriched and intensive study, including seminar approach, of fundamental principles and concepts of chemistry including, but not limited to, atomic structure, quantum theory, periodic properties, stoichiometry, oxidation-reduction, molecular structure and bonding, gas laws, states of matter, solutions, chemical kinetics and chemical equilibrium. CSU/UC

Chemistry 229
(C-ID CHEM 120S = CHEM 219 or 219H + 229)

## General Chemistry and Qualitative Analysis

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Chemistry 219 with a minimum grade of C.
Continuation of Chemistry 219, including but not limited to ionic equilibrium, acid and base equilibrium, thermodynamics, electrochemistry, nuclear chemistry, organic chemistry and descriptive chemistry. CSU/UC

Chemistry 249 (C-ID CHEM 150)
(C-ID CHEM 160S = CHEM 249 + 259)
Organic Chemistry I
Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total. Prerequisite: Chemistry 229 with a minimum grade of $C$. This course is the first semester of a year of organic chemistry. This course will cover: structure and bonding, nomenclature, descriptive chemistry, reaction mechanisms, synthetic methods and IR spectroscopy for different functional groups including alkanes, alkenes, alkynes, alkyl halides, organometallics, alcohols, and ethers. Laboratory will include: separations/purifications identification, and simple syntheses. CSU/UC

## Chemistry 259 (C-ID CHEM 160S = CHEM 249 + 259)

Organic Chemistry II
Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Prerequisite: Chemistry 249 with a minimum grade of C.
This course is the second semester of a year of organic chemistry (continuation of Chemistry 249). It includes units on structure elucidation, aromatic compounds, carbonyl compounds, carboxylic acids and their derivatives, amines, and classes of biologically important compounds. More complex synthetic routes are explored. Laboratory work includes multi-step syntheses and unknown identification. Reaction mechanisms and use of spectroscopic techniques continue to be emphasized. CSU/UC

## CHICANO STUDIES (CHST)

## Chicano Studies 101 <br> Introduction to Chicana/o Studies

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is an introduction to the field of Chicano/a Studies. It is designed to acquaint students with the most significant social, political, economic, and historical aspects of the Chicano/a experience in the United States. As such, the course is interdisciplinary in nature and critically analyzes the societal context in which Chicano/a have sought to maintain their culture. This course is designed to present a foundation in Chicano/a Studies. CSU/UC

## CHILD DEVELOPMENT (CDEV)

## Child Development 070 <br> Early Childhood Education: Introductory Principles and Practices (DS3)

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: English For Multilingual Students 055 is recommended.
Bilingual (Spanish/English) course designed to introduce Spanish speaking students who are considering a career as teachers or aides to the scope of early childhood education. This class meets state licensing requirements for aides and limited-English caregivers in Early Childhood Education programs.

Child Development 107 (C-ID CDEV 100) Child Growth and Development (DS1)
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course examines the major physical, psychosocial, and cognitive/ language developmental milestones for children, from conception through adolescence. Using developmental theories and research methodologies, course emphasis will be on typical and atypical development, maturational processes, and environmental factors. Students will also observe children, evaluate individual differences, and analyze characteristics of development at various stages. (No credit if student has taken Psychology 157.). CSU/UC

## Child Development 108 (C-ID ECE 200)

 Observation and Assessment for Early Learning and Development (DS3)Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 107 with a minimum grade of C. Negative TB Test (must be completed before observations take place during the semester). By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play, and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. CSU

## Child Development 110 (C-ID CDEV 110)

Child, Family, and Community (DS2)
Unit(s): 3.0 Class Hours: 54 Lecture total.
This class examines the developing child in a societal context, focusing on the interrelationship of family, school and community, and emphasizes historical and socio-cultural factors. Students will explore socialization processes and identity development that support and empower families by showing the importance of respectful and reciprocal relationships. CSU/UC

## Child Development 111A (C-ID ECE 120)

Principles and Practices of Teaching Young Children
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 108 with a minimum grade of C. Negative TB Test (need to complete before observation during the course). By the 3rd week of the semester, verification of the statemandated Tdap vaccination, MMR immunization, and negative TB test will be required.
This course examines the underlying historical and theoretical principles, and the developmentally appropriate practices of early childhood programs and environments. Emphasis will be on the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative, and intellectual development for all children. The evolution of professional practices promoting advocacy, ethics, and professional identity will be explored. CSU

## Child Development 111B (C-ID ECE 130) Introduction to Curriculum for Young Children

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 108, and Child Development 111A with a minimum grade of $C$ or concurrent enrollment in Child Development 111A. By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
This course presents an overview of knowledge and skills needed to provide developmentally appropriate curriculum for young children. Students will examine the teacher's role in supporting development, fostering the joy of learning and creativity through the essential role of play. Content areas include language/literacy, social/emotional/ sensory learning, art, music, math, science, health/safety, and motor development. CSU

## Child Development 112 (C-ID ECE 220)

## Health, Safety, and Nutrition for Children

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: By the 3rd week of the semester, verification of the statemandated Tdap vaccination, MMR immunization, and negative TB test will be required.
Recommended Preparation: Recommended Preparation: 6 units of child development coursework.
This course examines the regulations, policies, procedures and best practices for early childhood curriculum related to health, safety, food, and nutrition while supporting child development through everyday planning and school programming. The importance of collaboration between families and health and school professionals to ensure physical and mental health of all children, families, and professionals will be explored. Students will have to show proof of negative TB test results by the 4th week of the semester. Observations to local child development centers will be included. CSU

## Child Development 114

## Careers in Teaching

Unit(s): 1.0 Class Hours: 18 Lecture total.
Introduction to the teaching profession, culturally diverse student populations, career ladders and options, academic preparation, experience, and credentials required for employment, utilizing career assessments, principles of goal setting, and exposure to teaching environments and teaching professionals. Students will formulate a career objective and develop an educational plan. (Same as Counseling 114). CSU

## Child Development 116A

Infant/Toddler Growth and Development (DS4)
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 107 and Child Development 108 with a minimum grade of $C$. By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
A study of infants and toddlers from conception to age three including physical, cognitive, language, social, and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development. CSU/UC

## Child Development 116B

Care and Education for Infants and Toddlers (DS3)
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 107, Child Development 108, and Child Development 116A with a minimum grade of C or concurrent enrollment in Child Development 116A. By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
Applies current theory and research to the care and education of infants and toddlers in group settings. Examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. CSU

## Child Development 120A

## Development of the School Age Child (DS5)

Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of the physical, cognitive, personality, and social development of children between the ages of five and twelve years. Attention will be paid to the scientific study of middle childhood, developmental trends, and issues of diversity. Not offered every semester. (Same as Education 120A). CSU/UC

## Child Development 120B

School-Age Child Care and Recreation Activities (DS5)
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course will focus on school-age creative activities, including planning and implementing an appropriate before/after school curriculum. Attention will be paid to integrating academics, recreation, and creative activities suitable for school-age child care programs. (Same as Education 120B). CSU

## Child Development 200

Introduction to Technology in Early Childhood Education
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: By the 3rd week of the semester, verification of the statemandated Tdap vaccination, MMR immunization, and negative TB test will be required.
This course provides students knowledge about and experience with technological tools used in early childhood settings. Students will have the opportunity to evaluate the impact of technology as it relates to growth and development of children and developmentally appropriate practices. Emphasis will be on basic knowledge and practice in a wide variety of current and emerging technologies and how to integrate them in the learning environment. CSU

## Child Development 205

Introduction to Children With Special Needs
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduces the variations in development of children and adolescents with special needs, and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to individuals with special needs, and the identification and referral process. (Same as Education 203). CSU

## Child Development 206

## Curriculum and Intervention Strategies

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 205 with minimum grade of $C$ This course focuses on curriculum and intervention strategies for supporting young children's individual needs in partnership with their families. Focuses on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. Includes the role of the teacher as an intentional teacher and professional working with families, collaboration with interdisciplinary teams, and cultural competence. CSU

## Child Development 207 <br> Supporting and Empowering Families of Children With Special Needs

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 205 with a minimum grade of C. This course will provide teachers, intervention assistants, administrators, and parents the tools necessary to support and empower families of children with disabilities and other special needs in early childhood and school age programs. Techniques, strategies, and resources will be provided to support children in a natural and/ or inclusive educational setting and to help guide parents to be advocates of their children. CSU

## Child Development 210

## Creative Music Experiences for Young Children

Unit(s): 2.0 Class Hours: 36 Lecture total.
Explores musical expression through songs and ballads, the elements of music, and diverse types of instruments as used in the early childhood curriculum. Includes the study of musical growth and development in young children and the use of music as a classroom management tool. CSU

## Child Development 214

## Creative Art Experiences for Children

Unit(s): 1.5 Class Hours: 18 Lecture, 27 Laboratory total. Emphasizes the child's (ages 2 through 8 years) ability to represent and expressively use art media. Includes theoretical as well as practical application and the role of adult in fostering creativity. CSU

## Child Development 215

Administration I: Programs in Early Childhood (DS6)
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Twelve (12) units in Early Childhood Education.
This course is an introduction to the administration of early childhood programs. Students will learn about program types, budget, management, regulations, laws, development and implementation of policies and procedures. Additionally, they will examine administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. CSU

## Child Development 216 <br> Administration II: Personnel and Leadership in Early Childhood Education (DS6)

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Twelve (12) units in Early Childhood Education.
This course provides effective strategies for personnel management and leadership in early care and education settings. Students will learn about legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. CSU

## Child Development 220

The Child As a Victim
Unit(s): 3.0 Class Hours: 54 Lecture total.
Exploration of battered, molested, and neglected children from five vantage points: child, law, parents, social services and educator. CSU

## Child Development 221 (C-ID ECE 230) Living and Teaching in a Diverse Society <br> Unit(s): 3.0 Class Hours: 54 Lecture total.

Examination of the development of social identities in diverse societies, and implications of oppression and privilege, as they apply to young children, families, programs, classrooms, and teaching. Classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches, self-examination, and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling. CSU/UC

## Child Development 229

Brain Development and Learning
Unit(s): 2.0 Class Hours: 36 Lecture total.
This class explores the development of the brain for children from birth through adolescence, and how behavior and learning are affected. Brain-based learning strategies will be used to teach new ways of approaching learning including how to understand diverse learning styles. This course is designed for educators, parents, and students who are interested in knowing more about how the brain operates and how environment affects the brain. CSU

## Child Development 230

## Child Guidance and Classroom Management

Unit(s): 2.0 Class Hours: 36 Lecture total.
This course will explore expectations about young children's behavior and the importance of teacher interaction skills in addressing and dealing with behavior issues. Behavior expectations will be defined, skills for dealing with various behaviors will be developed and a file of community resources in regards to behavioral issues will be created. It is advised that participants take this course in conjunction with working in a classroom setting. CSU

## Child Development 231

Developing Language and Literacy in Young Children Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: By the 3rd week of the semester, verification of the statemandated Tdap vaccination, MMR immunization, and negative TB test will be required.
Designed to introduce students to basic concepts of first and second language acquisition and literacy in young children including classroom applications. CSU

## Child Development 232

Math and Science Methods for Early Learning Environments Unit(s): 2.0 Class Hours: 36 Lecture total.
Introduces early learning teachers to basic math and science principles and the standards established by the National Council of Teachers of Mathematics and the National Science Content Standards for early learning environments. Includes theoretical and practical applications for problem-solving and critical thinking that are common to math and science. Students will develop a personal file of appropriate math/ science activities for early learning. CSU

Child Development 250
Adult Supervising and Mentoring in Early Care and Education
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Child Development 111B or Child Development 116B with a minimum grade of $C$. By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
For the experienced teacher, a study of the methods and principles of supervising adults in early childhood classrooms. Emphasis is on the role of experienced classroom teachers who function as supervisors/ mentors to new teachers and staff while simultaneously addressing program quality and the needs of children, parents, and other staff. CSU

## Child Development 297 <br> Analyzing and Applying Teacher Strategies in the Classroom

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Child Development 111B or Child Development 116B or Child Development 120B with a minimum grade of C. By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
This course will provide students with essential skills to utilize a variety of current statewide assessment tools that address the quality of early childhood programs and the developmental levels of young children. Students will identify strategies to help teachers effectively use curriculum that is intentional, child-focused, and content-driven. Students will also learn to be responsive of cultural diversity, Englishlanguage learners, and the unique needs of families. CSU
Child Development 298A (C-ID ECE 210) Practicum in Early Childhood Programs
Unit(s): 3.5 Class Hours: 36 Lecture, 81 Laboratory total.
Prerequisite: Child Development 107, Child Development 108, Child Development 110, Child Development 111A, Child Development 111B, Child Development 112, Child Development 221, and Child Development 297 with a minimum grade of C. And by the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.
Under guided supervision in a RSCCD Child Development Center or approved mentor site, students will demonstrate competency in connecting theory to practice, and enhance professional-behaviors. Students will plan and implement child-centered, play-oriented approaches to teaching, learning, and assessment. Knowledge of curriculum content areas will be emphasized as students design, implement, and evaluate positive experiences for young children. CSU

## Child Development 298B

## Practicum in Infant/Toddler Programs

Unit(s): 3.5 Class Hours: 36 Lecture, 81 Laboratory total.
Prerequisite: Child Development 107, Child Development 108, Child Development 110, Child Development 112, Child Development 116A, Child Development 116B, Child Development 221, and Child Development 297 with a minimum grade of C. And By the 3rd week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required. Under guided supervision in a RSCCD Child Development Center or approved mentor site, students will demonstrate competency in connecting theory to practice and enhance professional behaviors. Students will plan and implement infant/toddler-centered, playoriented approaches to teaching, learning, and assessment. Knowledge of curriculum content areas will be emphasized as students design, implement, and evaluate positive experiences for infants and toddlers. CSU

## Child Development 299

Cooperative Work Experience Education
Unit(s): 1.0-4.0 Class Hours: 60-300 Laboratory total.
This work experience course of supervised employment is designed to assist students to acquire career awareness and work habits in early childhood, K-12, and after-school programs. 75 hours of paid work or 60 hours of unpaid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. May be repeated. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## CHINESE (CHNS)

## Chinese 101

Elementary Chinese I
Unit(s): 5.0 Class Hours: 90 Lecture total.
Practice and integration of pronunciation, grammar, vocabulary, and common idioms through listening, speaking, reading, and writing so that students can begin to express thoughts orally and in writing.
The class will also introduce students to culture and social linguistic knowledge appropriate to Chinese-speaking societies. CSU/UC

## Chinese 102 <br> Elementary Chinese II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Chinese 101 with a minimum grade of $C$ or equivalent, or two years of high school Chinese with a passing grade.
Continuation of Chinese I. Further training in language skills providing avenues for the expression of ideas in both oral and written forms.
Enhanced study of culture and socio-linguistic knowledge appropriate to Chinese-speaking societies. CSU/UC

## COMMUNICATION STUDIES (CMST)

## Communication Studies N49 <br> Introduction to Academic Speaking Skills

Unit(s): 3.0 Class Hours: 54 Lecture total.
Beginning course for non-native students with previous instruction in basic English as a second language. Includes listening discrimination, pronunciation, speaking and listening skill building. Skills are intensively practiced and reviewed. Not applicable to associate degree. (Same as English For Multilingual Students N49). Grade: Pass/ No Pass Only.

## Communication Studies N52A <br> Beginning American English Pronunciation Skills

Unit(s): 3.0 Class Hours: 54 Lecture total.
Instruction in pronunciation of American English sounds, identifying commonly mispronounced sounds, and common sound spelling patterns. Not applicable to associate degree. (Same as English For Multilingual Students N52A). Grade: Pass/No Pass Only.

## Communication Studies N52B

Intermediate American English Pronunciation Skills
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Communication Studies N52A with a minimum grade of $P$.
More extensive instruction in American English sounds. Emphasis on more difficult sounds, sound blends, word endings, syllable and word stress. Not applicable to associate degree. (Same as English For Multilingual Students N52B.)

## Communication Studies N54

## Accent Reduction

Unit(s): 1.0 Class Hours: 18 Lecture total.
Co-Requisite: Concurrent or previous enrollment in English For Multilingual Students 055, English For Multilingual Students 107, English For Multilingual Students 109, English For Multilingual Students 110, or English For Multilingual Students 112.
Individualized instruction to assist in the reduction of foreign accents. Improvement of discrimination and production of the American English sound system, melody, intonation and stress patterns. Not applicable to associate degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Communication Studies N59 Pronunciation Review

Unit(s): 1.0 Class Hours: 18 Lecture total.
Review of the pronunciation system of American English. Designed for non-native speakers who have studied pronunciation, but need further practice and identification of specific needs for improvement. Grade: Pass/No Pass Only.

## Communication Studies 097 <br> American English Conversational Skills

Unit(s): 3.0 Class Hours: 54 Lecture total.
Intensive, advanced conversational practice of American English. The course emphasizes oral competency in key American social, academic and business encounters and communication techniques. Preparation for Communication Studies 101, Communication Studies 101 H , or Communication Studies 102. Recommended for English learners.
Communication Studies 101 (C-ID COMM 130) Introduction to Interpersonal Communication
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Completion of or concurrent enrollment in English 101 or English 101H with a minimum grade of C. Introduction to communication theory, rhetoric, listening, perception, language usage, nonverbal communication, and conflict management. Students participate in oral and written exercises and simulations; these activities are designed to enhance communicative awareness and skills in interpersonal contexts. It is designed to assist students in improving their own interpersonal and oral communication skills. CSU/ UC

## Communication Studies 101H (C-ID COMM 130) <br> Honors Introduction to Interpersonal Communication

## Unit(s): 3.0 Class Hours: 54 Lecture total.

Recommended Preparation: Completion of or concurrent enrollment in English 101 or English 101H with a minimum grade of C. Prerequisite: A high school or college GPA of 3.0 or above.
Introduction to communication theory, rhetoric, listening, perception, language usage, non-verbal communication and conflict management. An enriched approach designed for honors students. Seminar mode stresses the development of analytical thinking, writing, and speaking skills. CSU/UC

## Communication Studies 102 (C-ID COMM 110) Public Speaking

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Communication Studies 097 recommended for non-native speakers of English.
Teaches critical thinking skills in relation to public speaking. Emphasis on the process, principles, and major facets of critical thinking with practice through oral presentations. CSU/UC

## Communication Studies 103 (C-ID COMM 150) Introduction to Intercultural Communication

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Recommended Communication Studies 097 for non-native speakers.
A general view of the sociological, psychological, and communication patterns of various cultural groups. Special emphasis on the methods, skills, and techniques necessary for effective intercultural, crosscultural, and interracial communication. Stresses the development of analytical thinking, speaking, and writing skills. CSU/ UC

Communication Studies 103H (C-ID COMM 150)
Honors Introduction to Intercultural Communication
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: High school or college GPA of 3.0 or above.
Enriched for honors students. In-depth, seminar format examination of sociological, psychological, and communication patterns of various cultural groups. Methods, skills, and techniques for effective intercultural and interracial communication. Stresses analytical thinking, speaking, and writing skills. CSU/UC

## Communication Studies 104

## Listening

Unit(s): 1.5 Class Hours: 27 Lecture total.
Prerequisite: Communication Studies 097 with a minimum grade of C . For students wanting to assess and improve their current listening/ responding capabilities. Emphasizes appropriate application of divers $\epsilon$ listening skills. CSU

## Communication Studies 107

Communication for the Health Care Professional
Unit(s): 1.5 Class Hours: 27 Lecture total.
Introduction to communication skills vital to health care settingslistening, presentation skills, cultural awareness, expressions and terminology used in health care settings. Designed for students whose first language is not English. CSU

## Communication Studies 140 (C-ID COMM120)

Argumentation and Debate
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Completion of or concurrent enrollment in English 101 recommended. Communication Studies 097 recommended for non-native speakers.
Principles of debate techniques with emphasis on methods of logical analysis and reflective thinking. Practical application through adaptation of material to forms of debate on current issues. CSU/UC

## Communication Studies 145 (C-ID COMM 140) Group Dynamics <br> Unit(s): 3.0 Class Hours: 54 Lecture total.

Recommended Preparation: Recommended Communication Studies 097 for non-native speakers.
Principles and methods of communication as applied in the small group setting. Emphasis on communication skills, processes, and operations in the small group. Includes understanding group dynamics and cooperative problem solving. CSU/UC

## Communication Studies 151

Voice and Diction for Effective Communication
Unit(s): $3.0 \quad$ Class Hours: 54 Lecture total.
Recommended Preparation: Communication Studies 097 recommended for non-native speakers.
Basic speech and voice production. Anatomy and physiology related to respiration (breathing/loudness), phonation (sound/pitch) and articulation (diction/clarity). Practice in improving vocal skills for effective communication. Designed for individuals who have special demands on vocal production in their vocation. CSU

## Communication Studies 152 (C-ID COMM 170) <br> Oral Interpretation

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Communication Studies 097 recommended for non-native speakers.
Oral presentation of prose and poetry; practice in speaking, interpretation, and analysis of literature, with training in the principles of effective delivery. Not offered every semester. CSU/UC

## Communication Studies 158

## Readers Theatre

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Communication Studies 097 with a minimum grade of C ; recommended for non-native speakers.
Oral presentation of prose and poetry; practice in speaking, reading, and analysis of literature, with training in the principles of effective ensemble delivery. CSU/UC

## Communication Studies 170

Introduction to Phonetics
Unit(s): 3.0 Class Hours: 54 Lecture total.
Study of the articulatory foundations of the description and classification of speech sounds. Introduces the International Phonetic Alphabet (IPA), physiological properties of the speech-producing mechanism, and methods of transcription. Emphasis will be on American English along with comparison to the sound systems of other languages. Communication Studies N53 recommended for nonnative speakers. CSU
Communication Studies 206
Gender Communication
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Communication Studies 101 or
Communication Studies 103 with a minimum grade of C.
Practical application, techniques and in-depth analysis of male and female communication regarding language usage, biological and social influences, mass media, marriage, organizations, same sex/ cross sex friendships, and education. CSU/UC

## Communication Studies 206H

## Honors Gender Communication

## Unit(s): 3.0 Class Hours: 54 Lecture total.

Prerequisite: Communication Studies 101 or Communication Studies 101 H or Communication Studies 102 or Communication Studies 103 or Communication Studies 103 H or Communication Studies 104 or Communication Studies 140 or Communication Studies 145 or Communication Studies 151 with a minimum grade of $C$ and High school or college GPA of 3.0 or above.
An enriched approach in practical application, techniques, and indepth analysis of male and female communication regarding language usage, biological and social influences, mass media, marriage, organizations, same sex/cross sex friendships, and education. Students will be required to do individual/group professor-guided research. CSU/UC

## Communication Studies 307

## Health Communication

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on Enrollment: Student must be admitted to the Occupational Studies program. Communication Studies 101 or Communication Studies 101 H or Communication Studies 102 or Communication Studies 103 or Communication Studies 103 H or Communication Studies 145; with a minimum grade of $C$.
Course is designed to advance knowledge of health communication theory, research and practice while providing solid foundation for understanding importance, value and impact of health communication upon patients, families, caregivers and healthcare team-members.

## COMMUNICATIONS \& MEDIA STUDIES (CMSD)

## Communications \& Media Studies 102 <br> Multimedia Storytelling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Explores alternative story forms by combining text, still photographs, video clips, audio, graphics and interactivity to tell stories in the most compelling and informative way. Focuses on using a variety of media to tell different parts of a story for presentation in digital and online platforms. CSU

Communications \& Media Studies 103 (C-ID JOUR 170) Introduction to Visual Communications
Unit(s): 3.0 Class Hours: 54 Lecture total.
This multimedia course explores the social, cultural and historical implications of visual communications from Gutenberg's printing press to present day digital media. Using works of philosophical, historical and cultural importance students will analyze and debate the changes in the way visual communications affect society, and shape cultural values. CSU/UC

## Communications \& Media Studies 105 (C-ID JOUR 100) Mass Media and Society

Unit(s): 3.0 Class Hours: 54 Lecture total.
Exploration of mass communication and the interrelationships of media with society including history, structure and trends in a digital age. Examines major media forms, theories and effects in our information-conscious culture. CSU/UC

Communications \& Media Studies 105H (C-ID JOUR 100) Honors Mass Media and Society
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above. Enriched honors course of intensive exploration of historical impact and current influence of mass media (newspapers, TV, Internet, etc.). Uses critical thinking skills in seminar-setting to assess media's role in society. CSU/UC

Communications \& Media Studies 110 Introduction to Creative Nonfiction
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101, English 101H or Communications \& Media Studies 121 with a minimum grade of $C$.
Exploration of creative nonfiction writing concepts, and genres with focus on critically reading and analyzing respected works of literature ranging from biography and review to profiles and personal essays. CSU/UC

## Communications \& Media Studies 111 Media, Race and Gender

Unit(s): 3.0 Class Hours: 54 Lecture total.
This multimedia course is an overview of the social and cultural implications of mass media on race and gender from the 1920s to the present. Using works of philosophical and cultural importance students will analyze and debate the changes in the faces of media with particular focus on social class, gender and ethnicity. CSU/UC

Communications \& Media Studies 121 (C-ID JOUR 110) Introduction to Reporting and Newswriting
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to evaluating, gathering, and writing news across multiple platforms under newsroom conditions. Includes role of the journalist in a multi-media environment and the legal and ethical issues related to reporting. Writing experiences include: web-based and multi-media reporting, interviewing techniques, research methods, application of media law, writing under deadline and use of AP Style. CSU

Communications \& Media Studies 123A (C-ID JOUR 130) News Media Production
Unit(s): 4.0 Class Hours: 72 Lecture, 180 Laboratory total. A production-based course designed around a functioning media organization, providing students practical training in print, digital and Web-based media through work as members of the campus news magazine el Don and its website eldonnews.org. Students utilize a digital laboratory to gain practical experience in a variety of disciplines, including writing, editing, design, photography, audio, visual, multimedia and emerging technologies. Arranged laboratory hours (TBA) 10 hours per week. CSU

## Communications \& Media Studies 123B (C-ID JOUR 131) Intermediate News Media Production

Unit(s): 4.0 Class Hours: 72 Lecture, 180 Laboratory total.
Prerequisite: Communications \& Media Studies 123A with a minimum grade of $C$ or equivalent college media course.
An intermediate level production-based course designed around a functioning media organization, providing students practical training in print, digital and web-based media through work as members of the campus news magazine el Don and its website eldonnews.org. Students utilize a digital laboratory to gain practical experience in a variety of disciplines, including writing, editing, design, photography, audio, visual, multimedia and emerging technologies. Completion of Communicatons \& Media Studies 123A is required. Arranged laboratory hours (TBA)10 hours per week. CSU

## Communications \& Media Studies 123C

## Advanced Intermediate News Media Production

Unit(s): 4.0 Class Hours: 72 Lecture, 180 Laboratory total.
Prerequisite: Communications \& Media Studies 123B with a minimum grade of $C$ or equivalent college media course.
An advanced intermediate level production-based course designed around a functioning media organization, providing students practical training in print, digital and Web-based media through work as members of the campus news magazine el Don and its website eldonnews.org. Students utilize a digital laboratory to gain practical experience in a variety of disciplines, including writing, editing, design, photography, audio, visual, multimedia and emerging technologies. Completion of Communicatons \& Media Studies 123B required. Arranged laboratory hours (TBA)10 per week. CSU

## Communications \& Media Studies 123D

## Advanced News Media Production

Unit(s): 4.0 Class Hours: 72 Lecture, 180 Laboratory total.
Prerequisite: Communications \& Media Studies 123C with a minimum grade of $C$.
An advanced level production-based course designed around a functioning media organization, providing students practical training in print, digital, and Web-based media through work as members of the campus news magazine el Don and its website eldonnews.org. Students utilize a digital laboratory to gain practical experience in a variety of disciplines, including writing, editing, design, photography, audio, visual, multimedia, and emerging technologies. Completion of Communicatons \& Media Studies 123C required. Arranged laboratory hour (TBA)10 per week. CSU

## Communications \& Media Studies 160 (C-ID JOUR 160) Introduction to Photojournalism

Unit(s): 3.0 Class Hours: 54 Lecture total.
Explores the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Stresses news, feature photography, and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet, and other mass communications media. CSU

## Communications \& Media Studies 201 Visual Reporting

Unit(s): 2.0 Class Hours: 36 Lecture, 18 Laboratory total.
Course stresses how to perceive and select visual images through work with a digital camera, a computer, and related graphics software. Students learn application and manipulation of images in digital form by focusing on telling stories through pictures and informational graphics. Students serve as visual reporters for campus media. CSU

## Communications \& Media Studies 210 (C-ID JOUR 210) Intermediate Reporting and Newswriting

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Communications \& Media Studie 121 with a minimum grade of $C$.
This course is a continuation of Introduction to Newswriting and Reporting and focuses on coverage of public affairs reporting, including local and regional government, police, courts, school, and city boards. It includes both on- and off-campus reporting and writing, stressing news presentation for a variety of media purposes through multiple platforms. CSU

## Communications \& Media Studies 222

## Writing Across Media

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101, English 101H or Communications \& Media Studies 121 with a minimum grade of C.
For writing students seeking a better understanding of non-fictional prose genres focusing on narrative storytelling techniques for Web, multimedia and print. Emphasizes integration of writing skills across media formats. CSU

## Communications \& Media Studies 298A Designing for Print and Digital Media

Unit(s): 3.0 Class Hours: 54 Lecture, 54 Laboratory total.
A comprehensive course emphasizing professional standards, theory, and techniques in print, digital, and Web-based design. Students use a digital laboratory as a platform for training in design theory, visual organization, color theory, scale, unity, and use of typography. For those interested in design careers. CSU

## Communications \& Media Studies 298B <br> Intermediate Designing for Print and Digital Media

Unit(s): 3.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Communications \& Media Studies 298A with a minimum grade of $C$ or upon approval of instructor.
An intermediate level comprehensive course emphasizing professional standards, theory, and techniques in print, digital, and Web-based design. Students use a digital laboratory as a platform for training in design theory, visual organization, color theory, scale, unity, and use of typography. For those interested in design careers. Completion of Communicatons \& Media Studies 298A is required. CSU

## COMPUTER SCIENCE (CMPR)

## Computer Science 100 <br> The Computer and Society

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the area of computers and their relationship to todays' information society. Examines a broad overview of topics including hardware, software, networking, information technology, and the Internet. The student will explore the implication and effect of technology on society, careers, and ethics. CSU/UC

## Computer Science 104

## Cooperative Work Experience Education-Occupational

Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Computer Science 105

## Visual BASIC Programming

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to programming and Visual BASIC. Emphasis on programming fundamentals and the creation of applications with Visual BASIC. No previous programming experience required. Students will write programs on PC compatible computers. CSU/UC

## Computer Science 112

## Java Programming

Unit(s): 3.0 Class Hours: 54 Lecture total.
Study of the Java language, its features and applications. CSU/UC

## Computer Science 113 <br> Advanced Java

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Computer Science 112 with a minimum grade of $C$. This course will introduce Text Processing, Inheritance, Exception's I/O, Intro and Advanced GUI Applications, Arrays, Advanced Classes and Database Connections using Java Database Connectivity (JDBC). Students should already have knowledge of Java in Decision Making using If Conditional Statements, Basic Loops, Creating Methods and Creating Classes. CSU

## Computer Science 114 <br> Python Programming

Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will be introduced to the syntax of Python, the methods used to incorporate Python into creating business applications, and using Python to create interactive forms. Students will also learn to enhance Business Applications through the use of Interactive Programming utilizing forms, objects, looping constructs, variables, classes and the use of various data-types. CSU

## Computer Science 117 <br> PERL Programming and CGI

Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will be introduced to the Perl scripting language syntax, data types, input/output, managing system processes, database programming, CGI programming and Web programming. CSU

## Computer Science 118

JavaScript Programming
Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will be introduced to the syntax of JavaScript, the methods used to incorporate JavaScripts into HTML documents, and using JavaScripts to create interactive forms. Students will also learn to enhance Web pages through the use of interactive programming utilizing forms, frames, documents, Windows, loops, strings, and cookies. CSU

## Computer Science 120 (C-ID COMP 112) Introduction to Programming

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
Prerequisite: Mathematics 083 or Mathematics 084 with a minimum grade of $C$.
Introduction to programming concepts including data types, mathematical operations, elementary input/output, and the basic control structures of sequence, selection, iteration, and functions. Program design techniques utilizing structured and object-oriented methodologies will be emphasized. CSU/UC

## Computer Science 121 (C-ID COMP 122) Programming Concepts

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
Prerequisite: Computer Science 120 with a minimum grade of $C$. Continuing introduction to programming concepts, development of algorithms utilizing functions, classes, and the primary control structures. Program I/O; strings and arrays; data types; classes, and objects. Documentation techniques. CSU/UC

## Computer Science 124A <br> MCDST Preparation

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Computer Science 100 with a minimum grade of C.
Study of skills needed to successfully support end-users and to successfully troubleshoot desktop environments that are running the Microsoft operating systems. Student will be provided with the skills necessary for the Microsoft Certified Desktop Support Technician (MCDST) Exams, 70-271 and 70-272. CSU

## Computer Science 125

## Help Desk Fundamentals

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to Help Desk "soft skills," such as effective communication, analytical thinking, diplomacy, problem solving, leadership, team building, and listening skills. In addition to learning necessary soft skills, students will be familiar with a help-desk environment, its function and organization. CSU
Computer Science 129 (C-ID COMP 142 ) Introduction to Computer Organization
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Computer Science 120 with a minimum grade of $C$. Recommended Preparation: Computer Science 121.
Presents the organization and structure of computers at hardware and software levels: analysis and synthesis of combinatorial and sequential logic, data representation and manipulation, language structures and translation, and process administration and management. CSU/UC

## Computer Science 131 (C-ID COMP 132) Data Structures Concepts

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Computer Science 121 with a minimum grade of $C$.
Application of simple Data Structures Concepts (ADT's) including linked structures, stacks, queues, and trees. Use of pointers, recursion, sorting algorithms, classes, and object-oriented programming to implement data structures. CSU/UC

## Computer Science 134

## Microsoft Windows Operating System

Unit（s）：3．0 Class Hours： 54 Lecture total．
Microsoft Windows operating system．Course topics include installation，configuration，application installation and management， hardware configurations，file and information management， security，managing user accounts，networking，digital media，system maintenance and management，desk top management，and utilization of cloud storage．CSU

## Computer Science 136

## Building a Small Office／Home Office Network

Unit（s）：1．5 Class Hours： 27 Lecture total．
Plan and build a SOHO network．Students will learn about simple file－ sharing networks，wireless networks，and more advanced networking technologies that connect multiple machines and devices．Students will be able to choose the networking solution that is best suited to their needs．CSU

## Computer Science 137

## Personal Computer Troubleshooting

Unit（s）：3．0 Class Hours： 54 Lecture total．
Study of techniques and methods of PC maintenance．Topics include the interaction between hardware and software；the motherboard and CPU；managing memory；disk drives；input and output and multimedia； printers；installation；management and supporting Windows；network and Internet connectivity；purchasing and building a PC；backups；
viruses；and troubleshooting PC problems．CSU

## Computer Science 138

## CompTIA Network＋Guide to Networks

Unit（s）：3．0 Class Hours： 54 Lecture total．
This course prepares students how to install，configure，and troubleshoot a computer network is a highly marketable and exciting skill．This course first introduces the fundamental building blocks that form a modern network，such as protocols，media，topologies，and hardware．It then provides in depth coverage of the most important concepts in contemporary networking，such as TCP／IP，Ethernet， wireless transmission，virtual networks，security，and troubleshooting． Student will be prepared to pass CompTIA＇s Network＋N10－006 certification exam．CSU

## Computer Science 139

Configuration and Administration of Local Area Networks Unit（s）：1．5 Class Hours： 27 Lecture total．
The configuration and administration of Windows－based local area networks，including planning，hardware，software and Internet connectivity．Recommended preparation：completion of Windows server course．CSU

## Computer Science 140 （C－ID COMP 152）

## Discrete Structures for Computer Science

Unit（s）：3．0 Class Hours： 54 Lecture total．
Course presents the fundamentals of discrete mathematics as applied to the computer sciences．Topics include sets，relations，functions， basic logic，proof techniques，counting，graphs，trees and probability． Recommended preparation：College Algebra．CSU／UC

## Computer Science 152 <br> HTML

Unit（s）：3．0 Class Hours： 54 Lecture total．
Introduction to HTML（Hypertext Markup Language）scripting and the creation of Hypertext documents．Topics will include the specification of the form and function of documents，inclusion of hypertext links， images，frames，tables，forms，JavaScript，VRML，and new features of HTML．CSU

## Computer Science 153

## A＋Essentials Hardware

Unit（s）：3．0 Class Hours： 54 Lecture total．
The A＋Essentials Hardware course maps to CompTIA＇s A＋Essentials Hardware exam．Course covers topics related to installing，building， upgrading，repairing，configuring，troubleshooting，optimizing， diagnosing，and performing preventive maintenance of basic personal computer hardware．Lecture and hands－on experience in structured labs is included．The A＋Essentials Hardware course teaches necessary competencies for an entrylevel IT professional． Topics include Personal Computer Components，Operating Systems， Networks，Security．Lecture and hands－on experience in structured labs is included．The A＋Essentials Hardware course maps to CompTIA＇s A＋Essentials Hardware exam．CSU

## Computer Science 154

A＋Essentials Software
Unit（s）：3．0 Class Hours： 54 Lecture total．
The A＋Essentials Software course teaches necessary competencies for an entry－level IT professional．Topics include Personal Computer Components，Operating Systems，Networks，and Security．Lecture and hands－on experience in structured labs is included．The A＋Essentials Software course maps to CompTIA＇s A＋Essentials exam．CSU

Computer Science 167

## Microsoft Access

Unit（s）：3．0 Class Hours： 54 Lecture total．
Relational Database Management using Microsoft Access．Includes design，creation and maintenance of a RDBMS，reports and form generation，queries，importing and exporting data，macros and modules using Access Basic．CSU

## Computer Science 168

## Microsoft Access－Visual Basic for Appl

Unit（s）：3．0 Class Hours： 54 Lecture total．
Advanced Relational Database Management using Visual Basic Application（VBA）programming，implementation in a multiuser environment and working with Access on the Internet．Computer Science 167 or equivalent experience is recommended．CSU

## Computer Science 169

## Structured Query Language（SQL）

Unit（s）：3．0 Class Hours： 54 Lecture total．
Recommended Preparation：Computer Science 167 with a minimum grade of $C$ ．
The course covers database concepts and the use of SQL（Structured Query Language）．Completion of Computer Science 167 or equivalent is recommended．CSU
Computer Science 170
Introduction to Oracle
Unit（s）：3．0 Class Hours： 54 Lecture total．
The course will teach students the industry－leading RDBMS software and cover topics in SQL programming and PL／SQL．Students will learn to manipulate and cross－reference data and to show the importance of importing and exporting BIG data．Relational database development concepts using Oracle and application development using PL／SQL will be taught．CSU

## Computer Science 173

## Introduction to Networking Technology

Unit（s）：3．0 Class Hours： 54 Lecture total．
A comprehensive overview of networking technology，including a history of LAN development and the uses and benefits of LAN＇s． Students are introduced to LAN terminology，components，standards， and upper level protocols．CSU

## Computer Science 175

## CompTIA Security+ Guide to Network Security

Unit(s): 3.0 Class Hours: 54 Lecture total.
Reccommended Preparation: Computer Science 138 with a minimum grade of $C$.
This course provides a comprehensive overview of network and information security topics such as threats, attacks, vulnerabilities, application/data/infrastructure security, cryptography, operational/ organizational security, risk management, disaster recovery, business continuity, as well as computer forensics. The contents also map to the CompTIA Security+ certification objectives to prepare students for the exam. CSU

## Computer Science 198

Topics
Unit(s): 1.0-3.0 Class Hours: 18-54 Lecture total.
Courses on a variety of contemporary topics will be offered to meet the interests and needs of students in Computer Science. CSU

## Computer Science 205

## Advanced Visual Basic

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Computer Science 105 with a minimum grade of $C$. Advanced programming for those seeking to further develop their skills using Visual Basic programming language. Course will cover the advanced features of the Visual Basic programming language, data structures, and advanced programming techniques available with Visual Basic. CSU/UC

Computer Science 213
C\# Programming
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recomended Preparation: Completion of Computer Science 120 is recommended.
Study of C\# programming. Topics covered include the .NET environment, object-oriented programming including inheritance and polymorphism, and writing graphical user interfaces. CSU/UC

## Computer Science 214

XML Programming
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to XML (Extensible Markup Language). The course covers what it is, how it works, what technologies surround it, and how it can be used in data handling and web pages. Knowledge of HTML recommended. CSU

## Computer Science 247

## Windows Server Operating System

Unit(s): 3.0 Class Hours: 54 Lecture total.
Installation, management, and configuration of Windows Server operating system for managing network environments. Recommended preparation: knowledge of any client-level Windows operating system. CSU

Computer Science 248
Microsoft SQL Server
Unit(s): 3.0 Class Hours: 54 Lecture total.
Microsoft SQL Server, relational database concepts, programming with SQL and Transact-SQL, stored procedures, triggers, and use of client tools. Course is designed for developers and database administrators. Basic knowledge of SQL, programming and/or database concepts is helpful. CSU

## COUNSELING (CNSL)

## Counseling N45

## Orientation to College

Unit(s): 0.5 Class Hours: 9 Lecture total.
Introduction to college services and programs. Identification and exploration of programs and services designed to assist students entering college credit courses. Grade: Pass/No Pass Only.

## Counseling 021

## Math Study Strategies

Unit(s): 1.0 Class Hours: 18 Lecture total.
This course is designed to give intensive assistance to students in the areas of solving word problems, group study skills, test-taking strategies, note taking, and time management. Topics also include learning styles, active listening, and overcoming barriers to math comprehension. Grade: Pass/No Pass Only.

## Counseling 090

Academic Success Strategies
Unit(s): 0.5 Class Hours: 9 Lecture total.
This course is designed to develop strategies for educational goal completion. Emphasis is placed on the purpose of higher education in society and the policies, practices, and behaviors related to success in college. Students will learn to apply principles of cognitive psychology to overcoming barriers to academic progress. Grade: Pass/No Pass Only.

## Counseling 100

## Lifelong Understanding and Self Development

Unit(s): 2.0 Class Hours: 36 Lecture total.
Integrates concepts of lifelong understanding pertaining to career choice, educational planning, and self inventory. Skills, values, and interest assessments are utilized. Emphasis is on applying psychological principles to values clarification, goal setting, and decision making. Students analyze social/cultural conditioning and explore successful strategies for living in a diverse society. CSU/UC

## Counseling 103

Educational Planning
Unit(s): 0.5 Class Hours: 9 Lecture total.
This course is designed to introduce students to the process of composing an educational plan. Emphasis is placed on the objective assessment of Career/Technical Education and transfer options. Students will identify an educational pathway for Career/Technical Education, AA/AS degree, and/or university transfer. Grade: Pass/No Pass Only. CSU/UC

## Counseling 104

## Personal and Goal Development for Educational Planning

 Unit(s): 1.0 Class Hours: 18 Lecture total.This course will facilitate the development of goals for educational planning. Students taking this course will receive an overview of graduation requirements, transfer requirements, academic policies, and college resources. Additional topics will include: student development theory, internal and external influences on educational success, purpose for attending college, and strategies for living a balanced life. Grade: Pass/No Pass Only. CSU/UC

## Counseling 106

Inquiries Into Higher Education
Unit(s): 1.0 Class Hours: 18 Lecture total.
A comprehensive and advanced study of selecting and completing an academic plan, developing goals and objectives, and choosing a college major. Topics include study techniques, assessing interests and skills and planning a major. Grade: Pass/No Pass Only. CSU/UC

## Counseling 107 <br> The Freshman Experience

Unit(s): 3.0 Class Hours: 54 Lecture total.
Integration of educational, socio-economic, and psychological factors that contribute to success in college. Development of personal learning style as it interfaces with the linked college classes. Development of college-level learning skills. CSU/UC

## Counseling 110 <br> University Transfer Research

Unit(s): 2.0 Class Hours: 36 Lecture total.
Development and enhancement of decision-making strategies for transfer students. Identification of educational/career goals. Analysis, comparison, and evaluation of university entrance, major, and postgraduate requirements, and student services. On-site research/field study at universities. CSU/UC

## Counseling 111

## Learning Skills Development

Unit(s): 1.0 Class Hours: 18 Lecture total.
Application of educational/psychological principles in the development of effective learning skills for college courses. Topics also include identifying diversities of cultural influence, learning style, time management, textbook study/comprehension, note-taking, research preparation, and testing. CSU

## Counseling 114 <br> Careers in Teaching

Unit(s): 1.0 Class Hours: 18 Lecture total.
Introduction to the teaching profession, culturally diverse student populations, career ladders and options, academic preparation, experience, credentials required for employment, utilizing career assessments, principles of goal setting, and exposure to teaching environments and teaching professionals. Students will formulate a career objective and develop an educational plan. (Same as Child Development 114). CSU

## Counseling 116

## Career/Life Planning and Personal Exploration

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is designed to assist students in successfully establishing and achieving education, career, and life goals. Students are guided through a reflective process that focuses on values, interests, personality, skills, and learning styles. Career and education options are researched, and students are exposed to college resources and support services. Decision making models and goal setting techniques are examined and will be used to develop short and long term education, and career and life plans. CSU/UC

## Counseling 120

## Assertive Self Development

Unit(s): 3.0 Class Hours: 54 Lecture total.
A process for building self esteem and confidence in personal/social/ professional interactions without feeling excess anger, guilt, stress, or passivity. Psychological theories will be used to identify, analyze, and change ineffective thought systems and behavior. CSU

## Counseling 121

## Introduction to STEM Study Skills

Unit(s): 1.0 Class Hours: 18 Lecture total.
This course is designed to introduce specialized study techniques for students in science, technology, engineering, and math courses. Effective learning processes will be examined through facilitated, structured peer interaction; strategies for complex problem solving; time management; and overcoming obstacles to achievement in rigorous coursework. Grade: Pass/No Pass Only. CSU

## Counseling 122

STEM Study Strategies
Unit(s): 1.0 Class Hours: 18 Lecture total.
This course examines and employs advanced study techniques for students in science, technology, engineering, and math courses. Effective learning processes will be strengthened through applying emotional intelligence concepts to group and classroom study, creating an exam preparation plan and formulating long and short term goals. Grade: Pass/No Pass Only. CSU

## Counseling 124

## College Success and Personal Growth

Unit(s): 3.0 Class Hours: 54 Lecture total.
Analysis of the concepts related to learning and self-development as c lifelong process. Examination of human motivation from psychological, social, and physiological perspectives. An evaluation of the roles of values, ideals, and principle centered leadership in achieving balance in life. CSU/UC

## Counseling 125

Exploring Leadership
Unit(s): 3.0 Class Hours: 54 Lecture total.
This introductory course will examine the fundamental concepts of effective leadership through reading, discussion, research, and inventories for self-awareness and assessment. The course will prepare students to understand the importance of leadership in careers, communities, and society in general and to assume responsibilities of leadership roles in college and community settings. CSU

## Counseling 128

## Introduction to Community Activism

Unit(s): 3.0 Class Hours: 54 Lecture total.
The study of issues facing communities and ways individuals can become involved in solving community problems. Introduces the study of communities in theory and practice: forces shaping past and present communities and issues defining contemporary communities. This course will facilitate the understanding of human beings as integrated physiological, psychological, and social entities within the context of communities and the process of change. CSU/UC

## Counseling 144

Reasoning and Problem Solving
Unit(s): 3.0 Class Hours: 54 Lecture total.
The nature of critical thinking, models and strategies; common fallacies of reasoning, self-regulation in the thinking process; application of critical thinking to complex issues of life. CSU/UC

## Counseling 150

## Introduction to Human Services

Unit(s): 3.0 Class Hours: 54 Lecture total.
The history and philosophy of human services including theoretical frameworks, the function and orientation of human service organizations and the roles and qualifications of human service workers. A study of the target populations served by the human services and the professional, ethical, and cultural issues facing the human service field. CSU

## Counseling 155

## Skills for the Helping Professions

Unit(s): 3.0 Class Hours: 54 Lecture total.
An exploration of processes for increasing mental flexibility and assisting people in getting resolution on life issues. Focus is on the theory and practice of methods which are based in inquiry, distinction, resolution, and integration. The role of self-responsibility and selfawareness will be emphasized. CSU

Counseling 198<br>Topics<br>Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total. Description of the course that will appear in the class schedule. CSU

## Counseling 220

## The Child As a Victim

Unit(s): 3.0 Class Hours: 54 Lecture total.
Exploration of battered, molested, and neglected children from five vantage points: child, law, parents, social services, and educator. (Same as Child Development 220). CSU

## CRIMINAL JUSTICE (CJ)

Criminal Justice 098
Topics
Unit(s): 3.0 Class Hours: 54 Lecture total.
Varies with topic.

## Criminal Justice 101 (C-ID AJ 110)

 Introduction to Criminal JusticeUnit(s): 3.0 Class Hours: 54 Lecture total.
This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces that have shaped those principles and approaches. Although justice structure and process are examined in a cross cultural context, emphasis is placed on the US justice system, particularly the structure and function of US police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, and sentencing and incarceration policies. CSU/UC

## Criminal Justice 101H (C-ID AJ 110)

Honors Introduction to Criminal Justice
Unit(s): 3.0 Class Hours: 54 Lecture total.
Honors-level enriched content regarding the complexities of the criminal justice system. Increased focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines and appraises the evolution of the principles and approaches utilized by the justice system and the evolving forces that have shaped those principles and approaches. Although justice structure and process are examined in a cross cultural context, increased emphasis is placed on the US justice system, particularly the structure and function of US police, courts, and corrections. Students will also examine the origins and development of criminal law, legal process, and sentencing and incarceration policies. CSU/UC

Criminal Justice 102 (C-ID AJ 200)

## Introduction to Corrections

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introductory course in corrections in the criminal justice system. Emphasis on history, types, analysis, alternatives, and impacts of punishment. Critical examination of types of correctional institutions and persons housed in them, and examination of current issues and challenges in the corrections field. CSU

## Criminal Justice 103 (C-ID AJ 120)

Concepts of Criminal Law
Unit(s): 3.0 Class Hours: 54 Lecture total.
Analysis of criminal liability and the classification of crimes against persons, property, morals, and public welfare. Special emphasis is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law, and the nature of acceptable evidence. Limited discussion of prosecution and defense decision making, criminal culpability, and defenses to crimes. CSU/UC

## Criminal Justice 103H (C-ID AJ 120) <br> Honors Concepts of Criminal Law

Unit(s): 3.0 Class Hours: 54 Lecture total.
Honors-level enriched content regarding criminal law. Presents analysis of criminal liability and the classification of crimes against persons, property, morals, and public welfare. Increased emphasis and appraisal is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law, and the nature of acceptable evidence. Expanded discussion of prosecution and defense decision making, criminal culpability, and defenses to crimes. CSU/UC

Criminal Justice 104
Prison Experience
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Full background check required
A practical and in-depth study of adult corrections in the United States. This class includes field trips to jails and prisons in the surrounding area, with follow-up analysis, discussion, and written assignments. Full background check required for access to facilities. CSU

Criminal Justice 105 (C-ID AJ 124) Legal Aspects of Evidence
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course examines categories of evidence and legal rules governing its admission and exclusion in the criminal process. CSU

Criminal Justice 106

## Coroner Death Investigations

Unit(s): 3.0 Class Hours: 54 Lecture total.
The investigation of homicides, suicides, accidents, and natural deaths. Emphasis on evidence collection and identification of cause of death. Topics include violent crime wounds, fire and electrical wounds, traffic collision fatalities, buried bodies, skeletal remains, and autopsy protocols. CSU

## Criminal Justice 107 (C-ID AJ 122)

Principles and Procedures in the Criminal Justice System
Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination and analysis of due process in criminal proceedings from pre-arrest through trial and appeal, utilizing statutory law and state and constitutional law precedents. (Same as Paralegal 107). CSU

## Criminal Justice 108 (C-ID AJ 150)

Crime Scene Investigation
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the role of forensics in criminal investigations. An examination of the methods utilized in the forensic analysis of crime scenes, pattern evidence, instruments, firearms, questioned documents, and controlled substances. CSU

## Criminal Justice 109 (C-ID AJ 160)

Community Interaction
Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict, with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics may include the consensus and conflicting values in culture, religion, and law. CSU/UC

## Criminal Justice 109H (C-ID AJ 160) Honors Community Interaction

Unit(s): 3.0 Class Hours: 54 Lecture total.
Honors-level enriched content regarding community interaction. This course examines and evaluates the complex, dynamic relationship between communities and the justice system in addressing crime and conflict, with an increased emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics will include the consensus and conflicting values in culture, religion, and law. CSU/UC

## Criminal Justice 110

## Street Gangs

Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of street gangs in the United States, with emphasis on California and the local area. Topics include ethnic gangs, taggers, hate groups, and prison gangs, and current efforts to supress their criminal activities, via enforcement, rehabilitation, and prevention. CSU

## Criminal Justice 148

Report Writing for Criminal Justice Personnel
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English N60 with a minimum grade of C.
To develop practical, precise report writing techniques as well as general writing skills applicable to law enforcement and corrections. CSU

## Criminal Justice 198

## Topic Course

Unit(s): 3.0 Class Hours: 54 Lecture total.
Varies with course. CSU

## Criminal Justice 205 (C-ID AJ 140) <br> Criminal Investigation Principles

Unit(s): 3.0 Class Hours: 54 Lecture total.
Techniques, procedures, and ethical issues in the investigation of crime. Emphasis upon organization of the investigative process, crime scene searches, interviewing and interrogating, surveillance, sources of information, utility of evidence, scientific analysis of evidence, and the role of the investigator in the trial process. CSU

## Criminal Justice 209

Organized Crime
Unit(s): 3.0 Class Hours: 54 Lecture total.
In-depth study of the development and methodology of international organized crime. Host countries and areas include: Italy, Sicily,
Japan, China, Colombia, Mexico, Russia, Haiti, Cayman Islands, and Caribbean. Emphasis on eonomic and societal impacts on the United States. CSU

## Criminal Justice 210

## Drug Abuse and Criminal Justice

Unit(s): 3.0 Class Hours: 54 Lecture total.
Study of the recognition, identification, and effects of illegal drugs: opiates, marijuana, hallucinogens, depressants, and stimulants. Emphasis will also be placed on investigation techniques, use of informants, search warrants, and treatment. CSU

## Criminal Justice 220 (C-ID AJ 220) <br> Juvenile Delinquency and Control

Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of the origin, development, and organization of the juvenile justice system. Explores the theories that focus on juvenile law, courts, and processes, and the constitutional protections extended to juveniles within the US justice system. CSU

## CRIMINAL JUSTICE ACADEMIES (CJA)

## Criminal Justice Academies 006B <br> Arrest and Control Training/ACT

Unit(s): 0.1-0.5 Class Hours: 3 Lecture, 21 Laboratory total. Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 099D with a minimun grade of $C$ or Commission on Peace Officer Standards and Training (POST) certified basic law enforcement academy or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course builds upon the student's existing skills and knowledge in the legal, safe, and proper application of arrest and control technique in the law enforcement environment. Instruction includes safe and proper use of ground fighting technique, use of chemical weapons, usє of non-lethal weapons, use of carotid control technique, and current case law. Grade: Pass/No Pass Only.

Criminal Justice Academies 007A
Gangs, Cults and Hate Crimes
Unit(s): 0.1-0.5 Class Hours: 4-40 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or its equivalent and eligible to receive peace officer training as defined in Government Code Section 1031
This course covers gangs, cults and hate crimes: Ethnic gangs, organized crime, current gang trends, gangs and drugs, and drug cartels. Course information is POST and/or STC approved. Grade: Pass/No Pass Only.

## Criminal Justice Academies 007B

## Gangs, Cults, Subcultures \& Hate Crimes

Unit(s): 0.2-0.5 Class Hours: 4-10 Lecture, 0-14 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to provide peace officers with current instruction on gangs, cults, subcultures, and hate crimes. Course content includes current trends, recent changes in laws, and strategies to address associated criminal activity. Grade: Pass/No Pass Only.

## Criminal Justice Academies 008B <br> Corrections Supplemental Core Course

Unit(s): 5.5 Class Hours: 89 Lecture, 7 Laboratory total.
Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 099D with a minimum grade of C or Commission on Peace Officer Standards and Training (POST) certified basic law enforcement academy, or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed for the corrections officer who has completed the Commission on Peace Officers Standards and Training (POST) Basic Academy. It meets the California Standards and Training for Corrections (STC) regulations for entry-level training for personnel whc work in adult custodial programs and facilities. Grade: Pass/No Pass Only.

## Criminal Justice Academies 008C <br> Emergency Response Team Training

Unit(s): 0.2 Class Hours: 1 Lecture, 7 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to enhance and review Emergency Response Team (ERT) responsibilities and protocols in compliance with Standards and Training for Corrections (STC). Grade: Pass/No Pass Only.

## Criminal Justice Academies 009B

## Fitness for Law Enforcement

Unit(s): 0.1-0.3 Class Hours: 4-16 Laboratory total.
Training designed specifically for law enforcement and those with an interest in entering a law enforcement basic police academy program. Grade: Pass/No Pass Only.

## Criminal Justice Academies 009C

Advanced Narcotics Training
Unit(s): 0.2-0.5 Class Hours: 4-10 Lecture, 0-14 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of C or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards.
Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to cover all aspects of illegal drug enforcement, including legal updates, search and seizure updates, investigative techniques, and other topics related to the enforcement of controlled substances statutes. Grade: Pass/No Pass Only.

## Criminal Justice Academies 009D

Drug Trends, Identification, Packaging, and Symptomology
Unit(s): 0.2 Class Hours: 3 Lecture, 5 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed to provide law enforcement professionals with the knowledge to identify and safely handle controlled substances. Report writing, evidence collection, and presumptive testing will be discussed. Grade: Pass/No Pass Only.

## Criminal Justice Academies 009E Narcotics Investigation

Unit(s): 3.0 Class Hours: 39 Lecture, 41 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed for sworn law enforcement officers assigned to investigate narcotic violations. The course prepares the student to identify, arrest, and successfully prosecute narcotic violators. Grade: Pass/No Pass Only.

## Criminal Justice Academies 010

Pre-Employment Preparation for Law Enforcement
Unit(s): 1.5 Class Hours: 14.50 Lecture, 33.50 Laboratory total.
Criminal justice career information will be provided. Emphasis will be on preparing students to successfully complete law enforcement preemployment testing including oral boards, physical agility, and training academy requirements. Grade: Pass/No Pass Only.

## Criminal Justice Academies 010B

## Supervision and Leadership

Unit(s): 0.3-1.0 Class Hours: 5-8 Lecture, 3-32 Laboratory total. Prerequisite: California P.O.S.T. Certified Peace Officer.
Course is designed to enhance the professional knowledge of law enforcement supervisors in specified groupings of leadership, supervision skills, legal issues, and handling of workplace investigations, in accordance with POST and STC Standards. Grade: Pass/No Pass Only.

## Criminal Justice Academies 010D Explorer Training Academy

Unit(s): 1.0-2.5 Class Hours: 6-16 Lecture, 34-92 Laboratory total. Prerequisite: Students sponsored by law enforcement agencies must meet agency Explorer Post application guidelines. Self-sponsored students must meet all prerequisites prior to being admitted into the course, and will be responsible for providing their own required uniforms and equipment. Self-sponsored student's applications will be evaluated and screened by the Criminal Justices Academies Coordinator and staff to ensure students are sufficiently prepared. Obtaining a medical clearance and medical insurance prior to attending is highly recommended. Ability to participate in strenuous physical activities such as running, marching, push-ups, sit-ups, kneeling, jumping, climbing, and handcuffing. Students will be exposed to loud noises, tear gas, and pepper spray. If the student is a minor, the parent(s) or legal guardian must sign consent forms and waivers related to and confirming student's physical, mental, and medical suitability for attending this course. Parent(s) or legal guardian must also sign consent forms for medical treatment and transportation of minor student. Students must meet academy hygiene and grooming standards, and will be required to follow strict rules of conduct at all times. Violation of rules of conduct may result in immediate dismissal from the course.
This course will prepare Law Enforcement Explorers for volunteer work at law enforcement agencies. Grade: Pass/No Pass Only.

## Criminal Justice Academies 011 Field Training Officer

Unit(s): 1.5 Class Hours: 21 Lecture, 19 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of C or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards.
Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed for sworn law enforcement officers assigned to supervise and train new officers. This course meets the requirements for field training officers as defined in POST Regulation 1004. Grade: Pass/No Pass Only.

## Criminal Justice Academies 012 <br> Basic Homicide Investigation

Unit(s): 1.5 Class Hours: 25 Lecture, 11 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is certified by California Peace Officer Standards and Training (POST) and meets the requirements for basic homicide investigations for California peace officers. The course is presented in cooperation with the Orange County Sheriff's Department. Grade: Pass/No Pass Only.

## Criminal Justice Academies 014 <br> Immigration and Customs Enforcement Corr

Unit(s): 0.2-0.5 Class Hours: 4-8 Lecture total.
Prerequisite: Criminal Justice Academies 008B or Criminal Justice Academies 069B with a minimum grade $P$.
This course is intended for correctional officers working in correctional institutions that are responsible for housing ICE detainees. Grade: Pass/No Pass Only.

## Criminal Justice Academies 015 Patrol School

Unit(s): 2.5 Class Hours: 23 Lecture, 57 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed for sworn law enforcement personnel who have completed a basic police academy program and are preparing themselves for an assignment as a field patrol officer. Students will build upon the knowledge they obtained in formal training and from previous law enforcement assignments and apply it to the course content in this course. Grade: Pass/No Pass Only.

## Criminal Justice Academies 015A Sergeants Patrol Transition Course

Unit(s): 1.0 Class Hours: 5 Lecture, 35 Laboratory total. Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to prepare a police supervisor to transition to a patrol assignment. Grade: Pass/No Pass Only.

## Criminal Justice Academies 016

Vehicle Theft for Patrol and Traffic Officers
Unit(s): 0.4 Class Hours: 2 Lecture, 14 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is certified by California Peace Officer Standards and Training (POST) and meets the requirements for advanced officer training in auto theft for patrol and traffic officers. Prior to taking this course students should have formal training and a working knowledge of patrol operations and criminal investigations. The course is presented in cooperation with the Orange County Sheriff's Department. Grade: Pass/No Pass Only.

## Criminal Justice Academies 021 <br> P.C. 832, Laws of Arrest

Unit(s): 1.5 Class Hours: 27 Lecture, 13 Laboratory total.
This course of instruction will provide the student with a basic knowledge of law enforcement. The course will cover history of law enforcement, arrest, and search and seizure laws. This course is Peace Officer Standard Training (P.O.S.T.) certified. Grade: Pass/No Pass Only

## Criminal Justice Academies 021A PC 832 Firearms

Unit(s): 0.5 Class Hours: 24 Laboratory total.
Prerequisite: Students must pass DOJ Livescan and application screening by Orange County Sheriff's Department Training Division. This course of instruction will provide the student with a basic knowledge of firearms, as well as related safety and liability issues. The course is P.O.S.T. certified and presented in cooperation with the Orange County Sheriff. Grade: Pass/No Pass Only.

## Criminal Justice Academies 026A Training Academy Preparation

Unit(s): 0.3 Class Hours: 16 Laboratory total.
This course is designed to prepare the student for the Basic Law Enforcement Academy. It will include drill, ceremony, physical training, reporting, and speeches. Grade: Pass/No Pass Only. Open Entry/Open Exit

## Criminal Justice Academies 029A <br> Explosive Devices Training

Unit(s): 0.1-0.8 Class Hours: 4-40 Laboratory total. Prerequisite: California P.O.S.T. Certified Peace Officer.
Training will provide updates on explosive devices: new technology, trends, and intelligence information. Grade: Pass/No Pass Only.

## Criminal Justice Academies 029B

## Bomb Technician Introduction

Unit(s): 2.0 Class Hours: 30 Lecture, 10 Laboratory total.
Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 099D with a minimum grade of C or Commission on Peace Officer Standards and Training (POST) certified basic law enforcement academy or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Student must possess, at minimum, a currently valid U.S. government secret clearance that authorizes them to attend this course. Student must be approved by FBI to attend this course. Student must meet FBI bomb technician requirements described in the National Guidelines for Bomb Technicians, as published by the FBI and National Bomb Squad Commanders' Advisory Board.
This course is designed for newly assigned bomb technicians. Topics include introduction to explosives, basic electricity, render safe procedures, bomb threats, threat assessment, and post blast investigations. Grade: Pass/No Pass Only.

## Criminal Justice Academies 029C

## Active Bomber Course

Unit(s): 0.5 Class Hours: 2 Lecture, 22 Laboratory total.
Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 099D with a minimum grade of C or Commission on Peace Officer Standards and Training (POST) certified basic law enforcement academy, or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Student must: 1) be free of felony convictions; 2) possess a valid California Driver's License; 3) undergo a fingerprint and criminal history check; 4) be a minimum of 18 years of age; 5) be a United States high school graduate or pass the GED, pass the California High School Proficiency Examination, or have attained a two-year or four-year degree from an accredited college or university; and 6) complete a medical suitability examination.
This course helps prepare law enforcement first responders react to a suicide bombing incident. Topics include threat evaluation, deployment of force, decision making, tactics, and scenarios. Grade: Pass/No Pass Only.
Criminal Justice Academies 029D Homemade Explosive Course
Unit(s): 0.3 Class Hours: 4 Lecture, 4 Laboratory total.
Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 099D with a minimum grade of C; Commission on Peace Officer Standards and Training (POST) certified basic law enforcement academy, or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to educate first responders on the dangers of homemade explosive devices and how to recognize bomb-making components and materials. Grade: Pass/No Pass Only.

## Criminal Justice Academies 029E

## Explosive Recognition and Response

Unit(s): 0.1 Class Hours: 2 Lecture, 2 Laboratory total.
Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 099D with a minimum grade of C; Commission on Peace Officer Standards and Training (POST) certified basic law enforcement academy, or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to teach students how to recognize the various components of explosions, as well as recognition of booby traps designed to harm first responders. Grade: Pass/No Pass Only.

## Criminal Justice Academies 034A

Advanced Officer Training (AOT)
Unit(s): 0.1-0.5 Class Hours: 4-40 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or its equivalent and eligible to receive peace officer training as defined in California Government Code Section 1031.
Course is designed to cover a variety of courses that are required and meet POST training mandate: communications, ethics, legal issues,
basic patrol procedures and cultural diversity. Legally/State Mandated Training. Grade: Pass/No Pass Only.

## Criminal Justice Academies 034B <br> Brady for Law Enforcement

Unit(s): 0.1 Class Hours: 2 Lecture, 2 Laboratory total.
Course is designed to provide law enforcement personnel with instruction on the Brady Rule. Grade: Pass/No Pass Only.

## Criminal Justice Academies 034C Law Enforcement Update

Unit(s): 0.2-0.5 Class Hours: 4-8 Lecture, 0-20 Laboratory total. Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency or legally approved to possess a baton in the State of California. Obtaining a medical clearance and medical insurance prior to attending is highly recommended. Ability to participate in strenuous activities such as kneeling, lying in a prone position while handcuffed, handcuffing other persons, use of impact weapons, and physically controlling noncompliant or combative persons. Students may be exposed to tear gas and/or pepper spray.
Course is designed to provide both sworn and non-sworn law enforcement personnel with training that is mandated for their continued professional certification and employment. All instruction is either POST or STC certified. Grade: Pass/No Pass Only.

## Criminal Justice Academies 034D Courthouse Operations

Unit(s): 0.3 Class Hours: 4 Lecture, 4 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. This course is designed to prepare a peace officer to work within the court system and a courthouse environment. Instruction includes the importance of ethical conduct, professionalism, preparation, and accurate witness testimony. Grade: Pass/No Pass Only.

## Criminal Justice Academies 038A Tactical/Weapons Training

Unit(s): 0.1-0.5 Class Hours: 4-40 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or its equivalent and eligible to receive peace officer training as defined in California Government Code Section 1031.
This course is designed to cover training that would be weapons based or involve law enforcement tactics: range qualifications, nomenclature, positioning, trigger pull, and tactics planning. POST required training and approved. Grade: Pass/No Pass Only.

## Criminal Justice Academies 038B <br> Basic SWAT Course

Unit(s): 2.0 Class Hours: 16 Lecture, 64 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency and, ability to lawfully possess fully automatic firearms, explosive ordinance, and a baton in the State of California.
Recommended Preparation: Obtaining a medical clearance and medical insurance prior to attending is highly recommended. Students may be exposed to tear gas and/or pepper spray. Students should have the ability to participate in strenuous activities such as kneeling, lying in a prone position while handcuffed, handcuffing other persons, use of impact weapons, and physically controlling non-compliant or combative persons.
A Peace Officer Standards and Training certified course to train peace officers to become a member of a Special Weapons and Tactics team. Grade: Pass/No Pass Only.

## Criminal Justice Academies 039A <br> First Aid/CPR Refresher

Formerly: Emergency/First Aid Training
Unit(s): 0.1 Class Hours: 8 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or Criminal Justice Academies 055B or Criminal Justice Academies 055D or Criminal Justice Academies 069B or their equivalent with a grade of Pass.
Course is designed to refresh first aid and CPR training. Grade: Pass/ No Pass Only.

## Criminal Justice Academies 039B

## First Aid Refresher

Unit(s): 0.1 Class Hours: 1 Lecture, 3 Laboratory total.
Course is designed to refresh first aid instruction for sworn and civilian law enforcement personnel. Grade: Pass/No Pass Only.

## Criminal Justice Academies 039C

## Emotional Wellness for Law Enforcement

Unit(s): 0.1 Class Hours: 1 Lecture, 3 Laboratory total.
Course is designed to help law enforcement personnel understand the impact and trauma of stress and the methodologies used to cope with various situations. Grade: Pass/No Pass Only.

## Criminal Justice Academies 040A

## Basic Peer Support Training

Unit(s): 0.4 Class Hours: 2.50 Lecture, 13.5 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. This course is designed to prepare members of a support team to respond and effectively support the psychological recovery and resilience of law enforcement personnel following a large scale critical incident. Grade: Pass/No Pass Only.

## Criminal Justice Academies 040B

## Post Critical Incident Response for Peer Support

Unit(s): 0.2 Class Hours: 2 Lecture, 6 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed to provide members of a Peer Support
Team with advanced knowledge and techniques to support the psychological recovery and resilience of law enforcement personnel following a large scale critical incident. Grade: Pass/No Pass Only.

## Criminal Justice Academies 055A

Driver Training/Force Option II
Unit(s): 0.1 Class Hours: 4-8 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or its equivalent and eligible to receive peace officer training as defined in Government Code Section 1031.
Course is designed to update student's skills in the area of emergency driving and use of force. Grade: Pass/No Pass Only.

## Criminal Justice Academies 055B

Correctional Services Assistant Academy
Unit(s): 8.0-8.5 Class Hours: 400-416 Laboratory total.
Prerequisite: Students will need to successfully complete agency written test, oral screening, physical agility test, background investigation, medical, and psychological testing.
This course is designed to train new civilian employees in aspects of working in a criminal justice custody environment in a California jail. Grade: Pass/No Pass Only.

## Criminal Justice Academies 055D Sheriff Special Officer Academy

Unit(s): 13.5-14.0 Class Hours: 656-672 Laboratory total.
Prerequisite: Students will need to successfully complete agency written test, oral screening, physical agility test, background investigation, medical, and psychological testing.
In coordination with California POST, this course provides training and certification for new sheriff special officers. Grade: Pass/No Pass Only.

## Criminal Justice Academies 055E <br> Sheriff Special Officer Transition Course

Unit(s): 2.5-3.0 Class Hours: 120-160 Laboratory total.
Prerequisite: Criminal Justice Academies 055B with a minimum grade of C.
This course is designed to provide students with the P.O.S.T. certified training required to transition from the Custody Service Assistant position to the Sheriff Special Officer position. Grade: Pass/No Pass Only

## Criminal Justice Academies 059 <br> Law Enforcement Supervisory Course

Unit(s): 3.5 Class Hours: 48 Lecture, 32 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of C or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
P.O.S.T. approved course for law enforcement personnel newly appointed to a first-level supervisory position. Topics focus on understanding the roles of law enforcement personnel, and providing appropriate training and supervision in critical field situations. Grade: Pass/No Pass Only.

## Criminal Justice Academies 066

## Basic Course Requalification

Unit(s): 5.5 Class Hours: 70 Lecture, 66 Laboratory total.
Prerequisite: Students must have successfully completed Criminal Justice Academies 99A Basic Academy, or Criminal Justice Academies 100D Modular 1 Academy, or the equivalent of either course as determined by the Assistant Dean of Criminal Justice. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Students must be free of felony convictions, possess a valid Driver's License, undergo a fingerprint and criminal history check, and obtain clearance from a licensed physician indicating capacity to participate in intensive physical activity. Students must furnish all of their own equipment, including ammunition and firearm. This course is designed to meet state requirements for persons qualifying under POST regulation 1008. Students must be physically able to participate in all classroom activities, including use of impact weapons, handcuffing, restraint devices, control holds, takedowns, firearm retention, and firearm takeaways.
This course is certified by the Commission on Peace Officers Standards and Training (POST) and re-certifies students who graduated from a basic academy more than three years ago. This course also re-certifies students who have been employed as a peace officer and are returning after a break of more than three years. Grade: Pass/No Pass Only.

## Criminal Justice Academies 068A

## Investigations and Report Writing

Unit(s): 0.1-1.6 Class Hours: 4-80 Laboratory total.
Prerequisite: California P.O.S.T. Certified Peace Officer.
This course is designed to cover all aspects of investigation from a theft to homicide to include first responder, report writing, evidence, and courtroom testimony. Grade: Pass/No Pass Only.

## Criminal Justice Academies 068B

Police Report Writing
Unit(s): 0.2-0.5 Class Hours: 1-2 Lecture, 7-22 Laboratory total.
To develop practical, precise report writing techniques as well as general writing skills applicable to law enforcement. Grade: Pass/No Pass Only.

## Criminal Justice Academies 068C Traffic Collision Investigation

Unit(s): 0.5 Class Hours: 3 Lecture, 37 Laboratory total.
This course is designed to provide the student with the knowledge and ability to investigate traffic collisions. Prior to attending the course students should be familiar with the basic skills provided in Learning Domain \#29 (Traffic Collision Investigation) from the POST basic police academy. Grade: Pass/No Pass Only.

## Criminal Justice Academies 068D

## Cybercrime Investigations for First Responders

Unit(s): 0.1 Class Hours: 8 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Course is designed to provide law enforcement first responder with the knowledge and ability to respond to a cybercrime incident. Students will learn their role as a first responder, how cybercrimes are committed, identify persons to be interviewed, and how to gather and protect cybercrime evidence. This course is POST certified. Grade: Pass/No Pass Only.

## Criminal Justice Academies 068E Criminal Investigations

Unit(s): 0.2-1.0 Class Hours: 4 Lecture, 0-36 Laboratory total.
Prerequisite: Criminal Justice Academy 099A with a minimum grade of Pass or, POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency or ability to lawfully possess a firearm and baton in the State of California.
Recommended Preparation: Obtaining a medical clearance and medical insurance prior to attending is highly recommended. Students may be exposed to tear gas and/or pepper spray. Students should have the ability to participate in strenuous activities such as kneeling, lying in a prone position while handcuffed, handcuffing other persons, use of impact weapons, and physically controlling non-compliant or combative persons.
This course is designed to provide students with state certified instruction in conducting criminal investigations. Grade: Pass/No Pass Only.

## Criminal Justice Academies 069A

Continuing Professional Training for Corrections
Unit(s): 0.2-0.5 Class Hours: 4 Lecture, 0-20 Laboratory total.
Prerequisite: Criminal Justice Academies 099A or Criminal Justice Academies 055B or Criminal Justice Academies 055D or Criminal Justice Academies 069B with a minimum grade of $P$ or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards. Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Medical Clearance from a licensed physician indicating capacity to participate in intensive physical activity.
Course covers all aspects of correctional officers training as required by the State of California (STC): Policies, legal update, case law, communication skills, transportation, arrest and control and weapons training. Grade: Pass/No Pass Only.

## Criminal Justice Academies 069B Corrections Officer CORE Course Enforcement

Unit(s): 9.0 Class Hours: 120.50 Lecture, 79.50 Laboratory total.
Prerequisite: Medical clearance from a licensed physician indicating capacity to participate in intensive physical activity.
This course is certified with Standards \& Training for Corrections (STC) and meets the requirements for Basic Corrections Officer Core Course. Course is presented in cooperation with the Orange County Sheriff's Department. Grade: Pass/No Pass Only.

## Criminal Justice Academies 069C <br> Prison Rape Elimination Act Training

Unit(s): 0.1 Class Hours: 2 Lecture, 2 Laboratory total.
Course is designed to provide employees assigned to work in a custody facility with the information they need to comply with the
Prison Rape Elimination Act (PREA). Grade: Pass/No Pass Only.

## Criminal Justice Academies 069D <br> Jail Security for Professional Staff

Unit(s): 0.2 Class Hours: 3 Lecture, 5 Laboratory total.
Course is designed to provide non-sworn law enforcement personnel with basic skills to operate in and around a custody facility. Grade: Pass/No Pass Only.

## Criminal Justice Academies 069E Self-Defense Strategies

Unit(s): 0.1 Class Hours: 8 Laboratory total.
Prerequisite: Ability to legally possess a baton in the State of California. Obtain a medical clearance and medical insurance prior to attending is highly recommended. Ability to participate in strenuous activities such as kneeling, lying in prone position while handcuffed, handcuffing other persons, use of impact weapons, and physically controlling non-compliant or combative persons. Student will be exposed to tear gas and pepper spray.
Course is designed to provide law enforcement personnel with strategies to escape physical attack while working in and around a custody facility. Grade: Pass/No Pass Only.

## Criminal Justice Academies 076A

## Police K-9 Training

Unit(s): 4.0-15.0 Class Hours: 200-720 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or its equivalent and eligible to receive peace officer training as defined in California Government Code Section 1031.
Intensive training for law enforcement personnel in the handling, deployment, and care of a police service dog. Training is required for assignment as a canine officer. Curriculum includes basic handler, narcotics and explosives instruction. Grade: Pass/No Pass Only.

## Criminal Justice Academies 076B <br> Canine Agitator Training

Unit(s): 0.3-1.5 Class Hours: 16-80 Laboratory total.
Course is designed to provide students with instruction required to serve as an agitator in a police dog and/or sport dog training environment under the direct supervision of a canine training instructor. Grade: Pass/No Pass Only.

## Criminal Justice Academies 083A Instructor Skills

Unit(s): 0.5 Class Hours: 24-40 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or Criminal Justice Academies 055B or Criminal Justice Academies 055D or Criminal Justice Academies 069B or their equivalent with a grade of Pass.
Course is designed to develop teaching skills and prepare instructors for the law enforcement classroom environment. Grade: Pass/No Pass Only.

## Criminal Justice Academies 088

## Campus Law Enforcement Update

Unit(s): 2.0 Class Hours: 32 Lecture, 8 Laboratory total.
Prerequisite: Criminal Justice Academies 099A with a minimum grade of P or POST certified basic law enforcement academy or equivalent as determined by the Associate Dean of Criminal Justice Academies and consistent with POST and/or STC accreditation standards.
Fundamental terms, concepts, laws and procedures basic to California law enforcement will not be taught or explained. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
This course is designed to expand the knowledge of peace officers working a campus environment. The course will include a history of campus law enforcement, legal authority, laws and liability, responsibility in learning environment, campus conduct, emergency response tactics, and the discipline process as it relates to students. Grade: Pass/No Pass Only.

## Criminal Justice Academies 090 <br> Academy Tactical Officer Training

Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Criminal Justice Academies 100A or its equivalent and eligible to receive peace officer training as defined in Government Code Section 1031.

This course is designed to prepare students to serve as tactical officers: in a California POST approved police academy training environment. Grade: Pass/No Pass Only.

## Criminal Justice Academies 098 <br> Topic Course

Unit(s): 0.1-2.0 Class Hours: 0-40 Lecture, 0-40 Laboratory total. Varies with topic. Grade: Pass/No Pass Only.

## Criminal Justice Academies 099 <br> OCSD Basic Pre-Academy

Unit(s): 2.5 Class Hours: 12.50 Lecture, 107.50 Laboratory total.
Prerequisite: Students sponsored by California law enforcement agencies must successfully complete required college screening procedures including interview, medical evaluation, and DOJ Livescan. Self-sponsored students must meet all prerequisites before entering the course, and will be responsible for providing their required uniforms and equipment. Students must sign information sharing, student testing, and weapons handling agreements before entering the course. Violations of these agreements may result in immediate removal from the course.

The course is designed to familiarize students with the duties and responsibilities associated with attending a basic police academy. Course instruction will include Drill and Ceremony, Introduction to Report Writing, Academy Protocol, Physical Training, and Program Overview. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Criminal Justice Academies 099A <br> Basic Police Academy

Unit(s): 20.0-21.0 Class Hours: 960-1024 Laboratory total.
Prerequisite: Students sponsored by California law enforcement agencies must meet P.O.S.T. hiring requirements. Self-sponsored students must successfully complete Criminal Justice Academies 010, Criminal Justice Academies 026A, Criminal Justice Academies 099 and required college screening procedures including interview, written test, medical evaluation, psychological evaluation and DOJ livescan. Self-sponsored students' applications will be evaluated and screened by Criminal Justice Academies Coordinator and Academy Fitness Instructor to assure students are sufficiently prepared. Self-sponsored students must meet all required prerequisites before entering or continuing the course.
Student will receive instruction in all areas of criminal justice, as required by P.O.S.T., for entry-level law enforcement officers. This course is offered in cooperation with the Orange County Sheriff's Department. Grade: Pass/No Pass Only.

## Criminal Justice Academies 099B

## Level 3 Modular Police Academy

Unit(s): 6.0-6.5 Class Hours: 71.50 Lecture, 96.5-112.5 Laboratory total
Prerequisite: Students sponsored by California law enforcement agencies must meet Peace Officers Standards and Training (POST) hiring requirements. Self-sponsored students must successfully complete required college screening procedures including interview, medical evaluation, and DOJ Livescan. Self-sponsored students must meet all prerequisites before entering the course, and will be responsible for providing their own required uniforms, equipment, and ammunition. All students must sign information sharing, student testing, and weapons handling agreements before entering the course Violations of these agreements may result in immediate removal from the course.
The first module of the P.O.S.T. Certified Modular Police Academy Program. Grade: Pass/No Pass Only.

## Criminal Justice Academies 099C <br> Level 2 Modular Police Academy

Unit(s): 6.5-7.0 Class Hours: 61.50 Lecture, 150.5-166.5 Laboratory total. Prerequisite: Criminal Justice Academies 099B with a minimum grade of C or Commission on Peace Officers' Standards and Training (POST) Certified Module 3 Police Academy Program or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Students sponsored by California law enforcement agencies must meet the POST hiring requirements. Self-sponsored recruits must successfully complete the required college screening procedures including interview, medical evaluation, and DOJ Livescan. Self-sponsored students must meet all prerequisites before entering the course, and will be responsible for providing their own required uniforms, equipment, and ammunition. All students must sign information sharing, student testing, and weapons handling agreements before entering the course. Violations of these agreements may result in immediate removal from the course.
The second module of the California P.O.S.T. Modular Police Academy Program. Grade: Pass/No Pass Only.

## Criminal Justice Academies 099D <br> Level 1 Modular Police Academy

Unit(s): 14.0-14.5 Class Hours: 124 Lecture, 314-334 Laboratory total.
Prerequisite: Criminal Justice Academies 099C with a minimum grade of C or Commission on Peace Officers' Standards and Training (POST) Certified Module 2 Police Academy Program or equivalent as determined by the Assistant Dean of Criminal Justice Academies. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Students sponsored by California law enforcement agencies must meet the POST hiring requirements. Self-sponsored recruits must successfully complete the required college screening procedures including interview, medical evaluation, and DOJ Livescan. Self-sponsored students must meet all prerequisites before entering the course, and will be responsible for providing their own required uniforms, equipment, and ammunition. All students must sign information sharing, student testing, and weapons handling agreements before entering the course. Violations of these agreements may result in immediate removal from the course.
The third and final module of the California P.O.S.T. Certified Modular Police Academy Program. Grade: Pass/No Pass Only.

## CULINARY ARTS (CULN)

## Culinary Arts 100

## Introduction to Culinary Arts and Hospitality

Unit(s): 2.0 Class Hours: 36 Lecture total.
Practices and procedures for individuals interested in a career in the Culinary Arts and Hospitality or allied fields. Includes field trips to industry sites and interaction with professionals in the field. CSU

## Culinary Arts 110

Food Sanitation and Safety
Unit(s): 3.0 Class Hours: 54 Lecture total.
Basic principles of sanitation and safety applied to commercial food service operations to comply with state regulations for sanitation certification. Includes certification knowledge of food borne illnesses and steps of food handling; personal hygiene, procurement, preparation, storage and service; and equipment use, care, selection, and accident prevention. (Same as Nutrition 110). CSU

## Culinary Arts 120

## Restaurant Management and Culinary

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Prerequisite: Culinary Arts 110 with a minimum grade of $C$. Students will explore, learn, practice, and apply the management and culinary skills needed for a career in the Restaurant and Food Service Industry. Laboratory work will include different cooking techniques and traditional food preparations for different sectors in the Industry. CSU

Culinary Arts 130
Advanced Culinary and Restaurant Management
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Culinary Arts 110 with a minimum grade of $C$.
Advanced food production techniques to be utilized in planning, costing, and implementing a wide variety of catered functions. CSU

## Culinary Arts 140

## Introduction to Baking \& Pastry

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Culinary Arts 110 or Nutrition and Food 110 with a minimum grade of $C$.
This course covers fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. Gourmet baked items and pastries are produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management, and will prepare students for entry level baking position in the food industry as a baker or pastry chef. CSU

Culinary Arts 150 Principles of Pantry
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Nutrition and Food 110 or Culinary Arts 110 with a minimum grade of $C$.
Foods presentation and cold food preparation, emphasizing knife usage for fruit and vegetable. CSU

## Culinary Arts 160 <br> Principles of Beverage Service

Unit(s): 2.0 Class Hours: 36 Lecture total.
Introduction to the basic skills needed for service of alcoholic beverages. The theory and practical skills required to identify and recommend different types of alcoholic and non-alcoholic beverages served in the food service/hospitality industry. Field trips may be required. CSU

## Culinary Arts 200 <br> Business Practices for Culinary Arts Professionals

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course offers insight into the various aspects of supervision in the hospitality industry. Supervisory roles, responsibilities, and essential managerial skills shall be discussed. The goal of the course is to equip students with the necessary authoritative and decision-making skills to be used in the workplace. CSU

## Culinary Arts 299

## Cooperative Work Experience Education

Unit(s): 1.0-4.0 Class Hours: 60-300 Laboratory total.
Prerequisite: 12 units completed in Culinary Arts or Nutrition \& Food degree/certificate courses.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. Students must work 75 hours of paid work or 60 hours of un-paid work to earn one unit of course credit. Credit may be accrued at the rate of one to four units per semester for a total of sixteen units. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## DANCE (DNCE)

## Dance 009A

Dance Laboratory I
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: By audition only.
Studio rehearsal time, emphasizing progressive development in the creation of concert performances and/or choreographic projects. Beginning level assignments are geared toward attainment of skills relating to concert performance and/or choreographic material. Material changes every semester. 24 hour earns 0.5 unit. Requires audition or instructor approval prior to enrollment. Grade: Pass/ No Pass Only. Open Entry/Open Exit. A combination of Dance 009A, Dance 009B, Dance 009C, and Dance 009D may be taken a maximum of four enrollments.

## Dance 009B

## Dance Laboratory II

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Dance 009A with a minimum grade of C.
Studio rehearsal time, emphasizing progressive development in the creation of concert performances and/or choreographic projects. Intermediate level assignments are geared toward attainment of skills relating to concert performance and/or choreographic material. Material changes every semester. 24 hour earns 0.5 unit. Requires audition,. Grade: Pass/No Pass Only. Open Entry/Open Exit. A combination of Dance 009A, Dance 009B, Dance 009C, and Dance 009D may be taken a maximum of four enrollments.

## Dance 009C

Dance Laboratory III
Unit(s): 0.5 Class Hours: 27 Laboratory total. Prerequisite: Dance 009B with a minimum grade of C.
Studio rehearsal time, emphasizing progressive development in the creation of concert performances and/or choreographic projects. Intermediate -advanced level assignments are geared toward attainment of skills relating to concert performance and/or choreographic material. Material changes every semester. 24 hour earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit. A combination of Dance 009A, Dance 009B, Dance 009C, and Dance 009D may be taken a maximum of four enrollments.

## Dance 009D

## Dance Laboratory IV

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Dance 009C with a minimum grade of C.
Studio rehearsal time, emphasizing progressive development in the creation of concert performances and/or choreographic projects. Advanced level assignments are geared toward attainment of skills relating to concert performance and/or choreographic material. Material changes every semester. 24 hour earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit. A combination of Dance 009A, Dance 009B, Dance 009C, and Dance 009D may be taken a maximum of four enrollments.

## Dance 100

## Dance History and Appreciation

Unit(s): 3.0 Class Hours: 54 Lecture total.
The development of dance in Western Europe and the U.S. from ancient times to the present. Explores dance as an emerging art form from the Renaissance to the 21th Century. Emphasizes the contemporary dance heritage of the United States. CSU/UC

## Dance 100H

Honors Dance History and Appreciation
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
An enriched honors course featuring intensive study of theatrical dance development in Western Europe and the U.S. from ancient times to the present. Utilizes writing, reading, critical thinking skills, required research, and student-initiated discussions in a seminar setting to explore dance history from cultural and aesthetic points of view. CSU/ UC

Dance 102
Introduction to Dance Forms
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
An introduction to historical and contemporary dance forms through lecture and activity. Experience in ballet, modern, jazz, hip-hop, improvisation, folk, ethnic and/or ritual dance styles. Recommended for future teachers. CSU/UC

## Dance 105 <br> World Dance and Cultures

Unit(s): 3.0 Class Hours: 54 Lecture total.
Dance around the world is studied in its cultural/social context. Emphasis on the different ways dance is used to express ideas about religion, cultural identity, myths, and social ideals. Includes cultures from Africa, Asia, Europe, India, Latin America, Middle East, and North America, plus a focus on Southern California. CSU/UC

## Dance 106A

## Introduction to Modern Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to modern dance emphasizing movement technique, dance vocabulary, and creative individual expression. Includes an introduction to choreographic principles and the historical/cultural context of American modern dance. For the student with little or no dance experience. A combination of Dance 106A, Dance 106B, Dance 206A, Dance 206B, Dance 209, and Dance 210 may be taken a maximum of four enrollments. CSU/UC

## Dance 106B

## Introduction to Modern Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to modern dance emphasizing movement technique, dance vocabulary, and creative individual expression. Includes an introduction to choreographic principles and cultural context of American modern dance. Dance 106B is a refinement of skills learned in Dance 106A. A combination of Dance 106A, Dance 106B, Dance 206A, Dance 206B, Dance 209, and Dance 210 may be taken a maximum of four enrollments. CSU/UC

## Dance 107

Dance Concert Performance
Unit(s): 1.0 Class Hours: 9 Lecture, 45 Laboratory total.

## Prerequisite: Audition

Formal Dance Concert performance experience for dance students. Includes both rehearsal process and a minimum of three on-stage public performances. 48 hours earns one unit. Repertoire and casting vary each semester. Grade: Pass/No Pass Only. CSU/UC

## Dance 108A

## Introduction to Ballet

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Prerequisite: Audition
Introduction to basic ballet emphasizing movement technique, dance vocabulary, and creative individual expression. Student learns basic ballet-barre exercises, center work, and short dance works. Includes an introduction to choreographic principles and cultural context of ballet. Prepares the student for Dance 108B. A combination of Dance 108A, Dance 108B, Dance 201A, Dance 201B, Dance 213, and Dance 214 may be taken a maximum of four enrollments. CSU/UC

## Dance 108B

## Introduction to Ballet

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Continuation of instruction in basic ballet technique, dance vocabulary, and creative individual expression. Student learns ballet-barre exercises, center work, and short dance works. Includes choreographic principles and cultural context of ballet. Dance 108B is a refinement of ballet technique skills learned in Dance 108A. A combination of Dance 108A, Dance 108B, Dance 201A, Dance 201B, Dance 213, and Dance 214 may be taken a maximum of four enrollments. CSU/UC

## Dance 109A

Pilates Mat I
Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to the mat exercises developed by Joseph Pilates to build strength, stability, coordination, and control in the core muscles of the body. Applicable to dance and general body conditioning. Grade: Pass/No Pass Only. A combination of Dance 109A, Dance 109B, and Dance 109C may be taken a maximum of four enrollments. CSU/UC

Dance 109B

## Pilates Mat II

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Continued refinement of skills learned in Pilates Mat I with an emphasis on building strength, stability, coordination, and control in the core muscles of the body. Applicable to dance and general body conditioning. Grade: Pass/No Pass Only. A combination of Dance 109A, Dance 109B, and Dance 109C may be taken a maximum of four enrollments. CSU/UC

## Dance 109C

## Pilates Mat III

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Intermediate level course in the mat exercises developed by Joseph
Pilates to build strength, stability, coordination, and control in the core muscles of the body. Applicable to dance and general body conditioning. Grade: Pass/No Pass Only. A combination of Dance 109A, Dance 109B, and Dance 109C may be taken a maximum of four enrollments. CSU/UC

## Dance 110

## Beginning Mexican Folk Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Introduces techniques, forms, and regional/historical backgrounds of dances from various regions of Mexico. Students will perform at least 3 different traditional dances. A combination of Dance 110, Dance 111, and Dance 117 may be taken a maximum of four enrollments. CSU/UC

## Dance 111 <br> Intermediate Mexican Folk Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Recommended Preparation: Dance 110 with a minimum grade of $C$.
Continued study of techniques, forms, and regional/historical backgrounds of dances from various regions of Mexico. Students will perform at least 3 different and more complex traditional dances. A combination of Dance 110, Dance 111, and Dance 117 may be taken a maximum of four enrollments. CSU/UC

## Dance 112

## Ethnic Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Introduction to the dance movement and techniques of selected ethnic groups from around the world, with emphasis on skill development and cultural/historical context. Focus chosen from African dance, Asian court or folk dance, dance forms from India, European folk dance, or Polynesian dance. No experience necessary. CSU/UC

## Dance 113A

## Flamenco Dance I

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Introduction to dance movements, techniques, and terminology of
Flamenco dance, music, rhythms, and song. Emphasis on dance skills and cultural relationship between Spain and the Gypsies. Prepares the student for Dance 113B. A combination of Dance 113A and Dance 113B may be taken a maximum of four enrollments. CSU/UC

## Dance 113B

## Flamenco Dance II

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Recommended Preparation: Dance 113A with a minimum grade of $C$. Continued study of Flamenco culture through dance, music, and song, with emphasis on particular rhythms. Students will explore the dynamics and structure of these rhythms and learn a choreographed dance. A combination of Dance 113A and Dance 113B may be taken a maximum of four enrollments. CSU/UC

Dance 117

## Introduction to Middle Eastern Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Introduction to Middle Eastern Dance, including belly dance and folkdance forms. Emphasis is on movement technique, vocabulary, and creative expression. Also explores the fusion of Western and Middle Eastern dance forms. No experience necessary. A combination of Dance 110, Dance 111, and Dance 117 may be taken a maximum of four enrollments. CSU/UC

Dance 118
Introduction to Caribbean and Latin Dance Styles
Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to Caribbean and Latin social dance styles, including musicality, partnering, and patterns. Emphasis is on movement technique, vocabulary and creative expression. Historical and contemporary forms such as Salsa, Merengue, Rhumba, Cumbia and Tango are studied. CSU/UC

## Dance 119A

Introduction to Jazz Dance
Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Introduction to jazz dance technique emphasizing elementary movement technique, vocabulary, and creative expression. Includes an introduction to composition and cultural context of jazz dance. For students with little or no dance experience. A combination of Dance 119A, Dance 119B, Dance 219A, Dance 219B, Dance 220, and Dance 221 may be taken a maximum of four enrollments. CSU/UC

## Dance 119B

## Introduction to Jazz Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
A refinement of basic jazz dance, emphasizing movement technique, vocabulary, and creative expression. Includes composition, the cultural context of jazz dance, and contemporary jazz dance forms. Movement repertoire differs from Dance 119A. A combination of Dance 119A, Dance 119B, Dance 219A, Dance 219B, Dance 220, and Dance 221 may be taken a maximum of four enrollments. CSU/UC

## Dance 120A

## Introduction to Hip-Hop Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to Hip-Hop dance emphasizing movement technique, dance vocabulary and creative expression. Includes learning routines and the history and culture of Hip-Hop dance. No prior experience necessary. CSU/UC

## Dance 120B <br> Intermediate Hip-Hop Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
A continuation of the study of Hip-Hop dance emphasizing movement technique, dance vocabulary and creative expression. Includes more complicated movements, advanced dance combinations and an overview of the historical and cultural context of Hip-Hop. Beginning Hip-Hop recommended. CSU/UC

## Dance 122 <br> Commercial Contemporary Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Instruction for the advanced dance student in commercial contemporary dance including the technical steps, styles, audition techniques, and performance skills necessary to be a successful dancer in commercial settings such as industrial, cruise ships, music videos, etc. CSU/UC

## Dance 123

## Introduction to Salsa Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to Salsa dance, including musicality, partnering, and patterns. Emphasis is on movement technique, dance vocabulary, and creative expression. Historical and contemporary forms are studied. CSU/UC

## Dance 124

## Intermediate Salsa Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Continued study in Salsa dance, including musicality, partnering, and patterns. Emphasis is on movement technique, vocabulary, and expression. Includes more complicated movements, complex patterns, and advanced dance combinations. Introduction to Salsa recommended. CSU/UC

## Dance 130

## Dance Improvisation

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
An introduction to structured dance improvisation, emphasizing movement invention, creative problem solving, group dynamics, and contact improvisation. Prior completion of dance technique course highly recommended. A combination of Dance 130, Dance 202A, and Dance 202B may be taken a maximum of four enrollments. CSU/UC

## Dance 140

## Dance Repertory Workshop

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Intensive course which emphasizes learning selected repertory.
Students learn one or more complete choreographic works of concert quality with instruction in specific performance styles, culminating in a public performance. Grade: Pass/No Pass Only. CSU/UC

## Dance 180

## Professional Studio Practices

Unit(s): 2.0 Class Hours: 36 Lecture, 36 Laboratory total.
Learn the procedures, management, and expectations of working in private dance studios. Applicable for both the dance educator and the professional dancer. CSU

## Dance 201A

Ballet I
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Introduction to ballet technique and terminology, including basic barre work, center work, and combinations en diagonale. Includes basic alignment, use of turnout, coordination, and ballet terminology. Dance 201A prepares the student for Dance 201B. CSU/UC

## Dance 201B

## Ballet II

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 201A with a minimum grade of C.
Continuation of beginning ballet technique and terminology, including barre work, center work, and combinations en diagonale. Includes basic alignment, use of turnout, coordination, and ballet terminology. Dance 201B utilizes additional combination work and prepares the student for Dance 213. CSU/UC

## Dance 202A Choreography

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation
Any course in an Intro to Dance or Beginning Level Dance Technique recommended with a minimum grade of C .
A class for the general student interested in dance that defines and explores the elements involved in creating a dance. Students will develop basic choreographic skills and apply those skills to express their ideas through dance movement. Compositions created by students will be performed in the studio. Open to non-majors. A combination of Dance 130, Dance 202A, and Dance 202B may be taken a maximum of four enrollments. CSU/UC

## Dance 202B

## Choreography for Dance Majors

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
A composition class for dance majors which defines and explores the elements involved in creating a dance. Students will develop choreographic skills emphasizing individual expression of ideas through dance movement. Advanced level assignments of solo and group compositions are created by dance major students and performed in the dance studio. A combination of Dance 130, Dance 202A, and Dance 202B may be taken a maximum of four enrollments. CSU/UC

## Dance 204A

## Dance Production I

Formerly: Dance Production
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: By audition only.
Concert dance production experience culminating in public performances in Phillips Hall Theatre as part of the Spring Student/ Faculty Dance Concert. Includes production basics, with an emphasis on performance techniques and working with faculty/student choreographers to create original dances. By audition only prior to enrollment. A combination of Dance 204A, Dance 204B, Dance 204C, and Dance 204D may be taken a maximum of four enrollments. CSU/ UC

## Dance 204B <br> Dance Production II

Formerly: Dance Production
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Dance 202B with a minimum grade of C or by audition only.
Concert dance production experience culminating in public performances in Phillips Hall Theatre as part of the Spring Student/ Faculty Dance Concert. Includes production basics, with an emphasis on choreography to create original dances. By audition only prior to enrollment. A combination of Dance 204A, Dance 204B, Dance 204C, and Dance 204D may be taken a maximum of four enrollments. CSU/ uc

## Dance 204C

## Dance Production III

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: By Audition only.
Continued study and refinement of concert dance production experience culminating in public performances in Phillips Hall Theater as part of the Spring Student/Faculty Dance Concert. Includes production elements, with an emphasis on performance techniques and working with student and/or faculty choreographers to create original dances. By audition only prior to enrollment. A combination of Dance 204A, Dance 204B, Dance 204C, and Dance 204D may be taken a maximum of four enrollments. CSU/UC

## Dance 204D

## Dance Production IV

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: By audition only.
Continued refinement and development of concert dance production experience culminating in public performances in Phillips Hall Theater as part of the Spring Student/Faculty Dance Concert. Includes production elements with an emphasis on choreography to create original dances. By audition only prior to enrollment. A combination of Dance 204A, Dance 204B, Dance 204C, and Dance 204D may be taken a maximum of four enrollments. CSU/UC

## Dance 205A

## Dance Touring Ensemble I

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Audition
Pre-professional ensemble to provide performance experience in various settings such as high school lecture presentations, dance festivals, or off-campus performing venues. For advanced students. Repertoire and casting vary each semester. Requires audition prior to enrollment. Grade: Pass/No Pass Only. A combination of Dance 205A, Dance 205B, Dance 205C, and Dance 205D may be taken a maximum of four enrollments. CSU/UC

## Dance 205B

## Dance Touring Ensemble II

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: By audition only.
Pre-professional ensemble to provide continued performance experience in various settings such as high school lecture presentations, dance festivals, or off-campus performing venues. For advanced students. Repertoire and casting vary each semester. Requires audition prior to enrollment. Grade: Pass/No Pass Only. A combination of Dance 205A, Dance 205B, Dance 205C, and Dance 205D may be taken a maximum of four enrollments. CSU/UC

## Dance 205C

Dance Touring Ensemble III
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: By audition only.
Pre-professional ensemble to provide performance and teaching experience in various settings such as high school lecturepresentations, dance festivals, or off-campus performing venues. Emphasis on rehearsal directing, co-teaching, and leadership roles for advanced students. Repertoire and casting vary each semester. Requires audition prior to enrollment. Grade: Pass/No Pass Only. A combination of Dance 205A, Dance 205B, Dance 205C, and Dance 205D may be taken a maximum of four enrollments. CSU/UC

## Dance 205D

## Dance Touring Ensemble IV

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: By Audition only.
Pre-professional ensemble to provide continued performance and teaching experience in various settings such as high school lecture presentations, dance festivals, or off-campus performance venues. Emphasis on continued experiences in rehearsal directing, coteaching, and leadership roles for advanced students. Repertoire and casting vary each semester. Requires audition prior to enrollment. Grade: Pass/No Pass Only. A combination of Dance 205A, Dance 205B, Dance 205C, and Dance 205D may be taken a maximum of four enrollments. CSU/UC

## Dance 206A

## Modern Dance I

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
A beginning level modern dance class emphasizing movement technique, dance vocabulary, and creative individual expression. Includes an introduction to choreographic principles and cultural context of modern dance. Students learn modern dance exercises and short dance combinations. Prepares the student for Dance 206B. A combination of Dance 106A, Dance 106B, Dance 206A, Dance 206B, Dance 209, and Dance 210 may be taken a maximum of four enrollments. CSU/UC

## Dance 206B

Modern Dance II
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 206A with a minimum grade of C. Continued study in modern dance emphasizing movement technique, dance vocabulary, and creative individual expression. Includes an introduction to somatic approaches to dance training to support body connectivity. Dance 206B is a continuation and refinement of learning longer dance combinations at the beginning-intermediate level. A combination of Dance 106A, Dance 106B, Dance 206A, Dance 206B, Dance 209, and Dance 210 may be taken a maximum of four enrollments. CSU/UC

## Dance 209

## Modern Dance III

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 206A and/or Dance 206B with a minimum grade of $C$.
Provides the continuing modern dance student opportunity to concentrate on more advanced steps and development of technical skills and somatic approaches to dance at the intermediate level. Emphasizes combinations, choreography, and performance style. Dance 206A or Dance 206B recommended. A combination of Dance 106A, Dance 106B, Dance 206A, Dance 206B, Dance 209, and Dance 210 may be taken a maximum of four enrollments. CSU/UC

## Dance 210

## Modern Dance IV

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 209 with a minimum grade of C. Continuing study of modern dance technique including more complicated combinations and advanced material. Emphasizes somatic approaches to dance training, performance expression, and comparison of modern dance styles. A combination of Dance 106A, Dance 106B, Dance 206A, Dance 206B, Dance 209, and Dance 210 may be taken a maximum of four enrollments. CSU/UC

## Dance 213

Ballet III
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 201B with a minimum grade of C. Study of ballet technique and terminology on the intermediate level-advanced. Course includes center adagio, jumps with beats, pirouettes, and movement combinations. Intermediate-advanced variations are also learned and performed in class. CSU/UC

## Dance 214

Ballet IV
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 213 with a minimum grade of C. Continuing study of technique and terminology at the intermediateadvanced level. Emphasizes longer, more intricate movement combinations and development of balletic style. Stresses expression and technique at intermediate-advanced level. Includes ballet history and comparisons of various ballet styles. CSU/UC

## Dance 219A

## Jazz Dance I

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Introduction to jazz dance emphasizing movement technique, vocabulary, and creative expression. Includes an introduction to choreographic principles and cultural context of jazz. Historical and contemporary forms are studied. Videos, concerts, and master classes enrich the course. A combination of Dance 119A, Dance 119B, Dance 219A, Dance 219B, Dance 220, and Dance 221 may be taken a maximum of four enrollments. CSU/UC

## Dance 219B <br> Jazz Dance II <br> Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.

Recommended Preparation: Dance 219A with a minimum grade of C. Continued study in beginning jazz dance emphasizing movement technique, vocabulary and creative expression. Includes an introduction to choreographic principles and cultural context of jazz. Historical and contemporary forms are studied. CSU/UC

## Dance 220 <br> Jazz Dance III

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 219B with a minimum grade of C. Instruction for the continuing jazz dance student in intermediate jazz steps and further development of technical skills. Emphasis will be placed on combinations, choreography, performance style, and cultural context of jazz. Historical and contemporary forms are studied. Dance 219B recommended. CSU/UC

## Dance 221

Jazz Dance IV
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 220 with a minimum grade of C .
Continuing study of jazz dance concentrating on advanced combinations with emphasis on movement technique, vocabulary, and performance style. Includes study of choreography, cultural context of jazz, and comparisons of historical and contemporary jazz styles. CSU/UC

## Dance 232

## Partnering

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Recommended Preparation: Dance 201A, Dance 206A or Dance 219A with minimum grade of $C$.
The study of partnering in modern, jazz, and classical ballet choreography. Includes duets, groups, and choreography involving any body contact or shifting of weight from one individual to another. CSU/ UC

Dance 240A
Repertory I
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Prerequisite: Audition.
Students develop rehearsal and performance skills through learning a repertoire of dances. Includes preparation for public concerts and performances at different venues. Dances vary each semester. Requires audition prior to enrollment. CSU/UC

## Dance 240B

## Repertory II

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Audition.
Continued refinement of rehearsal and performance skills through learning a more difficult repertoire of dances. Includes preparation for public concerts and performances at different venues. Dances vary each semester. Requires audition prior to enrollment. CSU/UC

## Dance 240C

## Repertory III

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Audition.
Students learn intermediate-advanced performance skills through small group, duet and/or solo repertoire. Includes preparation for public concerts and performances at different venues. Dances vary each semester. Requires audition prior to enrollment. CSU/UC

## Dance 240D

Repertory IV
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Audition
Continued study in intermediate-advanced performance skills through small group, duet and/or solo repertoire. Includes preparation for public concerts and performances at different venues. Dances vary each semester. Requires audition prior to enrollment. CSU/UC

## Dance 250A

## Hip Hop Dance I

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Introduction to hip-hop dance emphasizing movement technique, vocabulary, and creative expression. Includes an introduction to choreographic principles, improvisation, and cultural context of hiphop. A combination of Dance 250A, Dance 250B, and Dance 251 may be taken a maximum of four enrollments. CSU/UC

## Dance 250B <br> Hip-Hop Dance II

Formerly: Hip Hop Dance II
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 250A with a minimum grade of C. Continued study in hip-hop dance emphasizing movement technique, vocabulary, and creative expression. Includes improvisation, more difficult combinations, student compositions, and the cultural context of hip-hop. Movement repertoire differs from Dance 250A. A combination of Dance 250A, Dance 250B, and Dance 251 may be taken a maximum of four enrollments. CSU/UC

## Dance 251

## Hip-Hop Dance III

Formerly: DANCE 251- Hip Hop Dance III Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Recommended Preparation: Dance 250B with a minimum grade of C. Instruction for the continuing dance student in intermediate level hiphop dance technique and further development of performance skills.
Emphasis will be placed on combinations, choreography, performance style, and cultural context of hip-hop. A combination of Dance 250A, Dance 250B, and Dance 251 may be taken a maximum of four enrollments. CSU/UC

## Dance 260

## Somatic Practices in Dance

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
This course uses the principles of Bartenieff Fundamentals to develop efficient movement patterning within the body and to encourage and support personal expression, meaning-making, and an integration of the body and mind. Includes core concepts of the Laban Movement Analysis System which embodies all movement possibilities through Body, Effort, Shape, and Space. Knowledge in Anatomy/Physiology or Kinesiology and/or training in Intermediate/Advanced Dance Techniques are highly recommended. A combination of Dance 260, Dance 261, Dance 262, and Dance 263 may be taken a maximum of four enrollments. CSU/UC

## Dance 261

## Somatic Practices in Modern Dance

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Dance 260 with a minimum grade of C
Application of somatic practices learned in Dance 260 to intermediate/ advanced level modern dance techniques. Grade: Pass/No Pass Only. CSU/UC

## Dance 262

## Somatics Practices in Ballet

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Dance 260 with a minimum grade of $C$.
Application of somatic practices learned in Dance 260 to intermediate/ advanced level ballet techniques. Grade: Pass/No Pass Only. A combination of Dance 260, Dance 261, Dance 262, and Dance 263 may be taken a maximum of four enrollments. CSU/UC

## Dance 263

## Somatic Practices in Jazz Dance

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Dance 260 with a minimum grade of C
Application of somatic practices learned in Dance 260 to intermediate/ advanced level jazz dance techniques. Grade: Pass/No Pass Only. CSU/UC
Dance 270

## Dance Practicum

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total. Prerequisite: Dance 180 with a minimum grade of $B$.
Directed study at selected locations providing workplace experience as performer, choreographer, production assistant, dance management intern, dance team assistant, dance studio assistant, dance teacher, or somatics teaching assistant. Before placement, skills are assessed to match abilities with project or job needs. CSU/UC

Dance 290
Choreography for the Camera
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Television 140 with a minimum grade of C
Recommended Preparation: Dance 202B with a minimum grade of $C$ An introduction to dance for the camera, utilizing both practical and theoretical concepts of choreography and video production as it pertains to filmmaking. Through dance film analysis, studiobased exercises, viewings, and discussions, specific approaches to translating, contextualizing, framing, and structuring movement in the cinematic format will be explored. Designed for the dancer with intermediate/advanced technical training and choreographic skills. CSU/UC

## Dance 291

Dance Film Production
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Dance 290 with a minimum grade of C
A capstone course, where students build upon skills and concepts developed in previous camera, editing, cinematography, and choreography for the camera courses. Students produce and direct dance film productions. CSU/UC

## Dance 296 <br> Special Studies in Modern Dance <br> Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.

Recommended Preparation: Dance 210 with a minimum grade of C. An advanced level course offering individualized and accelerated instruction in modern dance techniques. Grade: Pass/No Pass Only. A combination of Dance 296, Dance 297, and Dance 298 may be taken a maximum of four enrollments. CSU/UC

## Dance 297

## Special Studies in Jazz Dance

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Recommended Preparation: Dance 221 with a minimum grade of $C$.
An advanced level course offering individualized and accelerated instruction in jazz dance techniques. Grade: Pass/No Pass Only. A combination of Dance 296, Dance 297, and Dance 298 may be taken a maximum of four enrollments. CSU/UC

## Dance 298

## Special Studies in Ballet Dance

Formerly: Dance 298 - Special Studies in Dance
Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Recommended Preparation: Dance 213 and Dance 214 with a minimum grade of $C$.
An advanced level course offering individualized and accelerated instruction in ballet dance techniques. Grade: Pass/No Pass Only. A combination of Dance 296, Dance 297, and Dance 298 may be taken a maximum of four enrollments. CSU/UC

## DIESEL (DSL)

## Diesel 101

Truck Preventative Maintenance
Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
This course provides the student with basic knowledge and skills in light, medium, and heavy duty truck maintenance. Safety, inspections, and hands-on practice are emphasized. CSU

## Diesel 108

## Oxyacetylene-Arc Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Technical knowledge and basic skills needed for occupational oxyacetylene and arc welding processes and applications. Students must furnish safety equipment. (Same as Automotive Technology 108 and Welding 108). CSU

## Diesel 109

## Truck Chassis: Brake and Suspension Service

Unit(s): 4.0 Class Hours: 36 Lecture, 108 Laboratory total.
This course covers the air and hydraulic brake systems used on modern medium and heavy duty trucks. Steering and suspension systems on these vehicles are also covered. Emphasis is placed upon utilizing the correct service and diagnostic procedures as required by the trucking industry. CSU

## Diesel 110

## Truck Chassis: Drive Train Service

Unit(s): 4.0 Class Hours: 36 Lecture, 108 Laboratory total.
This course covers the drive train systems used on medium and heavy duty trucks. Primary focus includes the manual transmission, clutch, and rear axle systems. Correct service procedures and diagnosis of these systems are emphasized as required on modern medium and heavy duty vehicles. CSU

## Diesel 113

## Allison Transmission Service

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total. A course of study designed to familiarize the student with the operation, service, overhaul, and troubleshooting of Allison automatic transmissions. Hands-on procedures are emphasized. Students must furnish approved safety glasses. CSU

## Diesel 115

## Introduction to Heavy Duty Mobile Hydraulics

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
This course presents the operation and service procedures for hydraulic devices found on heavy-duty diesel equipment and trucks. Hands-on procedures are emphasized. Student must furnish approved safety glasses. CSU

## Diesel 121 <br> Mid-Range Diesel Engine Service

Unit(s): 4.5 Class Hours: 54 Lecture, 90 Laboratory total.
Troubleshooting, service, and repair techniques for medium-duty diesel engines and fuel systems. Hands-on procedures and safety emphasized. Student must furnish approved safety glasses. CSU

## Diesel 122

## Electronics Fundamentals

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total. Introduction to the basic operating principles of electrical and electronic devices used in modern vehicles. Hands-on digital multimeter testing is highlighted. Safe and correct use of tools and equipment by students will be emphasized. Students must furnish approved safety glasses. (Same as Auto 122). CSU

## Diesel 125

## Heavy Duty Diesel Engine: Top End Service

Unit(s): 4.0 Class Hours: 36 Lecture, 108 Laboratory total.
This course covers the diagnosis and service of heavy duty diesel engine top end systems. Emphasis is placed on hands-on practice of measurement, specifications, and proper procedures as required by industry. CSU

Diesel 126
Heavy Duty Diesel Engine: Bottom End Service
Unit(s): 4.0 Class Hours: 36 Lecture, 108 Laboratory total.
This course covers the diagnosis and service of heavy duty diesel engine bottom end systems. Emphasis is placed on hands-on practice of measurement, specifications, and proper procedures as required by industry. CSU

Diesel 132
Diesel Fuel Injection Systems Service
Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
Theory, testing, and service of mechanical and electronic diesel fuel injection systems. Engine tune-up and troubleshooting techniques on current production medium and heavy-duty diesel engines. Handson procedures and safety are emphasized. Students must furnish approved safety glasses. CSU

Diesel 140

## Diesel Electrical Systems

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total. Diagnosis, service, and repair procedures for starting, charging, lighting, instruments, and multiplex systems. Wiring schematics, safety, and hands-on procedures are emphasized. Students must furnish approved safety glasses. CSU

Diesel 160
Foundations of Mobile Air Conditioning And Refrigeration
Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
This course focuses on the mobile air conditioning and refrigeration systems used on modern vehicles. The systems found on automobiles, light and heavy duty trucks, transport refrigeration units, and transit buses are covered in this course with hands-on practice. Safe handlins of refrigerant as well as preparation for the EPA 608 and 609 exams are covered. Student must furnish approved safety glasses. This course assists the student in preparation for A7, T7, and H7 ASE exams. (Same as Automotive Technology 160). CSU

## Diesel 162

## Air Conditioning and Heating

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Operation, testing, and servicing of truck cab air conditioning and heating systems as well as auxiliary power units. Safety, refrigerant recovery, special equipment, controls will be covered. Applied air conditioning theory. EPA 609 certification is a segment of this course. Helps prepare student for T7 ASE certification exam. CSU

## Diesel 165

## Transport Refrigeration

Unit(s): 5.0 Class Hours: 72 Lecture, 72 Laboratory total.
Theory and operation of truck and trailer refrigeration, electrical, and microprocessor control systems used on current production Carrier anc Thermo King units. Service, repair, and troubleshooting procedures used in industry will be covered. Hands-on procedures and safety are emphasized. CSU

## Diesel 202 <br> Introduction to Coach Operations

Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: The student must furnish approved safety equipment for the first meeting of the course. This equipment includes: Approved ANSI Standard Safety Glasses, Reflective Safety Vest, and Steel-Toed Shoes. This course provides students with an overview of the Certified Maintenance courses CERT1 through CERT10. Covers the ground rules and expectations of the program. Transit bus vehicle and shop safety training is highlighted. This safety training is required for participation in all CERT1 though CERT10 courses. Familiarizes students with the proper and safe use of hand tools and equipment. Includes an overview of the functions and procedures for preventive maintenance on current transit buses. Grade: Pass/No Pass Only. CSU

## Diesel 203

## Transit Vehicle Electrical Systems

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of $C$.
This course covers the functions and components of the electrical systems on current transit buses. Principles of electricity and safety are highlighted. An overview of troubleshooting techniques for both conventional and computer controlled buses are emphasized. This is the Certified Maintenance course CERT3. Grade: Pass/No Pass Only. CSU

Diesel 204
Transit Vehicle Air Systems
Unit(s): 0.5 Class Hours: 12 Lecture total.
Prerequisite: Diesel 202 with minimum grade of $C$.
This course provides students with functions and components of the air systems on current transit buses. Principles of air supply and safety are emphasized. An overview of troubleshooting techniques for both conventional and computer controlled buses is highlighted. This is the Certified Maintenance course CERT4. Grade: Pass/No Pass Only. CSU

## Diesel 205

## Transit Vehicle Air Brake Systems

Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of C.
This course introduces the students to the operation of air brake systems found on current transit buses. Diagnosis, service, and repair procedures are emphasized. This is Certified Maintenance course
CERT5. Grade: Pass/No Pass Only. CSU

## Diesel 206

Transit Vehicle Automatic Transmissions
Unit(s): 1.5 Class Hours: 27 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of $C$.
This course introduces the students to the basic theory of operation of the automatic transmissions currently used on transit buses.
Diagnostic and troubleshooting techniques, repair, and service will be emphasized. This is the Certified Maintenance course CERT6. Grade: Pass/No Pass Only.

## Diesel 207

## Transit Vehicle Engines

Unit(s): 2.5 Class Hours: 47.25 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of C.
Designed to acquaint the student with the basic theory of operation, diagnostic and troubleshooting techniques, repair and service of engines. Grade: Pass/No Pass Only. CSU

## Diesel 208

Transit Vehicle Heating, Ventilation, Air Conditioning
Unit(s): 1.5 Class Hours: 27 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of C.
This course introduces the student to the basic theory of operation of heating, ventilation, and air conditioning systems used on current transit buses. Service, maintenance, and troubleshooting will be emphasized. This is the Certified Maintenance course - CERT8. Grade: Pass/No Pass Only. CSU

## Diesel 209

Transit Vehicle Drive Train Suspension
Unit(s): 1.0 Class Hours: 21 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of $C$.
This course introduces students to the basic theory of operation of transit bus drive train and suspension systems. Diagnostic techniques, repair, and service of current transit bus drive train and suspension systems will be emphasized. This is the Certified Maintenance course CERT9. Grade: Pass/No Pass Only. CSU

Diesel 210

## Transit Vehicle Wheelchair Lifts

Unit(s): 0.5 Class Hours: 12 Lecture total.
Prerequisite: Diesel 202 with a minimum grade of C.
This course introduces the student to the basic theory of operation of wheelchair lifts and ramps currently used on transit buses. Service, maintenance, and troubleshooting will be emphasized. This is the Certified Maintenance course - CERT10. Grade: Pass/No Pass Only. CSU

## Diesel 287 <br> Alternative Fuels

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course introduces the student to the various types of alternative fuels used in modern vehicles. Safety and operation are highlighted. Compressed Natural gas (CNG) is emphasized. LPG, LNG, Bio-
diesel, Ethanol, and Hydrogen are also covered. This course prepares automotive as well as diesel students for industry. (Same as
Automotive Technology 287). CSU

## Diesel 288

Diesel Engines: Light-Medium Duty Systems
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course will introduce the practical applications of modern light and medium duty diesel engines. German as well as domestic engine systems will be covered including common rail fuel injection, turbo chargers, and diesel emission systems. (Same as Automotive Technology 288). CSU

## EARTH SCIENCE (ERTH)

## Earth Science 110 (C-ID GEOL 120) <br> Introduction to Earth Science

Unit(s): 3.0 Class Hours: 54 Lecture total.
A study of the processes that shape and form the Earth and define its place in the solar system. Introduction to the sciences of geology, oceanography, meteorology, and astronomy. Not open to students who are enrolled, or have credit in Geology 101 or Geography 101. CSU/UC

Earth Science 110H (C-ID GEOL 120) Honors Introduction to Earth Science
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
An intensive study of the processes that shape and form the Earth and define its place in the solar system. Introduction to the sciences of geology, oceanography, meteorology, and astronomy. Not open to students who are enrolled, or have credit in Geology 101 or Geography 101. CSU/UC

## Earth Science 115 <br> Earth Science for Educators

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
The study of the dynamic forces shaping the earth, including its oceans and atmosphere. This class is open to all majors but is oriented towards enhancing the earth science knowledge of future teachers. Also includes an introduction to the solar system. Half-day field trip required. Not open to students who are enrolled or have credit in Earth Science 110, Geology 101, or Geography 101. CSU/UC

## Earth Science 150

Introduction to Oceanography
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory study of the ocean and its topography, sediments, circulation, shoreline processes, biological productivity, and mineral resources. (Same as Geology 150). CSU/UC

## Earth Science 150H

## Honors Introduction to Oceanography

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Enriched and intensive study of the ocean's topography, sediments, circulation, shoreline processes, biological productivity, and mineral resources. Course is taught in a seminar format to provide optimal active learning and critical thinking. (Same as Geology 150H). CSU/UC

## ECONOMICS (ECON)

## Economics 120 (C-ID ECON 202) Principles/Macro

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Mathematics 060 or Mathematics 083 or Mathematics 084 with a minimum grade of C.
Introduction to macroeconomics, including basic economic concepts, analysis of markets, national income accounting, employment, short run business cycle fluctuations, long run growth trends, monetary and fiscal policies, and international economic issues. Intended for economics, business, and certain engineering/computer science majors. CSU/UC

## Economics 121 (C-ID ECON 201) Principles/Micro

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Mathematics 060 or Mathematics 083 or Mathematics 084 with a minimum grade of $C$.
Introduction to microeconomics, including basic economic concepts, analysis of markets, efficiency, consumer and firm behavior, industry structures, market failure, and resource markets. For economics, business, and certain engineering and computer science majors. CSU/ UC

## EDUCATION (EDUC)

## Education 105 <br> Exploration in the Field of Education <br> Unit(s): 3.0 Class Hours: 54 Lecture total.

An exploration in the field of education from early childhood through high school. This course requires 20 hours of structured observation in the following traditional and non-traditional settings: early childhood, elementary school, middle school, high school, special education, and English Language Development (ELD). Topics will include: a) roles and responsibilities of the teacher, b) teaching and learning of diverse student populations across different education spans, and c) careers in education beyond the classroom teacher. CSU

## Education 113 <br> Tutoring Reading in Elementary Schools

Unit(s): 1.0 Class Hours: 18 Lecture total.
An examination of effective tutoring strategies, focusing on the support for reading skills of elementary age children. Students are placed in local K-8 classrooms to gain experience with school-age children. Twenty+ service learning hours required in addition to lecture hours. Student must provide proof of negative TB screening. CSU

## Education 120A <br> Development of the School-Age Child

Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of the physical, cognitive, personality, and socia development of children between the ages of five and twelve years. Attention will be paid to the scientific study of middle childhood, developmental trends, and issues of diversity. Not offered every semester. (Same as Child Development 120A). CSU

## Education 120B

## School-Age Child Care and Recreation Activities

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course will focus on school age creative activities, including planning and implementing an appropriate before/after school curriculum. Attention will be paid to integrating academics, recreation, and creative activities suitable for school-age child care programs.
(Same as Child Development 120B). CSU

## Education 201 (C-ID EDUC 200)

 Introduction to EducationUnit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Education 105 with a minimum grade of B.

Introduction to the field of education including historical and philosophical perspectives; school governance and funding; societal influences and student diversity; school curriculum standards; professional standards and teaching performance expectations. Students will independently complete a minimum of 45 hours of Service Learning (structured observation and internship/fieldwork) in local public elementary school classrooms during the semester. CSU/ UC

Education 203
Introduction to Children With Special Needs
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduces the variations in development of children and adolescence with special needs, and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to individuals with special needs, and the identification and referral process. (Same as Child Development 203). CSU

## Education 204 <br> Personal Proficiency in Educational Technologies for Secondary Teachers

Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will develop personal proficiency in educational technologies to facilitate the teaching process in a secondary classroom setting. Students will also apply digital literacy skills through the use of presentation, spreadsheet, word processing and publication software, interactive online tools, internet search and retrieval, information literacy, electronic communication and collaboration, and awareness of legal and ethical issues in the digital world. CSU

## Education 205 <br> Personal Proficiency in Educational Technology for Elementary Teachers

Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will develop personal proficiency in educational technologies to facilitate the teaching process in an elementary classroom setting. Students will also apply digital literacy skills through the use of presentation, spreadsheet, word processing and publication software, interactive online tools, internet search and retrieval, information literacy, electronic communication and collaboration, and awareness of legal and ethical issues in the digital world. CSU

## Education 210

The Teaching Experience: Secondary Education
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to the history, philosophy, and sociology of secondary education. This course will cover the California Teaching Performance Expectation and Assessment, needs of special populations, English learners, struggling readers, content standards, and major curriculum reform documents. Students participate in 45 hours of structured observation in a local secondary classroom. CSU/UC

## EMERGENCY MEDICAL TECHNICIAN (EMT)

## Emergency Medical Technician 104 <br> Emergency Medical Technician

Unit(s): 10.0 Class Hours: 162 Lecture, 54 Laboratory total.
Corequisite: American Heart Association Basic Life Support (BLS) Healthcare Provider Card and concurrent enrollment in Emergency Medical Technician 105.
Basic course for the Emergency Medical Technician (EMT). Satisfies requirements for County/State Emergency Medical Services (EMS) Authority. Prepares students to take the Orange County Emergency Medical Services (OCEMS)/National Registry certifying exam for state certification. This course provides depth and breadth of foundational knowledge of the National EMS Education Standards derived from the National Scope of Practice Model for entry-level EMTs. CSU

## Emergency Medical Technician 105

Clinical EMT Skills Laboratory
Unit(s): 1.0 Class Hours: 54 Laboratory total.
Corequisite: Concurrent enrollment in Emergency Medical Technician 104. In order to pass Emergency Medical Technician 105, the student must pass Emergency Medical Technician 104. A failing grade in Emergency Medical Technician 104 will be given if Emergency Medical Technician 105 is not passed.
Supervised use of skills lab through supplemental learning to assist the student in development of clinical competency and mastery of psychomotor skills as addressed in course Emergency Medical Technician 104. Hours verified by instructor. Grade: Pass/No Pass Only. CSU

Emergency Medical Technician 111

## Recertification for EMT

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Valid EMT certificate or equivalent within past two years. Valid CPR card: American Heart Association Health Care Provider Update emergency medical techniques, equipment, and EMSA policies. Meets state requirements for EMT recertification. CSU

## Emergency Medical Technician 198

## Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Courses on a variety of contemporary topics will be offered to meet the interests and needs of students in the Emergency Medical Technician area. CSU

## ENGINEERING (ENGR)

## Engineering 012

## AEC Print Reading

Unit(s): 3.0 Class Hours: 54 Lecture total.
Reading and interpreting blueprints for Architecture, Civil Engineering, Construction (AEC). Information in this course provides preparation for more advanced AEC coursework. Recommended for students with no prior course(s) in blueprint reading.

## Engineering 051

## Basic Technical Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Principles of mechanical drawing including projections, views, dimensions, and conventions, utilizing sketches and computer drafting program. Designed for students with no prior mechanical drawing experience.

## Engineering 100A (C-ID ENGR 110)

 Introduction to EngineeringUnit(s): 2.0 Class Hours: 36 Lecture total.
Introduction to major fields of engineering (including mechanical, electrical, industrial, biomedical, aerospace, and others), the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Develops communication skills pertinent to the engineering profession. CSU/UC

## Engineering 100B

Introduction to Architecture/Civil Engineering /Construction (AEC)
Unit(s): 2.0 Class Hours: 36 Lecture total.
Introduction to the Architectural, Civil Engineering, Construction (AEC)
fields. Includes an overview of academic programs, career information and preparation requirements, virtual or in person field trips and guest speakers. CSU
Engineering 103

## Solidworks Basic Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course in parametric solid modeling. This course will include a solid modeling overview, solid model construction techniques (extrude, revolve, fillet, chamfer, etc.), including the preparation of individual solid components and basic solid model assemblies. (Same as Manufacturing Technology 103). CSU

## Engineering 104

## Solidworks Intermediate Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Engineering 103 or Manufacturing Technology 103 with a minimum grade of $C$.
Intermediate course for solid modeling, includes a review of the introductory class and changes to the Solidworks interface. Instruction in the use of intermediate Solidworks part modeling skills such as assembly modeling and sub-assemblies is included. (Same as Manufacturing Technology 104). CSU
Engineering 105
Solidworks Advanced Solid Modeling
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Engineering 104 or Manufacturing Technology 104 with a minimum grade of $C$.
Advanced course for solid modeling includes a review of the intermediate class and changes to the Solidworks interface. Instruction in the use of Solidworks part modeling, assembly modeling, sub-assemblies, advanced photoworks and advanced animator emphasized. (Same as Manufacturing Technology 105). CSU

## Engineering 110

## Advanced CAD Applications

Unit(s): 0.5-4.0 Class Hours: 27-216 Laboratory total.
Individual skill development for advanced students desiring to learn special applications using college licensed computer drafting and design software. Each 0.5 unit of credit requires 24 laboratory hours. Suggested preparation: Engineering 184. Grade: Pass/No Pass Only.
Open Entry/Open Exit. CSU

## Engineering 111

Basic Mechanical Blueprint Reading
Unit(s): 2.0 Class Hours: 36 Lecture total.
Reading and interpreting blueprints for manufacturing technologies.
(Same as Manufacturing Technology 111). CSU

## Engineering 112

## Society and the Built Environment

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introductory course that explores the far-reaching impacts of society on the built environment. A multidisciplinary examination of western and non-western society's ethics, economics, culture, ecology, processes, technology and tools on trends and developments. Field Trip may be required. CSU

## Engineering 114

## Geometric Dimensioning and Tolerancing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Engineering 111 or Manufacturing 111 or Engineering 122 or Engineering 125 with a minimum grade of C.
Drawing interpretation utilizing geometric dimensioning and tolerancing (ANSI Y14.5) as applied in engineering, manufacturing, and inspection. (Same as Manufacturing Technology 114). CSU

## Engineering 115

Cooperative Work Experience Education-Occupational
Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. CSU

## Engineering 118 (C-ID ENGR 180) Surveying

Formerly: Engineering 118, Plane Surveying
Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 162 or Mathematics 170 with a minimum grade of C or prerequisite may be satisfied by High School or College Trigonometry (C-ID MATH 851) or Precalculus (C-ID MATH 155) or High School transcripted Trigonometry or Precalculus with a minimum grade of $C$.
The course applies theory and principles of plane surveying: office computations and design; operation of surveying field equipment; and production of engineering plans/maps. Topics include distances, angles, and directions; differential leveling; traversing; property/ boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; land description techniques; and GPS. Extensive field work using tapes, levels, transits, theodolites, total stations, and GPS. Assists in passing the land surveyor-in-training exam. Completion of Mathematics 160 recommended. CSU/UC

## Engineering 119

## Advanced Plane Surveying

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Engineering 118 with a minimum grade of C; Instructor may waive if student can show proof of industry experience in surveying equal to or greater than Engineering 118.
Course emphasis is on: coordinate geometry calculations; route surveying with horizontal and vertical curves; topographic surveying and mapping; construction surveying; introduction to geospatial technologies, boundary surveying and surveys of public lands; and field surveying projects. Assists student in passing the state LSIT exam. CSU/UC

## Engineering 122

## Engineering Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Principles of engineering drawing: projections, views, sections, dimensions, tolerancing, assemblies, manufacturing processes, engineering drafting practices. Utilizing sketches and computer drafting program. CSU/UC

## Engineering 124

## Advanced Drawing

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total. Recommended Preparation: Engineering 122 or Engineering 125 with a minimum grade of $C$.
Advanced topics in engineering drawing and design - working drawings, fasteners, cams, gears, auxiliary views, advanced sectioning, dimensioning, tolerancing. Utilizing sketches and computer drafting program. CSU/UC

## Engineering 125 (C-ID ENGR 150) Engineering Graphics

Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Mathematics 162 with a minimum grade of $C$. May be satisfied by equivalent High School trigonometry class with minimum grade of $C$.
Recommended Preparation: Engineering 051 and Engineering 183 (may be taken concurrently).
Includes principles of engineering drawings in visually communicating engineering designs in sketches, and an introduction to computeraided design (CAD). Includes orthographic projections, dimensioning, tolerancing, section, design and graphical mathematics, utilizing sketches, introduction to 2D and 3D computer drafting program and the engineering design process. Assignments develop sketching and 2-D and 3-D CAD skill. The use of CAD software is an integral part of the course. Suggested preparation: Engineering 051 and Engineering 183 (may be taken concurrently). CSU/UC

## Engineering 130A

## CATIA Beginning Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course in parametric solid modeling CAD using CATIA software. Topics include: CAD overview, sketching, basic solid model creation (base features, pads, pockets, grooves, shafts, etc.) sketch constraints, reference elements, hole features, feature editing, assembly and drawing creation. (Same as Manufacturing Technology 130A). CSU

## Engineering 130B

CATIA Intermediate Solid Modeling
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Engineering 130A or Manufacturing Technology 130A with a minimum grade of C.
Intermediate course in parametric solid modeling CAD using CATIA software. Topics: intermediate/ advanced level sketching and modelinc (sweeps, ribs, slots), feature editing and transformation, assemblies, drafting workbench, surface modeling, and other CATIA modules. (Same as Manufacturing Technology 130B). CSU

## Engineering 131

## Engineering Mechatronics Technology Survey

Unit(s): 0.5 Class Hours: 9 Lecture total.
Course provides hands-on exposure to modern techniques in rapid prototyping, including: 3D printing, laser cutting, 3D scanning, and other processes used in mechatronics and engineering. Course provides a good introduction to the Engineering Mechatronics Technology program. CSU

## Engineering 132

## Introduction to Robotics

Unit(s): 2.5 Class Hours: 36 Lecture, 27 Laboratory total. Introductory course in robotics. Topics include history of robotics, role of robotics in modern engineering, industrial automation, emerging technologies, basic design, sensors, circuitry, actuators, mechanics, programming, and a hands-on robot design and construction project. CSU

## Engineering 133

## Basic Mechatronics Engineering Technology

Unit(s): 3.0 Class Hours: 45 Lecture, 27 Laboratory total.
Recommended Preparation: Engineering 103 and Mathematics 084 with a minimum grade of $C$.
Introductory course in mechatronics engineering technology with an emphasis on hands-on fabrication and testing. Topics include: basic design using CAD software and mechanics principles; introductory fabrication and testing of mechanical systems (mechanical elements, materials, fabrication processes, frames, fasteners, fluid systems, 3D printing, laser cutting, rapid prototyping, and other processes), and electronics systems (basic circuit analysis, construction, and measurement). CSU

Engineering 134
Intermediate Mechatronics Engineering Technology Unit(s): 3.0 Class Hours: 45 Lecture, 27 Laboratory total.
Recommended Preparation: Engineering 133 and Engineering 103 and Engineering 158
Intermediate course in mechatronics engineering technology with an emphasis on hands-on fabrication and testing. Topics include: design using CAD software and mechanics principles; intermediate level fabrication and testing of mechanical systems (machine elements, fabrication processes, rapid prototyping, assembly, measurement and inspection, and other processes), and electronics systems (circuit analysis, op amps, AC circuits, LEDs, soldering, circuit construction, use of DMM and oscilloscope). CSU

## Engineering 135

Advanced Mechatronics Engineering Technology
Unit(s): 3.0 Class Hours: 45 Lecture, 27 Laboratory total.
Recommended Preparation: Engineering 103 and Engineering 134 and Engineering 158
Advanced course in mechatronics engineering technology with an emphasis on hands-on fabrication and testing. Topics include: design using CAD software and mechanics principles; advanced level fabrication and testing of mechanical systems (drive systems, gears, linear motion elements, rapid prototyping systems, motor control, actuation, and other processes), and electrical systems (solid state devices, op amps, AC circuits, transducers, micro-controllers, circuit measurement devices). CSU

## Engineering 142

Architecture/Civil Engineering/Construction (AEC) Drawing
Unit(s): 4.0 Class Hours: 54 Lecture, 72 Laboratory total.
Recommended Preparation: Engineering 012 and Engineering 183
An introduction to conventional and computer aided drafting techniques in the relation of drawings for construction. Interpretation of details in construction drawings/blueprints and reference materials. Laboratory: Drafting plans for a residential building using the techniques introduced in the course. Includes ecological terms and concepts, BIM basics, and abbreviations. CSU

## Engineering 143

Fundamentals of Construction Engineering/Construction (AEC) Drafting Standards
Unit(s): 3.0 Class Hours: 54 Lecture total.
Overview of residential, commercial, institutional, industrial, and heavy civil construction and associated codes, standards, and ethical boundaries. Areas of focus to include type of foundations, materials, contract documents, working drawings and vocabulary. Includes an introduction to LEED/Green Construction. Field Trip may be required. CSU

## Engineering 154 <br> AEC BIM with Revit /Construction (AEC) Parametric and BIM Applications

Unit(s): 5.0 Class Hours: 54 Lecture, 108 Laboratory total.
Recommended Preparation: Engineering 142 and Engineering 186 with a minimum grade of C.Prior knowledge of 3D CAD and prior knowledge of AEC basics is recommended. Students who do not have that prior experience will need to plan to work longer hours and use optional course materials to ensure success. Engineering 142 and Engineering 186 or equivalent are recommended. Familiarity with 3D CAD environments is recommended. Students without that foundation knowledge will need to plan to plan to work longer hours to ensure success. Engineering 142 and Engineering 186 or equivalent industry experience are recommended.
This course covers AEC 3D Parametric applications for architectural, civil engineering, and construction drawings/documents. Includes BIM concepts, sustainable design, organization of projects, visualization and printing. Suggested preparation: Engineering 142 and Engineering 186. CSU

## Engineering 158

## Basic Machining Concepts and Operations

## Unit(s): 3.0 Class Hours: 18 Lecture, 126 Laboratory total.

Fundamental operations on lathes, milling machines, grinders, and drill presses, including precision measurements and layout. Equips students with skills and theory necessary to enter or upgrade within the machinist trade. (Same as Manufacturing Technology 158). CSU

## Engineering 165

Introduction to Energy
Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will gain a broad understanding of energy concepts, efficiencies, conservation, distribution, careers and cost-benefit analysis of energy resource use. The study of both renewable and non-renewable energy will be included. CSU/UC

## Engineering 175

## Introduction to Energy Analysis

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is focused on energy analysis with respect to energy conservation, energy auditing, and CA Title 24 requirements. Calculations will be performed manually and with the assistance of software applications. Career tracks in energy analysis will be explored. Energy concepts, heat loss calculations, basic solar concepts, site selection, design improvements, appliances, and utility systems will be covered within this course. CSU

## Engineering 177

Green HVAC
Unit(s): 3.0 Class Hours: 54 Lecture total.
In this course students learn the basic principles of heating, ventilation, and air conditioning (HVAC) systems in commercial buildings, with an emphasis on energy efficiency and renewable energy. Topics include heat loss calculations, fuels and combustion, waste heat recovery, and maintenance considerations for these systems. CSU

## Engineering 183

CAD I - Computer Aided Drafting
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
A first course in computer drafting focused on AutoDesk software, with AutoCAD as a base. Topics include display and file management, units, entities, object selection, advanced editing, layers, dimensions, text, graphic exchange, and phone apps. CSU/UC

## Engineering 184

CAD II - Computer Aided Drafting
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Recommended Preparation: Engineering 183 or industry CAD experience.
Intermediate course focused on Autodesk software, especially AutoCAD. Topics include including a variety of intermediate apps, blocks, hatches, attributes, inquiry, and 3-D introduction, plus smart phone use. CSU

## Engineering 186

## AutoCAD 3-Dimensional Drawing

Unit(s): 3.5 Class Hours: 36 Lecture, 81 Laboratory total.
Recommended Preparation: Engineering 184 with a minimum grade of
C. Equivalent industry experience/proficiency with AutoCAD drawing environment, setup, views, and commands would be comparable to Engineering 184 knowledge and skills.
Use of AutoCAD's 3-dimensional software. Includes 3-D models, extruding to 3-D, coordinate space, filter, dynamic viewing, basics for rendering \& images. CSU

## Engineering 187

3D CAD With Civil 3D
Unit(s): 3.5 Class Hours: 36 Lecture, 81 Laboratory total.
Recommended Preparation: Engineering 186
Advanced use of 3-Dimensional software for Civil Engineering applications. Includes: merging of models, advanced modeling, calculations, 3-dimensional rendering and presentation. CSU

## Engineering 195

## Renewable Energy

Unit(s): 3.0 Class Hours: 54 Lecture total.
Students will be able to cite sustainable methods for improving the operational performance of offices, schools, hospitals, and other residential and commercial buildings. In this course, students learn the principles, methods, and equipment associated with renewable energy systems. Topics include solar, wind, biomass and biofuels, fuel cells, hydropower, oceanic energy, geothermal, and energy storage. Nonrenewable energy sources, climate change, and the economics and politics of energy are also discussed. CSU/UC

Engineering 201
Residential and Light Commercial Construction Practices and Estimating
Unit(s): 4.0 Class Hours: 54 Lecture, 72 Laboratory total.
Recommended Preparation: Engineering 100B, Engineering 112, and Engineering 142.
Course provides practical knowledge, ecological terms and concepts, for planning, design, and construction of residential and light commercial buildings including materials, equipment, construction/ assembly methods, quantity take-off, and building codes/standards. CSU

## Engineering 203

## Sustainable Construction and Facilities Management

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course provides students the means to apply core sustainable principles to each step within the facilities planning, design, and management process. It examines best practices for site and building: energy, conservation, reclamation, recycle-ability, air, water, waste, sound, ecological literacy, and management tools. CSU

## Engineering 204

## Building Automation \& Controls

Unit(s): 3.0 Class Hours: 54 Lecture total.
In this course, students learn the basic principles of building automation and controls for energy management. Topics include control devices, signals, logic, and applications for various systems, such as electrical, lighting, HVAC, plumbing, fire protection, security, access control, voice-data-video, and elevator systems. CSU

## Engineering 205

Engineering Programming and Problem- Solving
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Prerequisite: Engineering 183 with a minimum grade of C.
This course includes fundamental studies of data handling and processing in engineering. It utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. It introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics. CSU

## Engineering 228

Descriptive Geometry
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Application of the concepts of orthographic projection to the solution of three-dimensional problems arising in the various branches of engineering. Introductory computer aided drafting/design concepts or applications. Suggested preparation: Engineering 122 or Engineering 125. CSU/UC

## Engineering 235

Statics
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Physics 217 and Mathematic 185 with a minimum grade of $C$ (Both classes can be taken concurrently).
A first course in engineering mechanics: properties of forces, moments couples and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and bending moment diagrams, center of gravity, centroids, friction, and area and mass moments of inertia. Utilizes SI metrics. CSU/UC

## Engineering 240 (C-ID ENGR 230)

Dynamics
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Engineering 235 with a minimum grade of C .
Fundamentals of kinematics and kinetics of particles and rigid bodies. Topics include kinematics of particle motion; Newton's second law, work-energy and momentum methods; kinematics of planar motions of rigid bodies; work-energy and momentum principles for rigid body motion; Introduction to mechanical vibrations. CSU/UC

## Engineering 250

Electric Circuits
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Mathematics 280 and Physics 227 with a minimum grade: of $C$ (Both may be taken concurrently).
An introduction to the analysis of electrical circuits. Use of analytical techniques based on the application of circuit laws and network theorems. Analysis of DC and AC circuits containing resistors, capacitors, inductors, dependent sources, operational amplifiers, and/or switches. Natural and forced responses of first and second order RLC circuits; the use of phasors; AC power calculations; power transfer; and energy concepts. CSU/UC

## Engineering 250L

## Electric Circuits Laboratory

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Corequisite: Engineering 250 with a minimum grade of $C$.
An introduction to the construction and measurement of electrical circuits, including resistive, RL, RC, RLC, and operational amplifier circuits. Basic use of electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Interpretation of measured data under DC, transient, and sinusoidal steady-state (AC) conditions. CSU/UC

## Engineering 281

Properties of Engineering Materials
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Chemistry 209 and Physics 217 with a minimum grade of $C$.
Study of atomic, microscopic, and macroscopic structure of metals; properties' enhancement by alloying and heat treatment; effects of temperature and corrosion on metals; fatigue; and other materials (wood, plastic, and concrete). CSU/UC

## ENGLISH (ENGL)

You have the right to take an English 101 class at Santa Ana College even if a pre-transfer level English class has been recommended to you and regardless of your grade in a previous English class. Additionally, starting in the fall of 2019, the Santa Ana College English Department will offer a choice between English 101 or English 101 with a support lab. If you have questions about this, we encourage you to meet with a counselor or English instructor and check out the SAC English Guide Self-Placement so that you can make an informed decision.

## English N50

## Introduction to Written Communication

Unit(s): $3.0 \quad$ Class Hours: 54 Lecture total.
Prerequisite: Qualifying profile from English placement process. Introduction to written communication including autobiographical, journal and summary writing, and responding to essays. Basic grammar and punctuation. Not applicable to associate degree. Students may be referred to the Learning Center.

## English N60

## Basics of Effective Writing

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English N50 with a minimum grade of C or qualifying profile from English placement process.
Sentence structure and paragraph writing including reading-based modeling and integrated study skills. Not applicable to associate degree.

## English 061

## Introduction to Composition

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English N60 with a minimum grade of C or qualifying profile from English placement process and Reading proficiency as assessed by the Reading assessment process.
Expository paragraph writing emphasizing various methods including argumentation. Practice in refining sentence skills and grammar.

## English 061X

## Accelerated Introductory Composition Skills

Unit(s): 5.0 Class Hours: 90 Lecture total.
Recommended Preparation: Reading 101X is recommended to be taken concurrently.
An accelerated alternative to the English course sequence designed to prepare students for English 101, Freshman Composition, emphasizing sentence structure, paragraph writing, essay writing, and argumentation using reading-based modeling.

## English 066

## Route to Writing Success: Freshman Composition Laboratory

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Corequisite: English 101 must be taken concurrently.
Laboratory exercises are designed to explore and understand the reading process, the writing process, grammar and punctuation rules in order to successfully complete English 101. This class must be taken concurrently with an English 101 course. Grade: Pass/No Pass Only.

## English 098

Topics in English
Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Specialized short course on topics related to needs of students. Not applicable to associate degree.

## English 101 (C-ID ENGL 100)

## Freshman Composition

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 061, English 061X, or English For Multilingual Students 112 with a minimum grade of C or qualifying profile from English placement process.
Expository and argumentative essays and the research paper. Special interest sections described in schedule of classes. CSU/UC

## English 101H (C-ID ENGL 100) <br> Honors Freshman Composition

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 061, English 061X or English For Multilingual Students 112 with a minimum grade of $C$ or qualifying profile from English placement process AND a high school or college GPA of 3.0 or above.
An enriched exposure to expository and argumentative essays and the research paper, requiring in-depth analysis of issues and substantive treatment of student-selected topics. CSU/UC

## English 102

(C-ID ENGL 105) (C-ID ENGL 110) (C-ID ENGL 120)
Literature and Composition
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C.
A second semester course in composition and literature that uses literature to develop critical thinking skills with extensive readings selected from the four major genres. CSU/UC

## English 102H

(C-ID ENGL 105) (C-ID ENGL 110) (C-ID ENGL 120)
Honors Literature and Composition
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C and a high school or college GPA of 3.0 or above.
An enriched approach designed for honors students. A second semester course in composition and literature that uses literature to develop critical thinking skills with extensive readings selected from the four major genres. CSU/UC

## English 103 (C-ID ENGL 105) Critical Thinking and Writing

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. This course focuses on developing critical thinking, reading, and writing skills by studying established argumentative methods and models and applying them to contemporary issues. Emphasis will be on logical reasoning and analytical and argumentative skills necessary for critical writing. CSU/UC
English 103H (C-ID ENGL 105)
Honors Critical Thinking and Writing
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C and high school or college GPA of 3.0 or above.
Enriched and intensive exploration of historical and contemporary issues. Application of critical thinking, writing and reading skills to established argumentative methods and models through studentinitiated discussion and problem-solving in a seminar setting. CSU/UC

## English 104 (C-ID ANTH 130) Language and Culture

Unit(s): 3.0 Class Hours: 54 Lecture total.
General introduction to the processes of human communication emphasizing coextensive aspects of language and culture. Surveys core areas of linguistic anthropology: structural linguistics; biological basis of language; and sociolinguistics. Topics include acquisition of first and second languages, languages in contract, and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as basis of study. CSU/UC

## English 104H (C-ID ANTH 130) <br> Honors Language and Culture

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: High School or college GPA of 3.0 or above
General introduction to the processes of human communication, emphasizing coextensive aspects of language and culture. Surveys core areas of linguistic anthropology: structural linguistics, biological basis of language, and sociolinguistics. Topics include acquisition of first and second languages, languages in contact, and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as basis of study.
Requires individual research and oral presentation of readings in a seminar setting. CSU/UC

## English 213 (C-ID ENGL 200) <br> Creative Writing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Introduction to writing techniques focusing on the four literary genres. Workshop format, emphasis on writing and critiquing. CSU/UC

## English 220

## Survey of the Bible As Literature

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. A study of the literary history, influence, and craftsmanship of the Bible and an exploration of related stories, poems, plays, essays, and other diverse materials. CSU/UC

## English 231 (C-ID ENGL 160)

## Survey of English Literature I

Formerly: English 231, Survey of English Literature
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Introductory study of representative selections of British literature from the Anglo-Saxon period to the neo-classical period. Emphasis on authors best exemplifying their period, such as Chaucer, Shakespeare, Spenser, Jonson, Milton, Donne, Dryden, Johnson, Behn, Pope and others. CSU/UC

## English 232 (C-ID ENGL 165) <br> Survey of English Literature II

Formerly: English 232, Survey of English Literature
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Introductory study of representative selections from the English Romantic Movement to the present. Emphasis on those authors best exemplifying their period, such as Austen, Wordsworth, Coleridge, Byron, the Shelleys, Keats, Tennyson, Newman, Carlyle, the Brownings, Dickens, the war poets, Houseman, Yeats, Wilde and Woolf. CSU/UC

## English 233A

## Shakespeare's Comedies and Romances

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Study of selected Shakespearean comedies and romances. Emphasizes dramatic elements, depiction of human nature, and timeless/timely conflicts. Augmented by films and, if available, appropriate field trips. Different selections in English 233A, English 233B, English 233C. CSU/UC

## English 233B

## Shakespeare's Tragedies and History Plays

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Study of selected Shakespearean history plays and tragedies.
Emphasizes dramatic elements, depiction of human nature, and timeless/timely conflicts. Augmented by films and, if available, appropriate field trips. Different selections in English 233A, English 233B, English 233C. CSU/UC

## English 233C

## Shakespeare's Theatre

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Study of selected Shakespearean plays. Emphasizes dramatic elements, depiction of human nature, and timeless/timely conflicts. Augmented by films and, if available, appropriate field trips. Different selections in English 233A, English 233B, English 233C. CSU/UC

## English 241 (C-ID ENGL 130) <br> Survey of American Literature 1600-1865

Formerly: English 241, Survey of American Literature 1600-1860 Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Survey of America's greatest works of literature from 1600-1865. Emphasizes the relationship between various works and general movements in American culture and literary history. CSU/UC

English 242 (C-ID ENGL 135)
Survey of American Literature, 1865-Present
Formerly: English 242, Survey of American Literature 1860-Present Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Survey of America's greatest works of literature and their contributions to the American culture from 1865 to present. Emphasizes the relationship between literary and intellectual history. CSU/UC

## English 243

## The Modern American Novel

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Study of significant American novels written since 1900. May include, but not limited to works by Fitzgerald, Hemingway, Faulkner, Hurston, Heller, Kerouac, Nabokov, Erdrich, Cisneros, and Morrison. CSU/UC

## English 245

The Image of African Americans in Literature and Films Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Examines literature and films by and about African-Americans in relationship to historical periods. Explores cultural, ethnic, and social environments for their impact on development of African-American images. CSU/UC

## English 246

Survey of Chicano Literature
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Examines American literature by and about Chicanos. Emphasizes the relationships between various works and the Chicanos' place in American society/culture. CSU/UC

English 270 (C-ID ENGL 180)
Children's Literature
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. A study of literature for children emphasizing the history, trends, issues, and evaluation of all major genres: picture books, poetry, drama, traditional literature, non-fiction, and fiction, including fulllength works. CSU/UC

## English 271 (C-ID ENGL 140)

Survey of World Literature I
Formerly: English 271, Survey of World Literature Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Survey of selections from world masterpieces from the beginnings of writing through the 1600's. Literary works studied in historical context for artistic form, their influence on their culture and others, and general contribution to understanding human experience. CSU/UC

## English 272 (C-ID ENGL 145)

## Survey of World Literature II

Formerly: English 272, Survey of World Literature
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. Survey of world literary masterworks since the Renaissance studied for artistic form, cultural influence, and contributions to modern and contemporary thought. CSU/UC

English 278
Survey of Literature by Women
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. An historical survey of literature by women. Will include short stories, novels, plays, poetry, and non-fiction. CSU/UC

## ENGLISH AS A SECOND LANGUAGE (ESL)

## English As a Second Language N88 <br> Verb Tenses

Unit(s): 1.5 Class Hours: 27 Lecture, 6 Laboratory total.
Prerequisite: Eligible for English For Multilingual Students 107 or higher.
Intensive oral and written practice with verb forms and tenses in a variety of contexts. Laboratory is required. May be taken after Education as a Second Language N89.

## ENGLISH FOR MULTILINGUAL STUDENTS (EMLS)

## English For Multilingual Students N49 Introduction to Academic Speaking Skills <br> Unit(s): 3.0 Class Hours: 54 Lecture total.

Beginning course for non-native students with previous instruction in basic English as a second language. Includes listening discrimination, pronunciation, speaking and listening skill building. Skills are intensively practiced and reviewed. Not applicable to associate degree. Grade: Pass/No Pass Only. (Same as Communication Studies N49)

## English For Multilingual Students N52A

Beginning American English Pronunciation Skills
Unit(s): 3.0 Class Hours: 54 Lecture total.
Instruction in pronunciation of American English sounds, identifying commonly mispronounced sounds, and common sound spelling patterns. Not applicable to associate degree. Grade: Pass/No Pass Only. (Same as Communication Studies N52A)
English For Multilingual Students N52B Intermediate American English Pronunciation Skills
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: English For Multilingual Students N52A with a minimum grade of $P$.
More extensive instruction in American English sounds. Emphasis on more difficult sounds, sound blends, word endings, syllable and word stress. Not applicable to associate degree. (Same as Communication Studies N52B)

English For Multilingual Students 055
Writing, Grammar and Reading I
Unit(s): 6.0 Class Hours: 108 Lecture total.
Prerequisite: Qualifying profile from ESL/EMLS placement process. Sentence-level writing for multilingual students who can speak English but often make grammar mistakes when writing. Narrative paragraphs and journal writing. Revision and editing. Basic grammar including verb tenses and modals. Critical reading.

## English For Multilingual Students 103

Grammar for Better Writing I
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Qualifying profile from ESL/EMLS placement process. Recommended Preparation: Concurrent enrollment English For Multilingual Students 104 is recommended.
Sentence refining course for multilingual students who can speak English but often make grammar mistakes when writing. Basic grammar including verb tenses, verbals, modals, nouns, pronouns, compound and complex sentences. Revision and editing. CSU

## English For Multilingual Students 104 <br> College Reading and Writing I

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Qualifying profile from ESL/EMLS placement process.
Recommended Preparation: Taking English For Multilingual Students 103 concurrently or prior to English For Multilingual Students 104 is highly recommended.
Reading and paragraph-level writing course for bilingual students who need to develop skills in reading academic material and writing academic paragraphs. Emphasis on connection between reading and writing, responding to reading critically, following the writing process and editing. CSU
English For Multilingual Students 105

## Grammar for Better Writing II

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English For Multilingual Students 103 with a minimum grade of $C$ or qualifying profile from ESL/EMLS placement test.
Concurrent enrollment English For Multilingual Students 106 is recommended.
Sentence refining course for bilingual students who can speak English but often make grammar mistakes when writing. Grammar focus is on sentence level accuracy, including transitions, the passive voice and multi-clause sentences. Revision and editing. CSU

## English For Multilingual Students 106 <br> College Reading and Writing II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: English For Multilingual Students 104 with a minimum grade of $C$ or qualifying profile from ESL/EMLS placement test.
Recommended preparation: Taking English For Multilingual Students 105 concurrently or prior to English For Multilingual Students 106 is highly recommended.
Reading and short essay-level writing course for bilingual students who need to improve skills in reading academic material and writing academic essays. Emphasis on connection between reading and writing, responding to reading critically, following the writing process and editing. CSU

## English For Multilingual Students 107 <br> Writing, Grammar and Reading II

Unit(s): $6.0 \quad$ Class Hours: 108 Lecture total.
Prerequisite: English For Multilingual Students 055 with a minimum grade of $C$ or qualifying profile from ESL/EMLS placement process.
Sentence and paragraph-level writing for multilingual students who can speak English but often make grammar mistakes when writing. Narrative and descriptive paragraphs. Revision and editing. Review of basic grammar. Practice with sentence variety. Critical reading. CSU

English For Multilingual Students 109
Writing, Grammar and Reading III
Unit(s): $6.0 \quad$ Class Hours: 108 Lecture total.
Prerequisite: English For Multilingual Students 107 with a minimum grade of $C$ or qualifying profile from ESL/EMLS placement process.
Paragraph-level writing for multilingual students who speak English but often make grammar mistakes when they write. Narrative, descriptive, and expository paragraph practice. Revision and editing. Complex grammar structures. Critical reading. CSU

## English For Multilingual Students 110 Introduction to the Essay

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite:English For Multilingual Students 109 with a minimum grade of C or qualifying profile from ESL/EMLS placement process. Introductory essay writing course for bilingual students who speak English fluently but make multiple grammar errors when writing. This composition course progresses from paragraph to essay, emphasizing basic expository modes, grammar review, critical reading, and revision and editing techniques. CSU/UC

## English For Multilingual Students 112 <br> Advanced Composition

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English For Multilingual Students 110 with a minimum grade of C or qualifying profile from ESL/EMLS placement process and Passing Proficiency on the Reading Placement process.
Advanced-level writing course for bilingual students who are fluent in conversational English but make multiple grammar errors when writing. Emphasis is on complex expository modes, grammatical accuracy in writing, grammar review, research methods, critical reading skills, and revision and editing techniques. CSU/UC

## ENTREPRENEURSHIP (ENTR)

## Entrepreneurship 100 <br> Introduction to Innovation and Entrepreneurship

Unit(s): 3.0 Class Hours: 54 Lecture total.
Discover how the entrepreneurial mindset teaches life skills that can make you more successful now and at every stage of your life. Examine how that mindset affects the social, psychological, and physiological impact of those life skills. Learn the basics of how to start a business and learn how to think like an entrepreneur. CSU

## Entrepreneurship 101

## Entrepreneurs and Success

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn the psychology of becoming a successful entrepreneur. Discover how to find flow and stay on course. Learn the habits of highly successful entrepreneurs. Discover how cutting-edge communication, design, and technology are 21st century drivers of success. CSU

## Entrepreneurship 102

## Entrepreneurial Ideas and Creativity

Unit(s): 1.0 Class Hours: 18 Lecture total.
Discover that business creativity is a process that can be learned.
Practice the process of searching for new business ideas using proven methods. Turn your creativity into business ideas. CSU

## Entrepreneurship 103 <br> Innovations and Opportunities

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn how to search for and create a good business opportunity. Learn how to turn business ideas into entrepreneurial opportunities. Explore and map personal specific knowledge to create business innovation. CSU

## Entrepreneurship 104

## Business Models

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn what a business model is and learn if a business model will make money. Discover how to filter business opportunities. Learn how to project whether business opportunities can be scalable, can target identifiable markets, and can achieve profitability. CSU

## Entrepreneurship 105 <br> Social Media, Bootstrapping, and Market Validation <br> Unit(s): 2.0 Class Hours: 36 Lecture total.

Learn the latest Social Media \& Bootstrap Marketing strategies \& techniques. Discover how to do more with marketing while spending less. Learn what you need to know about your customer and your market by designing a sound research strategy. Discover how to implement a market validation strategy. CSU

## Entrepreneurship 106

## Building an Entrepreneurial Team

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn how to create a network of principals, advisors, collaborators, managers, attorneys, accountants, and employees to build a successful business team. Explore how to organize your company and your business for day-to-day operations. Issues in hiring people and outsourcing. CSU

## Entrepreneurship 108

## Business Plans for Entrepreneurs

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn to complete an effective and useful business plan with elements such as a company overview, customer pain, solution, competition, team, business model, and financials. Learn the different audiences for a business plan. CSU

## Entrepreneurship 109

## Powerful Presentations

Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn how to collaborate and translate business plans into powerful sales tools using cutting-edge technology to create presentations using video, animation, visuals, stories and simulations. Discover how to bring business dreams alive. CSU

## Entrepreneurship 110 <br> Capstone Business Simulations

Unit(s): 3.0 Class Hours: 54 Lecture total.
Participate in realistic hands-on business simulations. Make complex business decisions and learn the implications of decisions made. Learn real world business principles in an exciting business context. CSU

## Entrepreneurship 111

Capstone Entrepreneurial Case Studies
Unit(s): 3.0 Class Hours: 54 Lecture total.
Discuss complex entrepreneurial business cases in a highly interactive environment. Translate complex business cases into critical incidents.
Translate critical incidents into simulations. Learn to analyze entrepreneurial problems and solutions. CSU

## Entrepreneurship 120

Introduction to Working As a Freelance Independent Contractor
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn the freelancer mindset. Learn how to work where you want, when you want, and how you want. Plan your life, your career, and your business. Develop your goals. Understand your personal strengths and skills. Learn how to turn your strengths and skills into viable, sustainable businesses by finding what is unique about you and turning that uniqueness into a personal brand. CSU

## Entrepreneurship 121

People Skills for the Freelancer
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn "people skills" - also known as "soft skills" - communication skills, technological skills, negotiation skills, and presentation skills needed to be successful as a freelance independent contractor. Develop your soft skills and selling skills to compete for business and keep customers happy. CSU

## Entrepreneurship 122

## Opportunities in Freelance Industries And Trades

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn how to spot opportunities within a trade and industry. Learn how to network and connect within a trade and industry in order to get business and get mentors. Learn to understand the competitive economic landscape within a trade or industry. Develop opportunities into a viable, sustainable business. Understand how to travel and work in a global economy. CSU

## Entrepreneurship 123

Marketing to Attract Customers and Grow Your Freelance Business
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn marketing as it applies to the freelance independent contractor. Learn market research, business development, branding, pricing, promotion, advertising, social media, sales, distribution and customer service. Understand how to identify and sell to a niche market. Learn how to market on a limited budget. Learn how to market yourself online. CSU

## Entrepreneurship 124

Survival Finance and Accounting for the Freelancer-Show Me the Money
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn personal finance, business finance and basic accounting. Learn financial survival tips for the freelancer. Understand sources of financing, cash and cash flow, Quickbooks, financial statements, pricing and profits, getting paid, accounts receivables and payables, record-keeping, budgeting and taxes. Understand how to open and operate your business on a limited budget. CSU

## Entrepreneurship 125

## Launch Your Freelance Business

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn how to launch a freelance business. Set-up and manage your operations. Learn about office locations, business licenses, insurance, government regulations, lawyers, entity formation, intellectual property, health insurance, work-life balance, leadership, teamwork, management and human resources. Topics include managing yourself, managing others and working with subcontractors. CSU

Entrepreneurship 140

## Fashion E-Commerce

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn how to create and manage an E-commerce store. Study of the operations of an established fashion E-Commerce retail business. Concepts of merchandising include buying, pricing, stock control, credit, credit control, omni-channel strategies, logistics, layout, customer service, marketing, and analytical software. (Same as Fashion Design Merchandising 140). CSU

## Entrepreneurship 147

Acting for the Non-Actor
Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
Acting techniques are learned to enhance life and business skills. Intended to help all individuals become more successful professionals in their chosen careers. (Same as Theatre Arts 107). CSU

## Entrepreneurship 148 <br> The Business of Entertainment

Unit(s): 3.0 Class Hours: 54 Lecture total.
The study of business issues relating to the entertainment industry with a focus on the formats of film, web, TV, and live performance. This course is designed for individuals desiring a career in entertainment. (Same as Theatre 108). CSU

## Entrepreneurship 174

Microsoft Dynamics for Business and Management Unit(s): 4.0 Class Hours: 72 Lecture total.
Hands-on training in the use of Microsoft Dynamics integrated software, covering setup and transaction processing for modules pertaining to inventory control, supply chain management, Enterprise Resource Planning (ERP), and other aspects of operational planning and management. Suggested preparation: completion of, or current enrollment in Accounting102 and Accounting 173. (Same as Accounting 174). CSU

## ENVIRONMENTAL STUDIES (ENVR)

## Environmental Studies 140 (C-ID GEOL 130) Environmental Geology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to environmental geology, the interaction between the Earth and mankind. Global study of geologic resources, resource management, geologic hazards, and waste remediation. (Same as Geology 140). CSU/UC

## Environmental Studies 170

Environmental Challenges of the 21st Century
Unit(s): 1.0 Class Hours: 18 Lecture total.
Examines the environmental impacts of increased human population on food, water and energy resources. Land use policies and environmental effects of pollution will also be analyzed. (Same as Biology 170). CSU

## Environmental Studies 200

## Environment of Man

Unit(s): 3.0 Class Hours: 54 Lecture total.
A biological and physical science introduction to environmental problems such as energy, resources, pollution, land use, population and food, including economic and political factors. A natural science elective. (Same as Biology 200). CSU/UC

Environmental Studies 259
Environmental Biology
Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Introduction to Environmental Biology. Includes study of ecosystems, population dynamics, classification, diversity of plant and animal species, effects of pollutants at both the cellular and organismal levels, and principles of ecology. (Same as Biology 259). CSU/UC

## ETHNIC STUDIES (ETHN)

## Ethnic Studies 101 (C-ID SJS 110)

 Introduction to Ethnic StudiesUnit(s): 3.0 Class Hours: 54 Lecture total.
This course serves to broaden the ethnic and racial perspective of students interested in American culture and society. It encompasses an historical overview of the social, cultural, political, and economic aspects of four ethnic groups - Native Americans, African Americans, Chicana/o, and Asian Americans - in the United States. Emphasis is placed on the historical and contemporary relationships of these groups with each other and the rest of American society. Duplicate credit not granted for Ethnic Studies 101H. CSU/UC

## Ethnic Studies 101H (C-ID SJS 110)

Honors Introduction to Ethnic Studies
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
This course serves to broaden the ethnic and racial perspective of students interested in American culture and society. It encompasses an historical overview of the social, cultural, political, and economic aspects of four ethnic groups - Native Americans, African Americans, Chicana/o, and Asian Americans - in the United States. Emphasis is placed on the historical and contemporary relationships of these groups with each other and the rest of American society. CSU/UC

## Ethnic Studies 102

## The Borderlands: Cultural Context and Intercultural

 RelationsUnit(s): 3.0 Class Hours: 54 Lecture total.
Analysis of the U.S. Mexico border region: geographic, historic, and artistic significance. Discussions of "borders" in international, regional, community, and personal contexts, as they concern intercultural relations. Attention given to the cultural interactions of African American, Asian American, Chicana/o, Latina/o and Native American ethnic groups within mainstream U.S. society. Duplicate credit not granted for Ethnic Studies 102H. CSU/UC

## Ethnic Studies 102H

Honors The Borderlands: Cultural Context and Intercultural Relations
Unit(s): 3.0 Class Hours: 48 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above. Enriched analysis of the U.S. Mexico border region: geographic, historic, and artistic significance. Discussions of "borders" in international, regional, community, and personal contexts, as they concern intercultural relations. Attention given to the cultural interactions of African American, Asian American, Chicano/Latino, and Native American ethnic groups within mainstream U.S. society, in a seminar format. CSU/UC

## FASHION DESIGN MERCHANDISING (FDM)

## Fashion Design Merchandising 005 Fashion Laboratory

Unit(s): 0.5-3.0 Class Hours: 27-162 Laboratory total.
Supervised use of the fashion laboratory. Lab hours verified by sign-in. Twenty-four hours laboratory per 0.5 units. Not applicable to associate degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fashion Design Merchandising 005A <br> Computer Fashion Laboratory

Unit(s): 0.5-1.5 Class Hours: 27-81 Laboratory total.
Corequisite: Concurrent enrollment in Fashion Design Merchandising 080 or Fashion Design Merchandising 081 or Fashion Design Merchandising 111A or Fashion Design Merchandising 111B or Fashion Design Merchandising 111C or Fashion Design Merchandisinc 140 or Fashion Design Merchandising 213 or Fashion Design Merchandising 215 or Fashion Design Merchandising 216.
Advanced level of supervised use of the computer fashion laboratory. Lab hours verified by sign-in. Twenty-four hours laboratory per 0.5 units. Not applicable to associate degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fashion Design Merchandising 052

## Knit and Swim Suit Sewing

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Construction techniques to sew lingerie, bathing suits, athletic attire, and knit t-shirts. Emphasis is placed on serger and coverstitch machine operation, fitting issues, and garment specification measurement techniques as related to knit garments for domestic and offshore production.

## Fashion Design Merchandising 053 Introduction to Sewing

Unit(s): 2.5 Class Hours: 36 Lecture, 27 Laboratory total.
Basics in sewing; how to use the sewing machine, understanding pattern terms and tools and constructing basic samples, skirts, and shirts. Grade: Pass/No Pass Only.

## Fashion Design Merchandising 055

## Children's Clothing

Unit(s): 2.0 Class Hours: 27 Lecture, 27 Laboratory total.
Quick basic sewing techniques. Emphasis on individualizing designs to create a variety of functional, durable children's garments.

## Fashion Design Merchandising 056

## Basic Sewing and Alterations

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Basic sewing techniques used in the restyling and alteration of readymade garments. Evaluation of fit and determination of appropriate styling changes emphasized.

## Fashion Design Merchandising 057

## Patterns for Dressmakers

Unit(s): 3.5 Class Hours: 54 Lecture, 36 Laboratory total.
Recommended Preparation: Fashion Design Merchandising 105A and Fashion Design Merchandising 105B.
Basic flat pattern methods for designing original patterns and altering designs of commercial patterns for dressmakers. Students will construct their designed garments.
Fashion Design Merchandising 058

## Decorative Apparel

Unit(s): 0.5 Class Hours: 9 Lecture, 9 Laboratory total.
Application techniques of sewing embellishments on surface textures and patterns in creating ethnic inspired apparel designs. Grade: Pass/ No Pass Only.

## Fashion Design Merchandising 059 <br> Fashion Modeling

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Modeling techniques of the formal fashion runway and informal showings, stressing preparation of the professional model. Grade: Pass/No Pass Only.

## Fashion Design Merchandising 070

## New York Study Tour

Unit(s): 1.0 Class Hours: 9 Lecture, 36 Laboratory total.
Prerequisite: Fashion Design Merchandising 100 with a minimum grade of $C$.
This course exposes students to numerous apparel industry career paths and illuminates how those paths are interconnected. Students learn about current events \& trending practices that are shaping the industry's focus. Further, students are provided with opportunity to network with numerous industry professionals, which can be instrumental in stimulating meaningful career endeavors. Students will travel to New York, the fashion capital of the United States. Students will enjoy exclusive access to design, production, \& merchandising collaboration in action, all while exploring employment and internship opportunities. Students partake in prearranged visits that may include apparel/textile manufacturers, designer showrooms, CAD companies, trend forecasters, visual display showrooms, fashion publication offices, retail stores, buying offices, and museum collections. Students are responsible for transportation, accommodation, and other necessary expenses.

## Fashion Design Merchandising 080 Embroidery

Unit(s): 1.5 Class Hours: 18 Lecture, 27 Laboratory total.
Applied techniques of embroidered decorative embellishments of surface textures and patterns in creating apparel designs. Incorporation of embroidery software and machinery.

## Fashion Design Merchandising 081 Fabric Printing

Unit(s): 1.5 Class Hours: 18 Lecture, 27 Laboratory total.
Application techniques of surface textures and patterns using screen printing techniques. Course includes digital application of artwork and preparation for printing.

## Fashion Design Merchandising 100 Introduction to Fashion

Unit(s): 3.0 Class Hours: 54 Lecture total.
Traces and analyzes the fashion industry, trends, and designers from socio-economic, political, technological, and global influences; emphasis on current fashion careers. CSU

## Fashion Design Merchandising 101 Buying and Merchandising

Unit(s): 3.0 Class Hours: 54 Lecture total.
Planning, purchasing, buying, and merchandising techniques of the apparel industry's wholesale to retail markets. Course covers ecommerce and brick and mortar stores. Includes research methods to create buying plans to satisfy consumer demands while aligning revenue and inventory requirements. Develop assortment planning, inventory management, and excel template creation. Identify SKU level demand analysis, inventory level evaluations, open to buy monitoring, and sales forecasting processes. CSU
Fashion Design Merchandising 102 Promotion and Coordination
Unit(s): 3.0 Class Hours: 54 Lecture total.
A study of the directing and coordination of event promotions. Emphasis on promotion planning and presentation, salesmanship, and event production. CSU

## Fashion Design Merchandising 103 Fashion Selection

Unit（s）： $3.0 \quad$ Class Hours： 54 Lecture total．
Apparel selection for professional and personal needs based on design，culture，and fashion trends．This course will examine the psychological，sociological，and cultural significance of clothing． Included is the analysis of color，line，and design as they relate to garment selection and wardrobe planning．The fashion professional uses this information to better design，produce，and select products to meet the needs of a culturally diverse consuming population．This course is designed for both men and women．CSU

## Fashion Design Merchandising 104 Textile Fibers and Fabrics

Unit（s）： 3.0 Class Hours： 54 Lecture， 18 Laboratory total．
This course is a study of textile fibers and fabrics，their production／ development，environmental impact，selection，use and care of wearing apparel and home furnishings．The course also covers current and future textile production and how appropriate performance characteristics are incorporated into materials and products．CSU／UC

## Fashion Design Merchandising 105A Beginning Sewing

Unit（s）：3．0 Class Hours： 36 Lecture， 54 Laboratory total．
Construction techniques for beginners with emphasis on learning how to use the sewing machine and reading a pattern．Students will construct a skirt，shirt，lined garment，and a compilation of construction techniques．Students will learn basic sewing techniques， how to select fabrics，and how to conduct fittings．CSU

## Fashion Design Merchandising 105B Intermediate Sewing

Unit（s）：2．0 Class Hours： 18 Lecture， 54 Laboratory total．
Follow－up of Fashion Design Merchandising 053 and Fashion Design Merchandising 105A，Beginning Sewing．Coordination of woven fabrics and pattern fitting in construction of class projects such as pants，dress shirts，and unlined jackets．CSU

## Fashion Design Merchandising 106 <br> Advanced Sewing

Unit（s）： 3.0 Class Hours： 36 Lecture， 54 Laboratory total．
Recommended Preparation：Fashion Design Merchandising 105A with a minimum grade of C ．
Advanced clothing construction techniques appropriate for creating custom garments．Emphasis is placed on working with designer patterns，complex contemporary fabrics，couture sewing techniques， and embellishment techniques．Embellishment techniques include tambour beading，sequins，and heirloom techniques．Projects include a custom formal occasion garment，an heirloom embellishment，and a collection of hand sewn samples．CSU

## Fashion Design Merchandising 107 Custom Tailoring

Unit（s）：2．0 Class Hours： 18 Lecture， 54 Laboratory total．
Advanced sewing students will apply traditional tailoring techniques in completing a lined suit or coat，including hand pad stitching and edge taping．CSU

## Fashion Design Merchandising 108

RTW Quality Analysis
Unit（s）： 3.0 Class Hours： 54 Lecture total．
An analysis of ready－to－wear apparel for quality evaluation of materials，construction，design，fit，care，and pricing related to consumer buying expectations．CSU

## Fashion Design Merchandising 109 <br> Flat Pattern Techniques

Unit（s）： 3.5 Class Hours： 54 Lecture， 27 Laboratory total．
Recommended Preparation：Fashion Design Merchandising 105A． Students will learn to use flat pattern basic block for pivoting and spreading methods to transfer trade sketches into first pattern outfits and dresses．Students will be required to sew their sample garments． CSU

## Fashion Design Merchandising 110 Corset Construction

Unit（s）：3．0 Class Hours： 36 Lecture， 54 Laboratory total．
Recommended Preparation：Fashion Design Merchandising 105A with a minimum grade of C ．
Class covers historical and modern corsets．Students will build a corset： from start to finish，including pattern drafting，boning construction， and fitting techniques．CSU

## Fashion Design Merchandising 111A <br> Fashion Illustration Techniques

Unit（s）：3．0 Class Hours： 36 Lecture， 54 Laboratory total．
Application of the basic techniques of drawing fashion and garment trade sketches．Students will use current fashion industry design software along with pencils and markers．CSU

## Fashion Design Merchandising 111B

Fashion Illustration
Unit（s）：2．0 Class Hours： 18 Lecture， 54 Laboratory total．
Prerequisite：Fashion Design Merchandising 111A with a minimum grade of $C$ ．
Further fashion illustration techniques including color media，camera ready skills，and design of layouts．Focus on Croquis Development and alternative customers including children，maternity，men，and plus size． CSU

## Fashion Design Merchandising 111C Fashion Portfolio Development

Unit（s）：1．0 Class Hours： 18 Lecture， 18 Laboratory total．
Prerequisite：Fashion Design Merchandising 111A with a minimum grade of $C$ ．
Advanced sketching course to create a cohesive fashion design or merchandising portfolio for job interview presentation．Focus on appropriate formats，design concepts，fabric rendering techniques， fashion figure proportions，flat technical drawings，and scholarship entries．CSU

## Fashion Design Merchandising 112 <br> Advanced Flat Pattern Marking

Unit（s）： 3.0 Class Hours： 45 Lecture， 45 Laboratory total．
Flat pattern drafting techniques applied to completing basic blocks and first patterns for pants and lined blazers／coats．Students are required to sew their sample garments．CSU

## Fashion Design Merchandising 113 Fashion Draping

Unit（s）：3．5 Class Hours： 54 Lecture， 36 Laboratory total．
Recommended Preparation：Fashion Design Merchandising 105A．
Basic techniques of draping flat fabric into three dimensional garment styles on the dress form to create first patterns．Students are required to sew their sample garments．CSU

Fashion Design Merchandising 125
Display Merchandising
Unit（s）：3．0 Class Hours： 54 Lecture， 18 Laboratory total．
Visual merchandise techniques and material in relation to the elements and principles of design and how it relates to the retail environment．CSU

Fashion Design Merchandising 136 (C-ID THTR 174) Fundamentals of Costume Design
Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
The study of costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated. (Same as Theatre Arts 136). CSU/UC

## Fashion Design Merchandising 140

## Fashion E-Commerce

Unit(s): 3.0 Class Hours: 54 Lecture total.
Learn how to create and manage an E-Commerce store. Study of the operations of an established fashion E-Commerce retail business. Concepts of merchandising include buying, pricing, stock control, credit, credit control, omni-channel strategies, logistics, layout, customer service, marketing, and analytical software. (Same as Entrepreneurship 140). CSU

## Fashion Design Merchandising 212

## Advanced Draping

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Fashion Design Merchandising 113 with a minimum grade of $C$.
Fashion design draping techniques further practiced in woven, knits, and motif fabrics in designing a line grouping. CSU

## Fashion Design Merchandising 213

Apparel Line Production
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Fashion Design Merchandising 100 or Fashion Design Merchandising 108, and Fashion Design Merchandising 109 and Fashion Design Merchandising 111A with a minimum grade of C. Instruction on designing a fashion line using industry production techniques and equipment. Techniques include computer sketching, computer pattern drafting, and garment construction. CSU

Fashion Design Merchandising 214
Tech-Packs for Manufactured Apparel
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Fashion Design Merchandising 111A with a minimum grade of $C$.
Introduction and application of garment industry manufacturing processes using production equipment to mass produce consumer products. Includes Enterprise Resource Planning (ERP), retail math, and Product Data Management (PDM) training. Students will learn how to take design concepts through the sourcing, costing, and production process. CSU
Fashion Design Merchandising 215
Computer Fashion Illustration
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation: Fashion Design Merchandising 111A with a minimum grade of $C$.
Computerized fashion illustration is taught using computer software. Software programs include Adobe Illustrator, Photoshop, InDesign, and embroidery software. Student needs to know how to manually draw trade flats and posed figures prior to enrolling. CSU

## Fashion Design Merchandising 216

Computer Flat Pattern Design, Grading, And Marking
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation: Fashion Design Merchandising 109
Computerized apparel pattern drafting, size grading, and marking are taught using Tuka Tech software as tools. Prior to enrollment, student must be able to manually draft patterns, grade patterns, and layout markers. CSU

## Fashion Design Merchandising 299

Cooperative Work Experience Education
Unit(s): 1.0-6.0 Class Hours: 60-450 Lecture total.
Recommended Preparation: 12 units of Fashion Design Merchandising courses completed with C or better.
This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. Credit may be accrued at the rate of one to six units per semester. One unit of course credit equals 75 hours of paid work or 60 hours of un-paid work. Student repetition up to 16 units is permissible per Title 5, Section 55253.
Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## FIRE ACADEMY (FAC)

## Fire Academy 007

## Strength and Conditioning for the Fire Service

Formerly: Fire Academy 007, Orientation and Physical Fitness
Unit(s): 2.5 Class Hours: 8 Lecture, 96 Laboratory total.
Corequisite: Concurrent enrollment in Fire Academy 050 or Fire Academy 060.
Strength and conditioning course for students preparing for a career in the Fire Service. Emphasis will be placed on metabolic conditioning and strength development to meet the demand of fireground activities, attaining fireground movement competency and to obtain a passing score on the Physical Ability Test (PAT). Grade: Pass/No Pass Only.

## Fire Academy 008

## Biddle Physical Ability Test (PAT) Examination

Unit(s): 0.1 Class Hours: 2 Lecture, 2 Laboratory total.
The Los Angeles County and Orange County Fire Chief's Physical Ability Test is designed to examine the physical ability of the individual when it comes to performing the functions or tasks of a Firefighter. Grade: Pass/No Pass Only.

Fire Academy 017
Physical Ability Instructor
Unit(s): 0.1 Class Hours: 2 Lecture, 2 Laboratory total.
Designed to train instructors to administer the Biddle Physical Ability Test and to evaluate instructors' ability to administer the physical ability test. Grade: Pass/No Pass Only.

## Fire Academy 018A

Firefighter I Physical Ability Practice (Exam)
Unit(s): 0.1-0.3 Class Hours: 5-16 Laboratory total.
Training designed specifically for the fire service and those interested in entering the fire service. May not be used to obtain eligibility for the basic fire academy. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Academy 018B

## Beginning Fire Physical Ability Training

Unit(s): 0.1-0.5 Class Hours: 5-32 Laboratory total.
Students will be introduced to the events of the "Biddle" Fire Fighter Physical Ability Test (Fire Academy 008). This is a supplemental learning assistance course designed to prepare the student for participation and successful completion of Fire Academy 008. Students will perform physical exercise using fire hose, ladders, stairs, TRX, kettlebells and other equipment. Students will learn proper body mechanics; correct lifting techniques and appropriate physical conditioning principles. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Academy 018C

## Intermediate Fire Physical Ability Training

Unit(s): 0.1-0.5 Class Hours: 5-32 Laboratory total.
Students will practice the individual events of the "Biddle" Fire Fighter Physical Ability Test (Fire Academy 008). This is a supplemental learning assistance course designed to prepare the student for participation and successful completion of Fire Academy 008.
Students will perform physical exercise using fire hose, ladders, stairs, TRX, kettlebells and other equipment. Students will learn proper body mechanics; correct lifting techniques and appropriate physical conditioning principles. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Academy 018D

## Advanced Fire Physical Ability Training

Formerly: Fire Academy 008D
Unit(s): 0.1-0.5 Class Hours: 5-32 Laboratory total.
Students will practice and condition for successful completion of the "Biddle" Fire Fighter Physical Ability Test (Fire Academy 008). This is a supplemental learning assistance course designed to prepare the student for participation and successful completion of Fire Academy 008. Students will perform physical exercise using fire hose, ladders, stairs, TRX, kettlebells and other equipment. Students will learn proper body mechanics; correct lifting techniques and appropriate physical conditioning principles. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Academy 028

## Physical Training for Fireground Operations

Unit(s): 1.0-2.5 Class Hours: 8 Lecture, 24-96 Laboratory total.
Prerequisite: Students must provide their own personal protective equipment and tools that meet current NFPA requirements and completion of an approved Fire Academy or signed statement by the agency's Fire Chief or designee stating the sponsored student is eligible to complete the training requirements for FFI.
Physical training course will provide an intense hands-on approach to fireground movement and energy system specificity. Focus will be on skill competency, an understanding of performance enhancement and injury prevention practices. Students will gain knowledge of proper training practices through lecture and participation in physical training designed to overload, progress, and decrease reversibility in an effective and safe manner. Grade: Pass/No Pass Only.

## Fire Academy 029 <br> Public Safety Wellness and Fitness-Operation and Safety Training

Unit(s): 2.0 Class Hours: 8 Lecture, 95 Laboratory total.
Occupation specific wellness and fitness principles to prepare those who respond to emergencies, accidents, local and national disasters and terrorist attacks. Physical fitness concepts and activities prepare the student for any threat whether physical, environmental or psychological. Individualized fitness assessment, fitness profile and exercise prescription provided. Grade: Pass/No Pass Only.

## Fire Academy 031

Fire Specialist Academy, Vehicle Rescue And Extrication
Unit(s): 0.5 Class Hours: 8 Lecture, 8 Laboratory total.
A course in rescue incident management and includes police coordination/cooperation, assessment, triage, extrication, field equipment, and stabilization. Not offered every semester. Grade: Pass/ No Pass Only.

## Fire Academy 035

Confined Space Rescue Technician
Unit(s): 1.0 Class Hours: 10 Lecture, 30 Laboratory total.
Prerequisite: Confined Space Awareness. Student must bring Confined Space Awareness certificate of completion to first class meeting or they be dropped from the class.
This course is designed for all emergency personnel with confined spaces within their jurisdiction. This course is an intensive hands-on training program that will prepare the student to respond to confined space emergencies. This course of instruction prepares the student in identifying confined spaces and permit-required confined spaces, the hazards associated with permit required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team. Meets CFSTES requirements for professional certification. Additional materials fee may be required for state course completion certificate. This course is limited to 36 students. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 041A <br> Reserve Firefighter Academy

Unit(s): 9.0 Class Hours: 144 Lecture, 22 Laboratory total.
Basic and predictable level of knowledge, skills, and ability among those individuals destined for assignment to an wildland fire crew. Includes EMS and Hazmat First Responder. Meets minimum departmental requirements for safety. Additional materials fees may apply. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 050

## Fire Suppression Training Academy

Unit(s): 22.5 Class Hours: 266 Lecture, 294 Laboratory total. Corequisite: Concurrent enrollment in Fire Academy 007. Medical exam in accordance with NFPA 1582 and Fire Academy 008. Basic and predictable level of knowledge, skills, and ability among those individuals destined for assignment to an wildland fire crew. Includes EMS and Hazmat First Responder. Meets minimum departmental requirements for safety. Does not meet requirements of OCFCA or California State Firefighter I criteria. Additional materials fees may apply. Not offered every semester.

## Fire Academy 060 <br> Basic Fire Academy

Unit(s): 12.0 Class Hours: 266 Lecture, 294 Laboratory total. Prerequisite: Fire Technology 101, Fire Technology 102, Fire Technology 103, Fire Technology 104, Fire Technology 105, Fire Technology 106, Fire Technology 121 (Fire Technology 121L must also receive a $P=$ pass); Fire Academy 008, and Emergency Medical Technician 100 with a minimum grade of C; meet NFPA 1582 medical examination.
Corequisite: Concurrent enrollment in Fire Academy 007 and certification in the State of California as an EMT.
California State Board of Fire Services/Firefighter I approved, criteria available.

## Fire Academy 062

Basic Incident Command Systems
Unit(s): 0.3 Class Hours: 16 Laboratory total.
Basic principles of command, knowledge, and skills common to all positions in the Incident Command System.

Fire Academy 062A
Strike Team Leader Orientation (ICS)
Unit(s): 0.5 Class Hours: 8 Lecture total.
State Office of Emergency Service procedures for fire departments assigned to OES when responding to a mutual aid incident.

## Fire Academy 063

## Rescue Systems 1: Basic Rescue Skills

Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Fire Academy 060, Basic Fire Academy with a minimum grade of $C$ or equivalent training as determined by the Dean of Instruction of the Fire Academy. Student must provide proof of training at the first class meeting or be dropped from the course.
Recommended Preparation: Completion of Low Angle Rope Rescue: Operational.
Designed for all emergency response personnel. Key topics include: Team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Additional materials fees may be required. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 063A

## Rescue Systems 2: Advanced Rescue Skills

Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Rescue Systems 1: Basic Rescue Skills. Student must bring certificate of course completion to first class meeting or be dropped from the course and Basic ICS. Student must bring certificate of course completion to the first class meeting or be dropped from the course.
Designed for all fire service and allied emergency response personnel. Provides advanced heavy rescue system techniques. Key topics include: Structural building types, wood and mechanical shores, crib capacities, floor weight calculations, building search, confined space considerations, damaged structure hazard assessment, use of power tools, air bags, and USAR ICS. Additional materials fees may be required. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 063C

US\&R Heavy Equipment and Rigging Specialist (HERS)
Unit(s): 0.5 Class Hours: 24 Laboratory total.
The primary purpose of this course is to provide functional training to the Task Force members who serve on an Urban Search \& Rescue Task Force. Grade: Pass/No Pass Only.

## Fire Academy 070

## Firefighter I Certification Refresher

Unit(s): 1.0 Class Hours: 4 Laboratory, 48 Lecture total.
Prerequisite: Completion of a Firefighter I academy and applying for certification testing or a signed statement by the agency's Fire Chief or designee stating the sponsored student has completed all SFT training requirements and skills sheets for Firefighter-1 or Documentation of approval from the California State Fire Training for a certification retest.
Prepares students to meet the State Fire Training (SFT) requirements for Firefighter I (FFI) including the capstone knowledge and skills necessary to pass FFI testing. Upon successful completion, students receive a pass letter from SFT and a FFI pass certificate from the college. Additional materials fees required. May not be offered every semester. Grade: Pass/No Pass Only.

Fire Academy 071A
Ventilation Review
Unit(s): 0.5 Class Hours: 8 Lecture, 8 Laboratory total.
Theory of positive pressure ventilation and panelized roofs; student will participate in walking, sounding, and cutting panelized roofs. Grade: Pass/No Pass Only.

## Fire Academy 072

## Emergency Trench Shoring

Unit(s): 0.5 Class Hours: 8 Lecture, 8 Laboratory total.
Prerequisite: Completion of an accredited Firefighter I fire academy or equivalent training as determined by the Dean of Instruction for the Fire Academy. Must bring certificate of completion to first class meeting or be dropped from the course and Completion of Rescue Systems I course. Students must bring certificate of completion to the first class or be dropped from the course or a letter from the Fire Chief (or designee) stating the sponsored student has successfully completed the equivalent training.
This course provides an update for first responders in emergency trench operations. Includes general safety and OSHA regulations relative to open trenches or excavations in potentially hazardous situations. Grade: Pass/No Pass Only.

## Fire Academy 076 <br> Low Angle Rope Rescue Operational

Unit(s): 1.0 Class Hours: 12 Lecture, 20 Laboratory total.
The Low Angle Rope Rescue Operational course is designed to provide training for responders in low angle rope rescue operations. These over-the-side operations may be the result of a vehicle accident, hiking mishap, swift water rescue, or search and rescue function in an urban or remote area. This course will also provide training in a subject element required for the California Urban Search and Rescue (US\&R) Basic and Light Operational Level by serving as the Prerequisite training for students wishing to continue training in a Rescue Systems 1 course. Additional materials fees may be required for state training course completion certificate. Not offered every semester. Grade: Pass/ No Pass Only.

## Fire Academy 076A <br> High Angle Rope Rescue

Unit(s): 1.0 Class Hours: 12 Lecture, 12 Laboratory total.
Designed to equip the students with information, techniques, and methods for utilizing rope, webbing, hardware, friction devices, and stretchers in high angle/high rise rope rescue situations. Additional materials fees may be required. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 079A

## S-339 Division/Group Supervisor- ALL RISK

Unit(s): 0.5 Class Hours: 4 Lecture, 16 Laboratory total.
Prerequisite: ICS-300, Intermediate I.C.S. Students must bring certificate of completion to first class meeting or be dropped from the course and qualified as a Task Force Leader (TFLD) or Incident Commander Type 3 (ICT3) or Incident Commander Type 4 (ICT4) and in any two Strike Team Leader positions - one must be STCR or STEN. Students must bring evidence to first class meeting or be dropped from the course.
This course prepares students to perform in the role of division/group supervisor during wildland fire operations. It provides instruction in support of the specific tasks of the division/group supervisor, but will not instruct students in general management/supervision or in the incident command system (ICS), both of which the student should learn through Prerequisite work. Topics include division/ group management, organizational interaction, division operations, all-hazard operations, and tactical decision games. There is a final examination in this course. May require additional material fees. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 079B

## S-330 Task Force-Strike Leader

Unit(s): 0.5 Class Hours: 2 Lecture, 22 Laboratory total.
Prerequisite: Qualified as any single resource boss. Must bring evidence to first class session or be dropped from the course and successful completion of the pre-course work and satisfactory completion of pre-selection assessment.
This course is designed to meet the training requirements outlined in the PMS 310-1, Wildland Fire Qualification System Guide and the position task books developed for the positions of task force leader and strike team leader. Most examples and exercises in this course are specific to wildland fire suppression, although some all-hazards exercises are included. Grade: Pass/No Pass Only.

## Fire Academy 079D <br> S-440 Planning Section Chief <br> Unit(s): 0.5 Class Hours: 4 Lecture, 16 Laboratory total.

Prerequisite: Students must be qualified as a Situation Unit Leader (SITL). Students must bring evidence to the first class meeting or be dropped from the class and students must be qualified as a Resources Unit Leader (RESL). Students must bring evidence to the first class meeting or be dropped from the class and Successful completion of pre-course work.
Designed to meet a portion of the training needs of the Planning Section Chief Type 2 for wildland fire operations. Topics include information gathering, strategies, meetings and briefings, incident action plans(IAP), interactions, forms, documents, supplies, demobilization, and an optional technology section. In the final exercise, the students observe a simulated planning meeting and use the information derived to find errors in an IAP. Additional fees may be required. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 080B <br> S-190 Introduction to Wildland Fire Behavior

Unit(s): 0.3 Class Hours: 4 Lecture, 4 Laboratory total.
This course provides instruction in the primary factors affecting the start and spread of wildfire and recognition of potentially hazardous situations. S-190 is typically taught in conjunction with or prior to Basic Fire Fighter Training, S-130. It is designed to meet the fire behavior training needs of a Fire Fighter Type 2 (FFT2) on an incident as outlined in the PMS 310-1, Wildland Fire Qualification System Guide and the position task book developed for the position. Grade: Pass/No Pass Only.

## Fire Academy 080D

S-290 Intermediate Wildland Fire Behavior
Unit(s): 0.5 Class Hours: 32 Laboratory total.
Prerequisite: S-190 Certification. Students are required to bring a copy of their S-190 certificate to the first class session or they will be dropped from the course.
This is a classroom-based skills course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed. Grade: Pass/No Pass Only.

## Fire Academy 084

Hazardous Materials First Responder Operational Level
Unit(s): 1.0 Class Hours: 18 Lecture, 6 Laboratory total.
This class is designed for fire department personnel who may respond to releases or potential releases of hazardous materials as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. Defensive tactics to contain the release from a safe distance, keep it from spreading, and prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 291910.120 and CCR Title 8. This course may require additional materials fees for state course completion certificate. This course is limited to 40 students. May not be offered every semester. Grade: Pass/No Pass Only.

## Fire Academy 084A <br> Hazardous Materials First Responder Operational, Decontamination

Unit(s): 0.3 Class Hours: 4 Lecture, 4 Laboratory total.
Recommended Preparation: Trained to Hazardous Materials First Responder Operational Level.
This course is designed for hazardous material emergency response personnel. This course will provide the hazmat emergency responder with the processes used in decontamination and methods to limit the spread of hazardous materials contamination in a safe and competent manner. Additional materials fees may be required for state certificate of completion. Not offered every semester. Grade: Pass/No Pass Only.

## FIRE OFFICER TRAINING (FOT)

## Fire Officer Training 006B <br> Truck Company Academy

Unit(s): 0.2 Class Hours: 16 Lecture total.
Truck company operations and ventilation skills at a first responder level. May be repeated. Grade: Pass/No Pass Only.

## Fire Officer Training 006D

CSFM Terrorism and RIC
Unit(s): 0.5 Class Hours: 24 Lecture total.
This course is designed to prepare firefighters to become familiar with terrorism tactics and (RIC) rapid intervention crew. Meets Orange County, L.A. City Fire Chiefs, and State Fire Marshall's certification standards. Grade: Pass/No Pass Only.

## Fire Officer Training 008A

## S-339 Division/Group Supervisor All Risk

Unit(s): 0.5 Class Hours: 24 Laboratory total.
Prerequisite: I-300 Intermediate ICS. Bring course completion certificate to first class session and I-400 Advanced ICS. Students must bring course completion certificate to first class session and satisfactory completion of pre-course work.
Recommended Preparation: Qualified as a Task Force Leader (TFLD) or Incident Commander Type 3 (ICT3) or Incident Commander Type 4 (ICT4) and in any two Strike Team Leader positions - one must be STCR or STEN.
This course prepares students to perform in the role of division/group supervisor. It provides instruction in support of the specific tasks of the division/group supervisor, but will not instruct the student in general management/supervision or in the incident command system (ICS), both of which the student should learn through Prerequisite work. Topics include division/group management, organizational interaction, division operations, all-hazard operations, and tactical decision games. There is a final examination in this course. Additional materials fee required for State Fire Training Course Completion Certificate. Grade: Pass/No Pass Only.

## Fire Officer Training 008E

## S-445 Incident Training Specialist

Unit(s): 0.3 Class Hours: 16 Laboratory total.
Designated to train personnel to perform the duties of a Training Specialist. Duties include coordinating incident training opportunities and activities, ensuring the quality of training assignments, and completing documentation of the incident training. Additional course fees required for State Fire Training Certificate of Completion.

## Fire Officer Training 016 <br> CSFA Terrorism

Unit(s): 0.3 Class Hours: 16 Lecture total.
This course is designed to prepare firefighters to become familiar with terrorism tactics. Meets Orange County, L.A. City Fire Chiefs, and State Fire Marshall's certification standards. Grade: Pass/No Pass Only.

## Fire Officer Training 017

## Fire Control 5

Unit(s): 0.5 Class Hours: 15 Lecture, 9 Laboratory total.
Designed to familiarize students with the different types of helicopter and aircraft rescues. Personal safety and rescue equipment will be demonstrated. The human factors and stress involved with aircraft rescue will be discussed. Grade: Pass/No Pass Only.

## Fire Officer Training 018

## Ground Safety and Survival

Unit(s): 0.3 Class Hours: 16 Laboratory total.
Fire Ground Safety \& Survival is designed to prepare participants to understand and provide several group crisis interventions, specifically demobilizations, defusing and critical incident stress debriefings. Grade: Pass/No Pass Only.

Fire Officer Training 019
Emergency Trench Rescue
Unit(s): 0.5 Class Hours: 24 Laboratory total.
Prerequisite: Fire Academy 060 with a minimum grade of $C$. This course is designed to train fire service personnel in hands-on application of the techniques necessary to safely affect a rescue from an excavation or trenching cave-in. Topics include critical considerations while responding to trenching emergencies, evaluation of cave-in scenes, basic life support procedures and temporary protection for victims, specialized tool usage, shoring techniques, and below grade rescue safety procedures. Grade: Pass/No Pass Only.

## Fire Officer Training 032

ICS-300 Intermediate ICS
Unit(s): 0.5 Class Hours: 24 Laboratory total.
Recommended Preparation: ICS 200- Students must bring copy of certificate of completion to first class session or they will be dropped from the course.
This course provides description and detail of the Incident Command System (ICS) organization and operations in supervisory roles on expanding or Type 3 incidents. Topics include: ICS fundamentals review, incident/event assessment and agency guidance in establishing incident objectives, Unified Command, incident resource management, planning process, demobilization, transfer of command, and close out. This course is designed for: Type 3 Incident Management Team (IMT) candidates, incident middle management (Unit Leaders, Division/Group Supervisors, and Strike Team Leaders), elected officials, line officers, lead dispatchers, Multi-Agency Coordination (MAC) members, director heads (public works director, fire chief, sheriff), emergency managers, and agency representatives. Grade: Pass/No Pass Only.

## Fire Officer Training 033

## ICS-400 Incident Command

Unit(s): 0.5 Class Hours: 24 Laboratory total.
Prerequisite: ICS-300, Intermediate ICS with a pass. Students must bring documentation of prerequisites to first class meeting. Failure to comply will result in student being dropped.
This course directs the student towards an operational understanding of large single-agency and complex multi-agency/multi-jurisdictional incident responses. Topics include fundamentals review for command and general staff, major and /or complex incident/even management, area command and multi-agency coordination. Grade: Pass/No Pass Only.

## Fire Officer Training 035

## Auto Extrication

Unit(s): 0.3-0.5 Class Hours: 16-24 Laboratory total.
Provides hands-on experience in the procedures and systems utilized during an automobile extrication. Subjects covered include: auto extrication, types of hand and power tools, removing windows, opening doors, removing roofs, pulling steering wheels, moving foot pedals, raising dashboards, pulling seats, stabilization of vehicles, and simulated rescues of trapped victims. Grade: Pass/No Pass Only.

## Fire Officer Training 044

Fire Investigation 1A: Fire Origin and Cause Determination
Unit(s): 0.5 Class Hours: 40 Laboratory total.
This course provides the participants with an introduction and basic overview of fire scene investigation. The focus of the course is to provide information on fire scene indicators and to determine the fire's origin. Additional fee required for OSFM Certificate of Completion.
Fire Officer Training 045
Fire Investigation 1B: Techniques of Fire Investigation
Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: OSFM - Investigation 1A with a grade of $B$ or better. Students must bring documentation of prerequisites to first class meeting; failure to comply will result in student being dropped. This course provides a deeper understanding of fire investigation and builds on Fire Investigation 1A. Topics include the juvenile fire setter, report writing, evidence preservation and collection, interview techniques, motives, and fire fatalities.

## Fire Officer Training 050

 Community Emergency Response TeamUnit(s): 0.2-0.5 Class Hours: 10-30 Laboratory total.
Educating the public to respond to terrorism response issues, theories, and methodologies for disaster mitigation. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Officer Training 060

## Fire Apparatus Driver/Operator 1A: Driver/Operator

Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Hold a valid Class C driver's license. License must be brought to first class session or student will be dropped from the course.

This course provides information on fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, back, maneuver, and turn a fire apparatus in a variety of conditions; and operate all fixed systems and equipment on a fire apparatus. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course fulfills the requirements for a California Class C Firefighter Endorsement. This course satisfies the partial requirements for State Fire Training Fire Apparatus Driver/Operator - Pumping Apparatus (2015) certification. A materials fee may be required. This course may not be offered every semester. Grade: Pass/No Pass Only.

## Fire Officer Training 061 <br> Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations

Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Hold a valid Class C Firefighter Endorsed driver's license (minimum). License must be brought to first class session or student shall be dropped from the course. and Fire Apparatus Driver/Operator 1A (2008 or 2015 version). Certificate of completion must be brought to first class session or student shall be dropped from the course and Completion of an accredited basic fire academy or equivalent as determined by the by the Associate Dean of Fire Technology prior to the start of the course. Students seeking to enter this course with equivalent training may be required to demonstrate knowledge of the following topics prior to the start of the course: Describe or explain: Fire hydrant operations; Suitable static water supply sources; Procedures and protocols for connecting to various water sources; Methods to fully open and close the hydrant; Principles of fire streams; flow capabilities of nozzles; Fittings, tools, and appliances; Open, close, and adjust nozzle flow and patterns; Prevent water hammer when shutting down nozzles; Hand lay a supply hose; Connect a supply hose to a hydrant; Make hydrant-to-engine hose connections for forward and reverse lays; Replace coupling gaskets; Mark defective hose NOTE: Approval of equivalent training is not a guarantee that state or licensing agencies will also grant equivalency.
This course provides information on pumping apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions; producing hand, master, and foam fire streams, relay pump operations; and supplying water to fire sprinkler and standpipe systems. This course is designed for career and volunteer fire service personnel who drive and operate a fire department pumping apparatus. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course satisfies partial requirements for OSFM certification for Fire Apparatus Driver/Operator - Pumping Apparatus. Materials fee may be required. Not offered every semester. Grade: Pass/No Pass Only.

## Fire Officer Training 078

## S-230 Crew Boss (Single Resource)

Unit(s): 0.5 Class Hours: 26 Laboratory total.
Prerequisite: Satisfactory completion of pre-course work and qualified as Firefighter Type 1 (FFT1). Bring evidence of training or certification to first class session and S-290 Wildland Fire Behavior. Bring copy of course completion certificate to class.
Designed for fire service personnel desiring to be qualified as an Engine Boss (ENGB). Training for the single resource boss position from initial dispatch through demobilization to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post incident responsibilities. Additional materials fee required for CA State Fire Training Certificate of Completion. This course is limited to 30 students. Grade: Pass/No Pass Only.

## Fire Officer Training 078A

## S-130 Firefighter Training - Wildland

Unit(s): 0.7 Class Hours: 32 Lecture total.
Designed to train firefighters in the basic fire behavior factors that will aid them in safe and effective control of wildland fires. Grade: Pass/No Pass Only.

## Fire Officer Training 078B <br> S-215L Urban Wildland Interface Firefighting

Unit(s): 0.7 Class Hours: 32 Lecture total.
S-215L Urban wildland interface firefighting is a course designed to teach fire crews the principles of backfire/burnout and the necessary firing techniques and related firing devices used to accomplish either of these suppression methods. Grade: Pass/No Pass Only.

## Fire Officer Training 078C <br> S-371 Helibase Manager <br> Unit(s): 0.5 Class Hours: 32 Laboratory total.

Recommended Preparation: Student should be qualified as a helicopter manager, single resource.
Designed for Fire Personnel qualifying within the Incident Command System as a Helibase manager. Topics include strike team orientation, position responsibilities, helicopter safety operations and weather condition affecting helicopter landing. Grade: Pass/No Pass Only.
Fire Officer Training 079
S-404 Safety Officer
Unit(s): 0.5 Class Hours: 24 Lecture total.
Designed to train company/chief officers in the advanced wildland fire safety factors that will aid them in safe and effective control of wildland fires. Not offered every semester. May be repeated. Grade: Pass/No Pass Only.

## Fire Officer Training 079B <br> S-231 Engine Boss

Unit(s): 0.3 Class Hours: 16 Laboratory total.
Recommended preparation: S-230 certification and qualified as a Fire Fighter Type 1 (FFT1) as per OSFM
This is a skill course designed to produce student proficiency in the performance of the duties associated with engine boss, single resource (ENGB). Topics include engine and crew capabilities and limitations, information sources, fire sizeup considerations, tactics, and wildland/urban interface. Grade: Pass/No Pass Only.

## Fire Officer Training 079C

## S-330 Task Force-Strike Team Leader

Unit(s): 0.5 Class Hours: 24 Laboratory total.
Recommended Preparation: Qualified as any single resource boss. Designed for fire personnel qualifying within the Incident Command System as a Task Force-Strike Team Leader. Topics include Strike Team orientation, incident responsibilities, and demobilization/release. Grade: Pass/No Pass Only.

## Fire Officer Training 080

## Motion Picture/Television Safety Officer

Unit(s): 0.5 Class Hours: 24 Lecture total.
Course is designed to prepare Fire personnel in special effects, film production safety and stunt coordination, line producers, location managers and film commissioners. May be repeated. Grade: Pass/No Pass Only.

## Fire Officer Training 130A

## Fire Inspector 1A: Duties and Administration

Unit(s): 1.5 Class Hours: 24 Lecture total.
Prerequisite: Fire Technology 104, Fire Technology 105, and Fire Technology 106 with a minimum grade of C OR equivalent as determined by the Dean of academy instruction. To be successful in this course, students should be able to understand and use professional terminology; Identify laws, codes, ordinances, and regulations as they relate to fire prevention; Understand code enforcement as it impacts life and property loss; Define laws, rules, regulations, and codes and identify those relevant to fire prevention; Define the functions of a fire prevention bureau; Describe the history and philosophy of fire prevention; Describe inspection practices and procedure; Understand theoretical concepts of how fire impacts major types of building construction; Describe building construction as it relates to firefighter safety, buildings codes, fire prevention, code inspection, firefighting strategy, and tactics; Differentiate between fire resistance, flame spread, and describe the testing procedures used to establish ratings for each; Classify occupancy designations of the building code; Analyze the hazards associated with the various types of building construction; Identify and describe various types and uses of fire protection system; Explain the benefits of fire protection systems in various types of structures; Describe residential and commercial sprinkler legislation.
This course provides a broad, technical overview of fire prevention codes and ordinances, inspection practices, and key hazards. CSU

## Fire Officer Training 130B

Fire Inspector 1B: Introduction to Fire And Life Safety
Unit(s): 1.5 Class Hours: 24 Lecture total.
Prerequisite: Fire Technology 104, Fire Technology 105, and Fire Technology 106 with a minimum grade of C OR equivalent as determined by the Dean of academy instruction. To be successful in this course students must be able to: Describe the basic elements of a public water supply system as it relates to fire protection; Describe the basic elements of a public water supply system including sources, distribution networks, piping and hydrants; Understand theoretical concepts of how fire impacts major types of building construction; Describe building construction as it relates to firefighter safety, buildings codes, fire prevention, code inspection, firefighting strategy, and tactics; Differentiate between fire resistance, flame spread, and describe the testing procedures used to establish ratings for each; Classify occupancy designations of the building code; Describe inspection practices and procedures and Describe the history and philosophy of fire prevention.
Recommended preparation: Fire Officer Training 130A with a minimum grade of $C$.
This course will provide fire prevention professionals with the base level of knowledge necessary to inspect fire protection systems and special hazards. CSU

## Fire Officer Training 130C <br> Fire Inspector 1C: Field Inspection

Unit(s): 1.5 Class Hours: 24 Lecture total.
Prerequisite: Fire Technology 104, Fire Technology 105, and Fire Technology 106 with a minimum grade of C OR equivalent as determined by the Dean of academy instruction. To be successful in this course students must be able to: Identify and describe various types and uses of fire protection systems; Identify the different types and components of sprinkler, standpipe and foam systems; Identify the different types of non-water based fire suppression systems; Explain the basic components of a fire alarm system; Describe the hazards of smoke and list the four factors that can influence smoke movement in a building; Discuss the appropriate application of fire protection systems; Explain the operation and appropriate application for the different types of portable fire protection systems; Understand theoretical concepts of how fire impacts major types of building construction; Describe building construction as it relates to firefighter safety, buildings codes, fire prevention, code inspection, firefighting strategy, and tactics; Identify various classifications of building construction; Identify laws, codes, ordinances, and regulations as they relate to fire prevention; Define laws, rules, regulations, and codes and identify those relevant to fire prevention of the authority having jurisdiction; Understand code enforcement as it impacts life and property loss and Describe inspection practices and procedures. Recommended Preparation: Training 130B, Fire Inspector 1B: Fire and Life Safety with a minimum grade of C.
This course provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector I including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers. CSU

## Fire Officer Training 130D Fire Inspector 1D: Field Inspector

Unit(s): 1.0 Class Hours: 16 Lecture total.
Prerequisite: Fire Technology 104, Fire Technology 105, and Fire Technology 106 with a minimum grade of C.
Recommended preparation: Fire Officer Training 130A with a minimum grade of $C$.
This course provides students with basic knowledge of the Fire Fighter 1's field inspection roles and responsibilities specific to California including tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments. CSU

## Fire Officer Training 136

## Fire Inspector 2A: Fire Prevention Administration

Unit(s): 1.0 Class Hours: 16 Laboratory total.
Prerequisite: Certified CA Fire Inspector I or completion of Fire Inspector 1A, 1B and 1C. Student must present State Certificates to the instructor at the first class meeting. Students who fail to meet this requirement will be dropped from the course.
This course provides students with a basic knowledge of the administrative requirements related to the roles and responsibilities of a Fire Inspector II including processing permit and plan review applications, enforcing permit regulations, investigating complex complaints, recommending modifications to codes and standards, recommending policies and procedures for inspection services, generating written appeals correspondence, initiating legal action, evaluating inspection reports, and proposing technical reference material acquisition. CSU

## Fire Officer Training 137

Fire Inspector 2B: Fire and Life Safety Requirements Unit(s): 1.5 Class Hours: 24 Lecture total.
Prerequisite: Fire Inspector 2A: Fire Prevention Administration. Students must bring documentation of prerequisite to the first class meeting: failure to comply will result in the student being dropped.
This course provides students with a basic knowledge of fire and life safety requirements related to the roles and responsibilities of a Fire Inspector II including occupancy classification, egress elements, emergency plans and procedures, occupant loads, building construction and fire growth potential. CSU

## Fire Officer Training 138

Fire Inspector 2C: Inspecting Fire \& Life Safety Systems and Equipment
Unit(s): 1.0 Class Hours: 16 Laboratory total.
Prerequisite: Fire Inspector 2A: Fire Prevention Administration. Students must bring documentation of prerequisite to the first class meeting: failure to comply will result in the student being dropped. This course provides students with a basic knowledge of inspection requirements related to the roles and responsibilities of a Fire Inspector II including inspection of life safety systems and building services equipment, fire protection systems, and emergency access criteria. CSU

## Fire Officer Training 139

Fire Inspector 2D: Hazardous Materials, Operations, and Processes
Unit(s): 2.0 Class Hours: 32 Lecture total.
Prerequisite: Fire Inspector 2A: Fire Prevention Administration. Students must bring documentation of prerequisite to the first class meeting: failure to comply will result in the student being dropped. This course provides students with a basic knowledge of hazardous materials, operations, and processes related to the roles and responsibilities of a Fire Inspector II including hazardous conditions, flammable and combustible liquids and gases, and hazardous materials. CSU

## Fire Officer Training 142

Fire Instructor 2C: Employing Audiovisual Aids
Unit(s): 0.8 Class Hours: 40 Laboratory total.
Prerequisite: Fire Instructor 1A and 1B with a minimum grade of $80 \%$. Students must bring documentation of prerequisites to first class meeting. Failure to comply will result in student being dropped. This course covers the principles and selection of media in the instructional process, employment of basic and advanced forms of instructional media, use of computers in the instructional process, and individualized instruction programs. Teaching demonstrations are required of all participants. CSU

## Fire Officer Training 144

## Fire Investigation 2A: Criminal and Legal Procedures

Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Fire Investigation 1A, passed with a grade of $80 \%$ and Fire Investigation 1B, passed with a grade of $80 \%$. Students must bring documentation of prerequisites to first class meeting. Failure to comply will result in student being dropped.
This course provides information on conducting an explosive investigation and a surveillance operation, preparing a search warrant, testifying as an expert witness, assembling a curriculum vitae, and properly documenting a criminally caused fire. In addition, each student will be assigned to an investigative team to conduct an investigation of his/her own criminally caused fire. During this practical exercise, each team will be required to conduct the scene investigation, properly collect and document supportive evidence, prepare their written case report, and present their finding to a district attorney and a judge to review. CSU

## Fire Officer Training 145

Fire Investigation 2B: Field Case Studies
Unit(s): 0.5 Class Hours: 40 Laboratory total.
Prerequisite: Fire Investigation 1-A with a grade of $80 \%$ and
Fire Investigation 1-B with a grade of $80 \%$. Students must bring documentation of prerequisites to first class meeting. Failure to comply will result in student being dropped.
This course provides advanced instruction in fire scene investigation, case preparation, and courtroom presentation. Topics include review of fire scene photography, sketching, evidence collection, interviewing and interrogation, and extensive use of simulations for developing and presenting an arson case. CSU

Fire Officer Training 150A
Company Officer 2A: Human Resource Management for Company Officers
Unit(s): 1.5 Class Hours: 16 Lecture, 24 Laboratory total. Prerequisite: Fire Academy 060 with a minimum grade of C , or equivalent.
This course provides information on the use of human resources to accomplish assignments, evaluate member performance, supervise personnel, and integrate health and safety plans, policies, and procedures into daily activities as well as the emergency scene. Materials fee for State Fire Training Certificate. May not be offered every semester. CSU
Fire Officer Training 150B
Company Officer 2B: General Administration Functions for Company Officers
Unit(s): 0.5 Class Hours: 8 Lecture, 12 Laboratory total.
Prerequisite: Completion of a CA Regionally Accredited Fire Academy or a signed statement by the agency's Fire Chief or designee stating the sponsored student has completed all SFT training requirements and skills sheets for Firefighter-1 or Equivalent.
This course provides information on general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. Applies to State Fire Marshal Company Officer certification. Additional materials fee required for State Certificate Fee. This class may not be offered every semester. CSU
Fire Officer Training 150C
Company Officer 2C: Fire Inspections and Investigations
Unit(s): 1.5 Class Hours: 25 Lecture, 15 Laboratory total.
Prerequisite: Completion of a CA Regionally Accredited Fire Academy or a signed statement by the agency's Fire Chief or designee stating the sponsored student has completed all SFT training requirements and skills sheets for Firefighter I or equivalent.
This course provides information on conducting inspections, identifyinc hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. Applies to State Fire Marshal Company Officer certification. Additional materials fee required for State Certificate Fee. This class may not be offered every semester. CSU

## Fire Officer Training 150D <br> Company Officer 2D: All-Risk Command Operations for Company Officers

Unit(s): 1.5 Class Hours: 16 Lecture, 24 Laboratory total.
Prerequisite: Completion of a CSFM (California State Fire Marshal) accredited fire Academy or Completion of IFSAC (International Fire Service Accreditation Congress) accredited fire academy or completion of a Pro Board Fire Service Professional Qualifications System fire academy or a signed statement by the agency's Fire Chief or designee stating the sponsored student has completed all SFT training requirements and skills sheets for Firefighter-1 and ICS 200 (online certificate)
Recommended Preparation: Hazardous Material Incident Commander (as offered by the California Specialized Training Institute)
This course is designed for aspiring company fire officers. Topics include: Conducting incident size-up, developing and implementing an initial plan of action for emergency incidents, pre-incident planning, and post-incident analysis. Applies to State Fire Marshal Company Officer certification. Materials fee required for State Certificate. This class may not be offered every semester. CSU

## Fire Officer Training 150E

Company Officer 2E: Wildland Incident Operations for Company Officers
Unit(s): 1.5 Class Hours: 24 Lecture, 16 Laboratory total.
Prerequisite: Fire Officer Training 150A with a minimum grade of C and S-290 Intermediate Fire Behavior (classroom delivery only). Students must bring proof of course completion to first class meeting or they will be dropped from the course. Completion of a CA Regionally Accredited Fire Academy or a signed statement by the agency's Fire Chief or designee stating the sponsored student has completed all SFT training requirements and skills sheets for Firefighter-1 or equivalent. This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. Applies to State Fire Marshal Company Officer certification. Additional materials fee required for State Certificate Fee. This class may not be offered every semester. CSU

## Fire Officer Training 205

## Instructor I: Instructional Methodology

Unit(s): 1.5 Class Hours: 16 Lecture, 24 Laboratory total.
Recommended Preparation: Completion of one of the following certificates is recommended: Introduction to the Incident Command System (IS-100.B), FEMA or National Incident Management System (IS-700.A), FEMA.
Students learn to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. Students will also learn to adapt a lesson plan and complete reporting requirements. Designed for: Personnel preparing for a college level fire instructor, Company Officer, or SFT Certified Training Instructor position. Applies to CSFM certification for Instructor I. Additional course material fee is required for CSFM certificate. May not be offered every semester. CSU

## Fire Officer Training 206

Instructor II: Instructional Development
Unit(s): 1.5 Class Hours: 16 Lecture, 24 Laboratory total.
Prerequisite: Fire Officer Training 205 with a minimum grade of C.
This course provides the skills and knowledge needed for the intermediate level professional fire service instructor preparing for Instructor II certification. Participants will learn to develop lesson plans and evaluation instruments, teach and deliver instruction, and evaluate and coach other instructors. Additional materials fees may be required for State Fire Training Certificate. Not offered every semester. CSU

Fire Officer Training 207
Instructor III: Instructional Program Management
Unit(s): 1.0 Class Hours: 16 Lecture, 20 Laboratory total.
Prerequisite: Fire Officer Training 205 with a minimum grade of $C$ and Fire Officer Training 206 with a minimum grade of C.
This course provides information on planning, developing, and implementing comprehensive programs and curricula. Topics include instructional development, program management, program and instructor evaluation, and test reliability and validity. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. This course is designed for Fire Officers, Staff Officers, and other fire service managers with experience in fire-service training. CSU

## Fire Officer Training 210 <br> Community Risk Educator

Unit(s): 1.5 Class Hours: 24 Lecture total.
Prerequisite: Introduction to Incident Command System I-100 (Must bring certificate of completion to first class meeting) and National Incident Management System (NIMS): An Introduction 700 (must bring certificate of completion to first class meeting) and Instructor I: Instructor Methodology or Training Instructor 1A Cognitive Lesson Delivery (must bring certificate of completion to first class meeting.) and Fire Prevention I: Fire \& Safety Inspections Fire \& Safety Inspections OR Fire Prevention 1A: Introduction to the California Fire Code Bridge OR Company Officer 2C: Fire Inspections and Investigation (Must bring certificate of completion to first class meeting)OR completion of Fire Technology 104 Fire Prevention Technology with a minimum grade of $C$.
This course provides the skills and knowledge needed for the Community Risk Educator to perform his/her duties safely, effectively, and competently by coordinating and delivering existing educational programs and information. Enrollment is limited to 30 students. CFSTES Certificate of Completion awarded. This course requires additional materials fees. CSU

## Fire Officer Training 273A <br> Chief Fire Officer 3A: Human Resource Management for Chief Fire Officers

Unit(s): 1.0 Class Hours: 16 Lecture, 10 Laboratory total.
Prerequisite: Student must meet the educational requirements for Company Officer. Evidence of qualifications must be submitted to the Fire Technology Department prior to the first class meeting. Educational Requirements may be met with completion of: Company Officer 2A: HR Management AND Company Officer 2B: General Administrative Functions AND Company Officer 2C: Fire Inspections and Investigation AND Company Officer 2D: All-Risk Command Operations AND Company Officer 2E: Wildland Incident Operations or If completed prior to 12/31/2016: Fire Command 1A: Command Principles for Company Officers AND Fire Command 1B: Incident Management for Company Officers AND Fire Command 1C:
I-Zone Fire Fighting for Company Officers AND Fire Instructor 1A: Instructional Techniques, Part 1 AND Fire Instructor 1B: Instructional Techniques, Part 2 AND Fire Investigation 1A: Fire Origin and Cause Determination AND Fire Management 1: Management/Supervision for the Company Officer AND Fire Prevention 1A: Introduction to the California Fire Code AND Fire Prevention 1B: Inspection of Fire Protection Systems and Special Hazards AND I-300: Intermediate ICS. This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer. Topics include developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program. This course is designed for the certified Company Officer advancing to the Chief Fire Officer classification. This course is limited to 25 students. Additional materials fees may apply. Not offered every semester. CSU

## Fire Officer Training 273B <br> Chief Fire Officer 3B: Budget and Fiscal Responsibilities for Chief Fire Officers

Unit(s): 0.5 Class Hours: 10 Lecture, 8 Laboratory total.
Prerequisite: Student must meet the educational requirements for Company Officer. Evidence of qualifications must be submitted to the Fire Technology Department prior to the first class meeting. Educational Requirements may be met with completion of: Company Officer 2A: HR Management AND Company Officer 2B: General Administrative Functions AND Company Officer 2C: Fire Inspections and Investigation AND Company Officer 2D: All-Risk Command Operations AND Company Officer 2E: Wildland Incident Operations or if completed prior to $12 / 31 / 2016$ : Fire Command 1A: Command Principles for Company Officers AND Fire Command 1B: Incident Management for Company Officers AND Fire Command 1C: I-Zone Fire Fighting for Company Officers AND Fire Instructor 1A: Instructional Techniques, Part 1 AND Fire Instructor 1B: Instructional Techniques, Part 2 AND Fire Investigation 1A: Fire Origin and Cause Determination AND Fire Management 1: Management/Supervision for the Company Officer AND Fire Prevention 1A: Introduction to the California Fire Code AND Fire Prevention 1B: Inspection of Fire Protection Systems and Special Hazards AND I-300: Intermediate ICS. This course provides students with a basic knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding. This class is designed for the certified Company Officer advancing to the Chief Fire Officer classification. May require additional materials fee. Class size is limited to 25. Not offered every semester. CSU

## Fire Officer Training 273C

## Chief Fire Officer 3C: General Administration Functions

Unit(s): 1.0 Class Hours: 14 Lecture, 10 Laboratory total.
Prerequisite: Student must meet the educational requirements for Company Officer. Evidence of qualifications must be submitted to the Fire Technology Department prior to the first class meeting. Educational Requirements may be met with completion of: Company Officer 2A: HR Management AND Company Officer 2B: General Administrative Functions AND Company Officer 2C: Fire Inspections and Investigation AND Company Officer 2D: All-Risk Command Operations AND Company Officer 2E: Wildland Incident Operations or If completed prior to 12/31/2016: Fire Command 1A: Command Principles for Company Officers AND Fire Command 1B: Incident Management for Company Officers AND Fire Command 1C:
I-Zone Fire Fighting for Company Officers AND Fire Instructor 1A: Instructional Techniques, Part 1 AND Fire Instructor 1B: Instructional Techniques, Part 2 AND Fire Investigation 1A: Fire Origin and Cause Determination AND Fire Management 1: Management/Supervision for the Company Officer AND Fire Prevention 1A: Introduction to the California Fire Code AND Fire Prevention 1B: Inspection of Fire Protection Systems and Special Hazards AND I-300: Intermediate ICS. This course provides students with a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ . Additional materials fees may be required. This course is limited to 25 students. Not offered every semester. CSU

## Fire Officer Training 273D <br> Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers

Unit(s): 1.0 Class Hours: 16 Lecture, 8 Laboratory total. Prerequisite: Student must meet the educational requirements for Company Officer. Evidence of qualifications must be submitted to the Fire Technology Department prior to the first class meeting. Educational Requirements may be met with completion of: Company Officer 2A: HR Management AND Company Officer 2B: General Administrative Functions AND Company Officer 2C: Fire Inspections and Investigation AND Company Officer 2D: All-Risk Command Operations AND Company Officer 2E: Wildland Incident Operations or If completed prior to 12/31/2016: Fire Command 1A: Command Principles for Company Officers AND Fire Command 1B: Incident Management for Company Officers AND Fire Command 1C: I-Zone Fire Fighting for Company Officers AND Fire Instructor 1A: Instructional Techniques, Part 1 AND Fire Instructor 1B: Instructional Techniques, Part 2 AND Fire Investigation 1A: Fire Origin and Cause Determination AND Fire Management 1: Management/Supervision for the Company Officer AND Fire Prevention 1A: Introduction to the California Fire Code AND Fire Prevention 1B: Inspection of Fire Protection Systems and Special Hazards AND I-300: Intermediate ICS. This course provides students with a basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records. This course is designed for the certified Company Officer advancing to the Chief Fire Officer classification. Additional materials fees may be required. This class limited to 25 students. May not be offered every semester. CSU

## Fire Officer Training 274A <br> Executive Chief Fire Officer 4A: Human Resource Management for Chief Fire Officers

Unit(s): 1.0 Class Hours: 16 Lecture, 12 Laboratory total.
Prerequisite: Fire Officer Training 273A, Chief Fire Officer 3A: Human Resource Management for Chief Fire Officers and Fire Officer Training 273B, Chief Fire Officer 3B: Budget and Fiscal Responsibilities for Chief Fire Officers and Fire Officer Training 273C, Chief Fire Officer 3C: General Administration Functions and Fire Officer Training 273D, Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers with minimum grade of $C$.
This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are recruitment, selection, and placement of human resources; the development of a positive and participative member/management program; the establishment and evaluation of a list of education and in-service training goals; appraisal of a member assistance program; and the evaluation of an incentive program to determine if the desired results are achieved. Applies to State Fire Marshal Executive Chief Fire Officer certification. Additional materials fee required for State Certificate Fee. This class may not be offered every semester. CSU

## Fire Officer Training 274B <br> Executive Chief Fire Officer 4B: Community \& Government Relations

Unit(s): 0.5 Class Hours: 6 Lecture, 6 Laboratory total.
Prerequisite: Fire Officer Training 273A, Chief Fire Officer 3A: Human Resource Management for Chief Fire Officers and Fire Officer Training 273B, Chief Fire Officer 3B: Budget and Fiscal Responsibilities for Chief Fire Officers and Fire Officer Training 273C, Chief Fire Officer 3C: General Administration Functions and Fire Officer Training 273D, Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers with a minimum grade of $C$.
This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching theme of this curriculum is assuming a leadership role in community events. Designed for: Executive Chief Fire Officer Candidate. CSU

## Fire Officer Training 274C

## Executive Chief Fire Officer 4C: Administration

Unit(s): 1.0 Class Hours: 16 Lecture, 16 Laboratory total.
Prerequisite: Fire Officer Training 273A, Chief Fire Officer 3A: Human Resource Management for Chief Fire Officers and Fire Officer Training 273B, Chief Fire Officer 3B: Budget and Fiscal Responsibilities for Chief Fire Officers and Fire Officer Training 273C, Chief Fire Officer 3C: General Administration Functions and Fire Officer Training 273D, Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers with a minimum grade of $C$.
This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are developing a comprehensive, long range plan; evaluating and projecting training requirements, facilities, and building needs; completing a written comprehensive risk, hazard, and value analysis; and developing a plan for a capital improvement project or program. Applies to State Fire Marshal Executive Chief Fire Officer certification. Additional materials fee required for State Certificate Fee. This class may not be offered every semester. CSU

## Fire Officer Training 274D <br> Executive Chief Fire Officer 4D: Emergency Services Delivery

Unit(s): 1.0 Class Hours: 22 Lecture, 16 Laboratory total.
Prerequisite: Fire Officer Training 273A, Chief Fire Officer 3A: Human Resource Management for Chief Fire Officers and Fire Officer Training 273B, Chief Fire Officer 3B: Budget and Fiscal Responsibilities for Chief Fire Officers and Fire Officer Training 273C, Chief Fire Officer 3C: General Administration Functions and Fire Officer Training 273D, Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers with a minimum grade of $C$.
This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching themes of this curriculum are developing a comprehensive disaster plan and a comprehensive plan for the organization to operate at a civil disturbance. Designed For: Executive Chief Fire Officer Candidate. CSU

Fire Officer Training 274E
Executive Chief Fire Officer 4E: Health and Safety Course Plan
Unit(s): 0.5 Class Hours: 4 Lecture, 12 Laboratory total.
Prerequisite: Fire Officer Training 273A, Chief Fire Officer 3A: Human Resource Management for Chief Fire Officers and Fire Officer Training 273B, Chief Fire Officer 3B: Budget and Fiscal Responsibilities for Chief Fire Officers and Fire Officer Training 273C, Chief Fire Officer 3C: General Administration Functions and Fire Officer Training 273D, Chief Fire Officer 3D: Emergency Service Delivery Responsibilities for Chief Fire Officers with a minimum of grade of $C$.
This course provides the skills and knowledge needed for the Executive Chief Fire Officer to perform his/her duties safely, effectively, and competently. The overarching theme of this curriculum is maintaining, developing, and providing leadership for a risk management program. Designed For: Executive Chief Fire Officer Candidate. CSU

## FIRE PUBLIC SAFETY (FSA)

Fire Public Safety 002
California Ocean Lifeguard-Aquatic Rescue Response Skills
Unit(s): 0.3-10.0 Class Hours: 16-480 Laboratory total.
This course provides ocean lifeguards the occupational education and training needed to maintain adequate levels of knowledge to continue to perform lifesaving tasks. In addition to maintaining the minimum standards necessary for their positions, students are provided drills and formal training needed to ensure high levels of performance.
Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Public Safety 005 EMT Recertification

Unit(s): 0.3-1.5 Class Hours: 6-24 Lecture total.
Prerequisite: Students must be in possession of a current EMT State certification or EMT National Registry certification.
Training and update for current EMTs. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Public Safety 014

## Rescue Operations- Refresher

Unit(s): 0.5-1.0 Class Hours: 12 Lecture, 10-24 Laboratory total.
Prerequisite: Fire Academy 060 with minimum grade of C or equivalent.
This course provides a review of the skills and knowledge needed for the professional fire fighter to perform his/her rescue duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Public Safety 016A <br> CA Fire Service Administrative Requirements

Unit(s): 0.5-1.0 Class Hours: 8-16 Lecture total.
Prerequisite: Completion of Fire Academy 060 Basic Fire Academy or equivalent with a minimum grade of C. NOTE: Requisite skills and knowledge learned in a basic fire academy will not be retaught.
This course covers the duties and responsibilities of a Firefighter, departmental communications, ethical principles and prevention of sexual harassment. Content is based on the NFPA 1001 Standard for Fire Fighter Professional Qualifications and the California State requirements for government employees. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Public Safety 017

## Firefighter Refresher-Core Competencies

Unit(s): 0.5-2.0 Class Hours: 8 Lecture, 6-92 Laboratory total.
Prerequisite: Completion of an approved Fire Academy or signed statement by the agency's Fire Chief or designee stating the sponsored student has completed the training requirements for FFI or equivalent and students must provide their own personal protective equipment and tools which meet current NFPA requirements for maintenance and repair.
Course reviews basic knowledge and skills used on the job. Provides the student the opportunity to reinforce their knowledge and refresh their skills in the areas most likely to lead to firefighter injury or death. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Public Safety 018

## Firefighter Survival

Unit(s): 0.5-1.0 Class Hours: 4 Lecture, 12-36 Laboratory total.
Prerequisite: Students must provide primary instructor verification of the following prior to participating in any skill or evolution: Access to approved personal protective equipment including demonstration of competency in donning and using the personal protective equipment, and current fit test documentation. Students shall be familiar with all components of their SCBA. Students must show competency in the use of their SCBA prior to participatung in any skill or evolution.
This course provides students with a greater understanding of the need for situational awareness, fire fighter survival skills, and the technical survival skills to help firefighters avoid committing fatal errors on the fireground. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Fire Public Safety 027

## Wildland Fire Safety Training Refresher

Unit(s): 0.2-1.0 Class Hours: 4-16 Lecture, 1-10 Laboratory total.
This course focuses on operations and decision-making issues related to fireline and all-hazard incident safety. Topics include entrapment avoidance, current issues, other hazard and safety issues, and fire shelter in order to prepare firefighters for the upcoming fire season. Grade: Pass/No Pass Only.

## FIRE TECHNOLOGY (FTC)

## Fire Technology 101 (C-ID FIRE 100 X) Fire Protection Organization

Unit(s): 3.0 Class Hours: 48 Lecture total.
This course provides an overview to fire protection and emergency services including: career opportunities in fire protection and related fields, culture and history of emergency services, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local government, laws and regulations affecting the fire service, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, introduction to fire strategy and tactics, and an overview of the life safety initiatives. CSU

## Fire Technology 102 (C-ID FIRE 140 X)

## Fire Behavior and Combustion

Unit(s): 3.0 Class Hours: 48 Lecture total.
This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. CSU

## Fire Technology 103 (C-ID FIRE 150 X) <br> Principles of Fire and Emergency Services Safety and Survival

Unit(s): 3.0 Class Hours: 48 Lecture total.
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. CSU

## Fire Technology 104 (C-ID FIRE 110 X) <br> Fire Prevention

Unit(s): 3.0 Class Hours: 48 Lecture total.
Prerequisite: Fire Technology 101 and Fire Technology 102 with minimum grade of $C$.
This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; community risk reduction; organization and operation of a fire prevention bureau; use and application of codes and standards; plan review; fire inspections; fire and life safety education; and fire investigation. CSU

## Fire Technology 105 (C-ID FIRE 130 X) Building Construction for Fire Protection

Unit(s): 3.0 Class Hours: 48 Lecture total.
Prerequisite: Fire Technology 101 and Fire Technology 102 with minimum grade of $C$.
This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. CSU

## Fire Technology 106 (C-ID FIRE 120 X)

## Fire Protection Systems

Unit(s): 3.0 Class Hours: 48 Lecture total.
Prerequisite: Fire Technology 101 and Fire Technology 102 with minimum grade of $C$.
This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. CSU

## Fire Technology 121

## Physical Fitness for Public Safety Personnel

Unit(s): 3.0 Class Hours: 54 Lecture total.
Corequisite: Concurrent enrollment in Fire Technology 121L.
This lecture class provides information on exercise physiology and nutrition as it relates to public safety personnel. Topics include the components of a fitness program such as metabolic fitness, muscular fitness, body composition and flexibility. Other topics include the FITT principle, specificity, and injury prevention and treatment. CSU

## Fire Technology 121L <br> Physical Fitness for Public Safety Personnel - Performance and Assessment

Unit(s): 0.3 Class Hours: 16 Laboratory total.
Corequisite: Concurrent enrollment in Fire Technology 121.
Student will participate in physical fitness and fire-specific activities.
Focus is on preparing individual fitness, health, and physical ability for job requirements. Students will be advised of the specific dates and times for the Lab/Physical Ability Practice sessions during first week of the semester at the Lab Orientation. Grade: Pass/No Pass Only. CSU

## FRENCH (FREN)

## French 101

## Elementary French 1

Unit(s): 5.0 Class Hours: 90 Lecture total.
A college level French course focusing on fundamentals of pronunciation and grammar, basic vocabulary (including common idioms), simple conversation and composition. Supplementary cultural readings. French 101 is equivalent to two years of high school French. CSU/UC

French 102

## Elementary French II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: French 101 with a minimum grade of $C$ or two years of high school French with a passing grade.
A college level French course focusing on further training in
pronunciation and grammar, more extensive vocabulary development, conversation and composition. Supplementary cultural readings.
French 102 is equivalent to the third year of high school French. CSU/ UC

## French 198

## Topics in French

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
A specialized course on topics related to current needs of students. CSU

## French 201

## Intermediate French I

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: French 102 with a minimum grade of $C$ or three years of high school French with a passing grade.
A college level French class focusing on expansive review of usage and grammar; discussion in French of interpretive reading material; conversation and composition. CSU/UC

## French 201H

## Honors Intermediate French I

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: French 102 with a minimum grade of C or three years of high school French, and a high school or college GPA of 3.0 or above. Enhanced and intensive exploration of French civilization, culture, and literature in a seminar setting. In-depth analysis of grammatical structures. Further use of argumentative oral strategies. Independent research by student to use and evaluate library and electronic information sources. CSU/UC

## French 202

## Intermediate French II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: French 201 with a minimum grade of $C$ or four years of high school French with a passing grade.
A college level French class focusing on a specialized review of grammar and composition; and discussions in French of history and culture based on literary materials. CSU/UC

## French 202H

Honors Intermediate French II
Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: French 201 or French 201H with a minimum grade of C or four years of high school French with a passing grade, and a high school or college GPA of 3.0 or above.
Continuation of intensive exploration of French culture and literature in a seminar setting, review of specialized grammatical structures, and use of argumentative oral strategies. Continued development of conversation and composition. Independent research by students to use and evaluate library and electronic information sources. CSU/UC

## French 211

## Intermediate Conversation and Composition I

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: French 102 with a minimum grade of $C$ or equivalent, or three years of high school French with a passing grade. Intermediate conversational techniques. A review of language
structure through discussion, conversation, reading and composition. Discussions of French culture and civilization. CSU/UC

## French 214

## Intermediate Conversation and Composition II

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: French 201 with a minimum grade of C or the equivalent, or four years of high school French, or concurrent enrollment in French 202.
Further development of conversational and composition skills through cultural and current events and readings. Vocabulary development and idiom usage in a cultural context. CSU/UC

## GEOGRAPHY (GEOG)

## Geography 100 (C-ID GEOG 125) <br> World Regional Geography

Unit(s): 3.0 Class Hours: 54 Lecture total.
The study of major world political and natural regions. Course study includes location of the regions on earth, the physical and cultural elements that lend the regions their identities, and ways in which these elements relate to the regions' inhabitants and economies. CSU/ UC

Geography 100H (C-ID GEOG 125)
Honors World Regional Geography
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Enriched and intensive study, including seminar approach with individual written and oral presentations of major world political and natural regions. Course study includes location of the regions on earth, the physical and cultural elements which provide the regions with their identities, and ways in which these elements relate to the regions' inhabitants and economies. CSU/UC

## Geography 101 (C-ID GEOG 110)

Physical Geography
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to the physical elements of geography: maps, earth/sun relationships, meteorology and climatology, natural vegetation, soils, and geomorphology. CSU/UC

## Geography 101L (C-ID GEOG 111) Physical Geography Laboratory

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Geography 101 with a minimum grade of C or concurrent enrollment in Geography 101.
Laboratory exercises and experiments designed to explore and understand the primary areas of physical geography. Exercises and applications related to map scales and projections, stereoscopic, topographic and aerial photo interpretation, meteorological tools and models and weather prognostication, geomorphologic models and processes, and landform interpretation. CSU/UC

Geography 102 (C-ID GEOG 120)
Cultural Geography
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introductory survey of the geography of culture, and the influences of the physical environment on culture, along with the impact of human activity on the environment, and the role of culture within societies and social groups. The course includes global patterns of population, migration, religion, language, agriculture, politics, customs, resources, and urban and rural settlement. CSU/UC

## Geography 130 (C-ID GEOG 130)

## Introduction to Weather and Climate

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course examines weather and climate patterns of the earth from a geographic perspective including atmospheric structure and composition, solar radiation and energy balances, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, air pressure, winds, air masses and fronts, cyclonic and anticyclonic systems, weather forecasting, adiabatics, climate, and climate change. CSU/UC

## Geography 140 (C-ID GEOG 140)

## California Geography

## Unit(s): 3.0 Class Hours: 54 Lecture total.

A thematic approach to the state's issues, processes and topics relevant to the geography including climate, landforms, natural vegetation, water resources, cultural landscape, ethnic diversity, urban and agricultural regions, and the economy. This course explores the physical, and human landscapes that have evolved as a result of the human-environment interface. CSU/UC

## Geography 155 (C-ID GEOG 155)

## Introduction to Geographic Information Systems

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course introduces basic scientific principles of Geographic Information Systems (GIS) as they relate to working with data that have important spatial orientation and organization. Geometric and geographic concepts and theories are used to develop scientific methods for proper communication of the data and the solution of problems that have spatial relationships. Course covers basic concepts in mapping and orientation, the development of map scales and comparison of different coordinate systems and data error analysis. CSU/UC

## GEOLOGY (GEOL)

Geology 101 (C-ID GEOL 100)
Introduction to Geology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course for students in any major. Study of the internal and external processes that shape the earth (earthquakes, volcanoes, groundwater, streams, landslides). Optional field trip offered.
Concurrent enrollment in Geology 101L is recommended. CSU/UC
Geology 101L (C-ID GEOL 100L) Introduction to Geology Laboratory
Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Geology 101 with a minimum grade of C or concurrent enrollment in Geology 101.
Study of the common minerals and rocks. Map reading and
interpretation of geology using topographic maps, geologic maps, and aerial photos. CSU/UC

## Geology 112

## Earthquakes

Unit(s): 1.0 Class Hours: 18 Lecture total.
Introduction to earthquakes, the processes that cause them, and the results of their occurrences. Required one-day field trip. CSU

Geology 140 (C-ID GEOL 130)

## Environmental Geology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to environmental geology, the interaction between the Earth and mankind. Global study of geologic resources, resource management, geologic hazards, and waste remediation. (Same as Environmental Studies 140). CSU/UC

## Geology 150

## Introduction to Oceanography

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory study of the ocean and its topography, sediments, circulation, shoreline processes, biological productivity and mineral resources. (Same as Earth Science 150). CSU/UC

## Geology 150H

Honors Introduction to Oceanography
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: High school or college GPA of 3.0 or above.
An enriched study of the ocean's topography, sediments, circulation, shoreline processes, biological productivity and mineral resources.
(Same as Earth Science 150H). CSU/UC

## Geology 162

Geologic Field Studies of the Mojave Desert
Unit(s): 1.0 Class Hours: 18 Lecture total.
The geologic history including mountain building, volcanic activity, faulting, mineral resources and human history of the Mojave Desert region. Mandatory orientation along with a two-day field trip. May be repeated. CSU

## Geology 164

Geologic Field Studies of the Eastern Sierra Nevada
Unit(s): 2.0 Class Hours: 36 Lecture total.
The geologic history including mountain building, volcanic activity, glaciation, faulting, and mineral resources of the eastern Sierra Nevada from Red Rock Canyon to Mammoth Lakes. Mandatory orientation along with a five-day field trip. May be repeated. CSU
Geology 168

## Geologic Field Studies of the Owens Valley

Unit(s): 1.0 Class Hours: 18 Lecture total.
A study of the volcanic, pluvial, and fault history as recorded in rocks from Red Rock Canyon to Owens Lake. Mandatory orientation along with a two-day field trip. May be repeated. CSU

## Geology 169

Geologic Field Studies of San Diego County
Unit(s): 1.0 Class Hours: 18 Lecture total.
Field study of the geology, ecology and history of the peninsular ranges and the San Diego County coastline. Mandatory orientation along with a two-day field study. May be repeated. CSU

## Geology 170

Geologic Field Studies of the Anza-Borrego Desert State Park
Unit(s): 1.0 Class Hours: 18 Lecture total.
Field study of the geology, ecology, and history of the Anza-Borrego Desert State Park. Mandatory orientation along with a two-day field study. May be repeated. CSU

## Geology 171

Geology Field Studies of Sequoia and Kings Canyon
National Parks
Unit(s): 1.0 Class Hours: 27 Lecture total.
A study of the geologic history, structure, and tectonics of the Sequoia and Kings Canyon areas. Mandatory orientation along with a threeday field study. May be repeated. CSU

## Geology 172

Geologic Field Studies of the California Coast
Unit(s): 2.0 Class Hours: 36 Lecture total.
A study of the coastal rocks, fossils and faults, as well as coastal oceanographic processes from Malibu to Monterey. Mandatory orientation along with a five-day field study. May be repeated. CSU

## Geology 173

## Geologic Field Studies of Death Valley

Unit(s): 1.0 Class Hours: 18 Lecture total.
The geologic history including mountain building, volcanic activity, faulting, mineral resources and human history of the Death Valley region. Mandatory orientation along with a two-day field trip. May be repeated. CSU

## Geology 174 <br> Geologic Field Studies of Joshua Tree National Park

Unit(s): 1.0 Class Hours: 18 Lecture total.
The geologic history including mountain building, volcanic activity, faulting, mineral resources and human history of the Joshua Tree region. Mandatory orientation along with a two-day field trip. May be repeated. CSU

## Geology 201 (C-ID GEOL 111)

## Introduction to Historical Geology

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total. Introductory geology course investigating the former landscapes and inhabitants of the Earth as preserved in the rock record with an emphasis on North America. Two optional one-day field trips. CSU/UC

## HISTORY (HIST)

History 101 (C-ID HIST 150)

## World Civilizations to the 16th Century

Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines the development of world civilizations and their interrelationships from the earliest beginnings to the sixteenth century. Emphasis on basic ideas, institutions, personalities, religious traditions, and artistic achievements. CSU/UC

History 101H (C-ID HIST 150)

## Honors World Civilizations to the 16th Century

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
An enriched approach designed for honors students that includes individual research as well as small group analysis of historical problems. Emphasis on the development of world civilizations and their interrelationships, basic ideas, institutions, personalities, and artistic achievements from the earliest beginnings to the sixteenth century. CSU/UC

## History 102 (C-ID HIST 160) <br> World Civilizations Since the 16th Century

Unit(s): 3.0 Class Hours: 54 Lecture total.
Broad historical study of world civilizations and their interrelationships from the 16th century to the present. Ideas, institutions, personalities, and artistic achievements which have contributed to present-day society. CSU/UC

## History 102H (C-ID HIST 160)

Honors World Civilizations Since the 16th Century
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
An enriched approach designed for honors students with emphasis on individual research as well as small group analysis of historical problems. Broad historical study of world civilizations and their interrelationships from the 16th century to the present. Ideas, institutions, personalities, and artistic achievements which have contributed to present day society. CSU/UC

History 105

## Ancient Mesoamerican Civilization

Unit(s): 3.0 Class Hours: 54 Lecture total.
An archeological and ethnohistorical survey of the origin and development of pre-Columbian civilizations in ancient Mesoamerica from Paleo-Indian times to the Spanish conquest. (Same as Anthropology 105). CSU/UC

## History 118

## Social and Cultural History of the United States

Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines social and cultural traditions during major historical periods. Focuses on American attitudes and response to economic and technological changes, aesthetics, music, art, language, architecture, folklore, high and popular culture. CSU/UC

## History 120

The United States to 1865
Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines major political, economic, intellectual, and social forces at home and abroad that shaped American life from the colonial period through the Civil War. CSU/UC

## History 120H

Honors The United States to 1865
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Seminar-style, content-enriched course for Honors students that examines major political, economic, intellectual, and social forces at home and abroad shaping American life from colonial period through Civil War. CSU/UC

## History 121 (C-ID HIST 140)

The United States Since 1865
Unit(s): 3.0 Class Hours: 54 Lecture total.
A critical analysis of American history. Includes industrial and technological development, the changing nature of society, cultural developments, domestic politics, and America's expanded world role. CSU/UC

## History 121H (C-ID HIST 140)

## Honors The United States Since 1865

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Seminar-style, content-enriched course for honors students exploring a critical analysis of American history including industrial and technological development, the changing nature of society, cultural patterns, domestic politics, artistic attainments, and America's expanded world role. CSU/UC

History 123
African American History to 1865
Unit(s): 3.0 Class Hours: 54 Lecture total.
Surveys the history of African Americans in the United States from their African origins through the Civil War. Emphasizes African American impact on U.S. economic and political life, and highlights the effect slavery had on selected American thinkers. CSU/UC

History 124
Mexican American History in the United States
Unit(s): 3.0 Class Hours: 54 Lecture total.
Survey of Mexican American history in the U.S. from the Pre-
Columbian period to the present. Emphasis on Mexican American contributions to the political, social, economic, and cultural development of the U.S. Will also examine the relationship of Mexican Americans to other cultural groups. CSU/UC

## History 124H

Honors Mexican American History in the United States
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Enriched and intensive survey of Mexican American history in the U.S. from the Pre-Columbian period to the present. Utilizing a seminar approach, emphasis on Mexican American contributions to the political, social, economic, and cultural development of the U.S. Will also examine the relationship of Mexican Americans to other cultural groups. CSU/UC

## History 125

## Native Americans in the U.S.

Unit(s): 3.0 Class Hours: 54 Lecture total.
An historical and contemporary survey of Native Americans in the United States, including the development of tribes and nations, and the cultural practices of Native Americans today. Field trips may be required. (Same as Anthropology 125). CSU/UC

## History 127

## Women in U.S. History

Unit(s): 3.0 Class Hours: 54 Lecture total.
Women of European, African, Native, Hispanic, and Asian backgrounds examined in U.S. 1607-present. Emphasis on individuation, social status, family, reproduction, child care, slavery, jobs, and political activism. Legal impact and theories of patriarchal oppression raised. CSU/UC

## History 133

## History of California

Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of the major social, political, and economic developments that have shaped California history from the indigenous period to the present. Special attention is given to regional issues, ethnic or cultural groups, constitutional matters, cultural change, and California's connection with the Pacific Basin. CSU/UC

## History 146

African American History From 1863 to The Present
Unit(s): 3.0 Class Hours: 54 Lecture total.
Survey of the history of African Americans in the United States from
Reconstruction to the present. Focuses on the economic, political and social aspects of racism and the varied efforts to advance civil rights. CSU/UC

## History 150

Latin American Civilization to Independence
Unit(s): 3.0 Class Hours: 54 Lecture total.
A study of Latin American civilization from the Indian, African, and European origins to Independence. Topics include native cultures, Spanish and Portuguese colonialism, the evolution of regional societies, and intellectual trends. CSU/UC

## History 151

Modern Latin American Civilization
Unit(s): 3.0 Class Hours: 54 Lecture total.
Latin American civilization in the nineteenth and twentieth centuries with a focus on the historical background of contemporary conditions and issues. Major and minor countries studied. CSU/UC

## History 153

History of Mexico
Unit(s): 3.0 Class Hours: 54 Lecture total.
Mexican history from the pre-Columbian period to the present.
Includes social, political, economic, and cultural growth of the Mexican nation. Emphasis on cultural and political development. CSU/UC

History 163
Introduction to Southeast Asia History
Unit(s): 3.0 Class Hours: 54 Lecture total.
Analyzes the general history of Southeast Asia's society, economy, government, religion, philosophy, and the arts. Also includes the impact of the West, decolonization and national unification movements during the Cold War, and the historical background of contemporary social and political problems. CSU/UC

## History 181

Survey of Chicana/Latina Women's History
Unit(s): 3.0 Class Hours: 54 Lecture total.
Survey of the historical roots of modern-day Chicana/Latina women. Course will discuss women in pre-columbian America, colonial women in Mexico and the Southwest U.S., as well as Chicana/Latina women ir a national/international context, labor, and culture. CSU/UC

## INTERDISCIPLINARY STUDIES (IDS)

## Interdisciplinary Studies 117H <br> Honors Introduction to Global Studies

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
A multidisciplinary, student-driven, social science course dealing with a conceptual approach to the cultural, political and economic implications of globalization. Study groups and individual computerbased research focus on the geographic, historical, and contemporary settings of globalization as well as the development of cross-cultural and comparative research methodologies and analysis. CSU/UC

Interdisciplinary Studies 121
Humanities Through the Arts
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the humanities through a study of seven major art forms: film, drama, music, literature, painting, sculpture and architecture. Artistic works are considered from the perspectives of historical development, the elements used in the creation process, artistic form, and meaning expressed. CSU/UC

## Interdisciplinary Studies 155 <br> Human Sexuality

Unit(s): 3.0 Class Hours: 54 Lecture total.
An interdisciplinary review of the biological development and psychological influences across the lifespan, including neuroscience research and sociocultural considerations in the areas of gender, attraction, attachment, love, sexual orientations, anatomy, sexual arousal and response, conception, contraception, reproduction, health, including sexual coercion and sexually transmitted infections. CSU/UC

## Interdisciplinary Studies 200

Introduction to Liberal Studies
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C. This survey course explores the historical foundations and interdisciplinary nature of Liberal Studies. Students will examine the nature, history, and intersections of prevailing ideas on a specific topic through the arts and humanities, social and political thought, and scientific inquiry. Readings will reflect gender and cultural diversity. CSU/UC

## ITALIAN (ITAL)

## Italian 120

Elementary Italian I
Unit(s): 5.0 Class Hours: 90 Lecture total.
Pronunciation, grammar, speaking, reading, listening, writing, common idioms, and cultural insights. Italian 120 is equivalent to 2 years of higt school Italian. CSU/UC

## Italian 121

## Elementary Italian II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Italian 120 with a minimum grade of C or two years of High School Italian. All public four year institutions in California require Italian I or Italian 120, as a Prerequisite of Italian 2, or Italian 121.
Mastery of pronunciation and basic grammatical structures. Further training in reading, writing, and speaking to promote fluent and idiomatic communication. Italian 121 is equivalent to the third year of high school Italian. CSU/UC

## JAPANESE (JAPN)

## Japanese 101

## Elementary Japanese I

Unit(s): 5.0 Class Hours: 90 Lecture total.
A college level Japanese course focusing on fundamentals of pronunciation and grammar, basic vocabulary (including common idioms), simple conversation, and composition. Supplementary cultural readings. Japanese 101 is equivalent to two years of high school Japanese. CSU/UC

## Japanese 102

## Elementary Japanese II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Japanese 101 or equivalent, or two years of high school Japanese with a passing grade.
A college level Japanese course focusing on further training in language skills, providing avenues for the expression of ideas in both oral and written forms. Additional study of culture. Japanese 102 is equivalent to the third year of high school Japanese. CSU/UC

## KINESIOLOGY ACTIVITIES (KNAC)

## Kinesiology Activities 098 <br> Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Specialized activities courses on topics related to special needs of Kinesiology students.

## Kinesiology Activities 107A

## Beginning Badminton

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed to introduce students to a racket sport, the sport of badminton. Emphasis is placed on the proper technique of the basic skills required in badminton, rules, scoring, and safety. Instruction and practice will include the proper grip, under-hand serve, drives, clears, drops, and smashes. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 107A, 160A, 169A, and Kinesiology Adapted Activities 205A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 107B

## Intermediate Badminton

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 107A with a minimum grade of $C$.
This course is designed to review and solidify the basic techniques and rules associated with the game of badminton. Emphasis is placed on proper footwork and the technical aspects associated with the game. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Activities 107C

## Advanced Badminton

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 107B with a minimum grade of $C$ This course is designed to review and solidify the proper footwork and intermediate techniques associated with the game of badminton. Emphasis is placed on tactical game awareness of both singles and doubles play. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Activities 123

Personal Fitness Training
Unit(s): 1.0 Class Hours: 54 Laboratory total.
Activity course designed to assist students in mastering effective lifestyles, and nutritional, cardiovascular, and resistance training techniques crucial for personal fitness and personal growth. Goal setting and motivation, time management, stress management, as well as development of an individual fitness routine and execution of that routine are the primary topics. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 140A

Beginning Karate
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed to offer instruction in the Japanese art of Karate for beginning level students. Basic movements such as stances, blocking, kicking and striking are taught. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Activities 150A <br> Beginning Hatha Yoga

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed as an introduction to the practice of Hatha Yoga. Emphasis will be placed on proper breathing techniques and learning basis yoga postures. These postures are designed to improve muscle tone and flexibility, as well as helping with breath control, relaxation, and unity of mind, body, and spirit. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 150A, 170A, and Kinesiology Aerobic Fitness 150A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 155A <br> Beginning Self-Defense

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Instruction in personal safety and self-protection including the effective use of hands, knees, elbows, feet, and the mind. Proficiency with everyday objects such as weapons and defense against common street weapons is also stressed. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 140, 155A, Kinesiology Aerobic Fitness 156, 156A, and 156B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 160A <br> Beginning Tennis

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Instruction and practice in the fundamental skills basic to the successful performance of tennis. These skills include grip and body mechanics involved with the forehand, backhand, serve, lob, smash, and net play. Etiquettes, court strategy, and rules will be covered in singles and doubles play. Tournament play will be introduced. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 107A, 160A, 169A, and Kinesiology Adapted Activities 205A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 169A <br> Beginning Wrestling

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Fundamentals of wrestling skills and techniques. Take-downs, escape, analysis of opponents strengths and weaknesses will be considered. Student will master rules, regulations, and ethics of the activity. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 107A, 160A, 169A, and Kinesiology Adapted Activities 205A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 169B

Intermediate Wrestling
Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Kinesiology Activities 169A with a minimum grade of C. Intermediate wrestling skills and techniques. Appropriate conditioning for wrestling competitive is developed. Fundamental skills are reviewed then focus shifts toward developing proficient intermediate skills such as striking, kicking, blocking, and grapling. CSU/UC

## Kinesiology Activities 170A <br> Beginning Yoga

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed to increase flexibility and core muscle strength as a way of improving and enhancing physical and mental alertness through beginning yoga postures. Emphasis will be placed on mind body preparation and the proper technique necessary to perform these postures. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 150A, 170A, and Kinesiology Aerobic Fitness 150A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 200A

## Beginning Intramural - Basketball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This class is designed to introduce/better acquaint students to the game of basketball. Emphasis is placed on rules, techniques, safety, and improving performance. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 200B

## Intermediate Intramural Sports - Basketball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 200A with a minimum grade of C. This class is designed to provide students with an opportunity to participate and compete against classmates in the sport of basketball. Instruction focuses on improving performance in all aspects of the game of basketball: defense, offense, strategies, and special situations. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 200C

## Advanced Intramural Basketball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 200B with a minimum grade of C. This class is designed to provide students with an opportunity to participate and compete against classmates in the sport of basketball. Instruction focuses on improving performance in all aspects of the game of basketball: advanced defense, advanced offense, advanced strategies, and special situations associated with the game of basketball. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 211A <br> Beginning Baseball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Beginning fundamentals of fielding, throwing and hitting. Includes pla, situations with an emphasis on team offensive and defensive strategy. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/ UC

## Kinesiology Activities 211B Intermediate Baseball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 211A with a minimum grade of C. Intermediate fundamentals designed to help prepare the student for baseball competition. Students will learn offensive skills, defensive skills, and communication under competitive game conditions. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/ UC

## Kinesiology Activities 220A <br> Beginning Basketball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Co-educational team sport activity which provides basic skills and techniques are refined at the beginner level. Rules, game strategies, and competitive activities are included. This course will be offered as a half-unit or one-unit course and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 220B Intermediate Basketball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 220A with a minimum grade of C. Co-educational team sport activity which provides intermediate instruction in the techniques, tactics and strategies associated with competitive basketball. Special emphasis placed on individual drills and skills such as catching, dribbling, passing, shooting, offensive and defensive strategies are utilized as well as competitive play situations. This course will be offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C,
270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 220C

## Advanced Basketball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Prerequisite: Kinesiology Activities 220B with a minimum grade of C. Co-educational team sport activity for students with advanced skills. Review of basic fundamental skills and emphasis on advanced development of skills and strategies associated with competitive basketball. This course will be offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 226A

## Beginning Water Polo

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: Students must be able to swim and be comfortable exercising in deep water.
Instruction and experience in the fundamentals and strategies of water polo. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

Kinesiology Activities 230A
Beginning Flag Football
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This is a physical activity course designed to provide instruction and practice in the basic skills, techniques, fundamentals, strategies, and rules of the game of flag football. These activities are based on a beginning level. This course will be offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU

## Kinesiology Activities 260A

## Beginning Soccer

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is an introduction to the beginning skills and rules associated with the sport of soccer. Emphasis will be placed on the proper technique used for these beginning skills as well as FIFA Laws of the Game. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 260B <br> Intermediate Soccer

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 260A with a minimum grade of $C$.
This course is designed to review and solidify the proper techniques associated with outdoor soccer and FIFA Laws of the Game. The intermediate skills necessary as well as the tactical aspects of the game will be introduced. Emphasis will be placed on improving the students technical abilities and tactical team formations used in the game of soccer. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 260C <br> Advanced Soccer

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 260B with a minimum grade of C. This course is designed to review and solidify the proper techniques associated with intermediate level outdoor soccer as well at the tactical aspects that were introduced. Emphasis will be placed on complete technical and tactical match preparedness and awareness. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/ UC

## Kinesiology Activities 265A

Beginning Indoor Soccer
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course in an introduction to the beginning skills and rules associated with the sport of indoor soccer. Emphasis will be placed on the proper technique used for these beginning skills as well as the rules of the game. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Activities 265B

## Intermediate Indoor Soccer

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 265A with a minimum grade of $C$.
This course is designed to review and solidify the proper techniques and rules associated with the game of soccer (indoor). The intermediate skills necessary as well as the tactical aspects of the game will be introduced. Emphasis will be placed on improving the students technical abilities and tactical team formations used in the game of soccer (indoor). This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Activities 265C <br> Advanced Indoor Soccer

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Activities 265B with a minimum grade of C. This course is designed to review and solidify the proper techniques associated with intermediate level indoor soccer as well as the tactical aspects that were introduced. Emphasis will be placed on complete technical and tactical match preparedness and awareness. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Activities 270A <br> \section*{Beginning Softball}

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Fundamentals of fielding, throwing, hitting, and base running. Includes play situations and an emphasis on team offensive and defensive strategy. This course will be offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 290A <br> Beginning Volleyball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Instruction and practice in fundamental skills techniques, strategies, basic rules, team offense and defense, and team concepts of Volleyball. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Activities 290B

Intermediate Volleyball
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: Kinesiology Activities 290A with minimum a grade of B.
An intermediate volleyball activities course. Emphasis will be placed on intermediate technical skill development, offensive and defensive systems analysis, and sport specific physical fitness assessment and conditioning activities. This course will be offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 200A, 200B, 200C, 211A, 211B, 226A, 220A, 220B, 220C, 260A, 260B, 260C, 270A, 290A, and 290B may be taken a maximum of four enrollments. CSU/UC

## KINESIOLOGY ADAPTED ACTIVITIES (KNAD)

## Kinesiology Adapted Activities 098 Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Corequisite: Adapted Kinesiology Medical Release Form required. Specialized courses on topics related to the special needs of students with disabilities and chronic conditions as related to health and fitness. Not offered every semester. Grade: Pass/No Pass Only.

## Kinesiology Adapted Activities 198 <br> Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Corequisite: Adapted Kinesiology Medical Release Form required. Specialized courses on topics related to the special needs of students with disabilities and chronic conditions as related to health and fitness. Not offered every semester. Grade: Pass/No Pass Only. CSU

## Kinesiology Adapted Activities 201A <br> Beginning Adapted Swimming

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corerequisite: Adapted Kinesiology Medical Release Form required. The class is designed for students with disabilities and chronic conditions to experience the benefits of swimming. Individualized exercise programs are designed to teach students adaptive strategies and beginning level techniques for pool entry/exit, breathing, and swim strokes to meet their individual needs. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Adapted Activities 201A, 211A, 211B, Kinesiology Aquatics 201A, 201B, and 204 may be taken a maximum of four enrollments. CSU/UC

Kinesiology Adapted Activities 202A

## Beginning Adapted Circuit Training

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corerequisite: Adapted Kinesiology Medical Release Form required. This class is designed for students with disabilities and chronic conditions to experience the benefits of circuit training. Individualized exercise programs are designed to teach students adaptive strategies and beginning level techniques to meet their individual needs. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Adapted Activities 202A, 202B, Kinesiology Fitness 100, 101A, 101B, 101C, 102, 109A, 109B, 109C, 110A, 110B, and 110C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Adapted Activities 202B

## Intermediate Adapted Circuit Training

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Adapted Activities 202A with a minimum grade of $C$
Corequisite: Adapted Kinesiology Medical Release Form required. The class is designed for students with disabilities and chronic conditions to increase their knowledge and skills competence in circuit training. Individualized exercise programs are designed to teach students adaptive strategies and intermediate level techniques to meet their individual needs. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Adapted Activities 202A, 202B, Kinesiology Fitness 100, 101A, 101B, 101C, 102, 109A, 109B, 109C, 110A, 110B, and 110C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Adapted Activities 205A

Beginning Adapted Badminton
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Corerequisite: Adapted Kinesiology Medical Release Form required. This course is designed for students with disabilities and chronic conditions to introduce the fundamentals of badminton play. Striking skills, ralleying, teamwork, rules, and court strategy are presented to meet the developmental needs of each student. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 107A, 160A, 169A, and Kinesiology Adapted Activities 205A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Adapted Activities 208A Beginning Adapted Aerobic Fitness

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corerequisite: Adapted Kinesiology Medical Release Form required. The class is designed for students with disabilities and chronic conditions to develop knowledge and skills for improving cardiovascular fitness. Various aerobic and stretching exercises are performed to music. Exercise programs are designed to teach students adaptive strategies and beginning level techniques to meet their individual needs. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Adapted Activities 208B Intermediate Adapted Aerobic Fitness

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Adapted Activities 208A with a minimum grade of $C$
Corequisite: Adapted Kinesiology Medical Release Form required.
The class is designed for students with disabilities and chronic conditions to increase knowledge and skills competence in activities that improve cardiovascular fitness. Various aerobic and stretching exercises are performed to music. Exercise programs are designed to teach students adaptive strategies and intermediate level techniques to meet their individual needs. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

Kinesiology Adapted Activities 211A

## Beginning Adapted Aquatics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Adapted Kinesiology Medical Release Form required.
The class is designed for students with disabilities and chronic conditions to experience the benefits of aquatic activities. In a group exercise setting, students are taught adaptive strategies and beginning level techniques for cardiovascular, balance, resistance, and core training. No swimming skills required. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Adapted Activities 201A, 211A, 211B, Kinesiology Aquatics 201A, 201B, and 204 may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Adapted Activities 211B

## Intermediate Adapted Aquatics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Adapted Activities 211A with a minimum grade of $C$ and Adapted Kinesiology Medical Release Form required. This class is designed for students with disabilities and chronic conditions to increase their knowledge and skills competence in aquatic activities. In a group exercise setting, students are taught adaptive strategies and intermediate level techniques for cardiovascular, balance, resistance, and core training. No swimming skills required. This course is offered as a half-unit or one-unit class and may not be repeated. A combination of Kinesiology Adapted Activities 201A, 211A, 211B, Kinesiology Aquatics 201A, 201B, and 204 may be taken a maximum of four enrollments. CSU/UC

## KINESIOLOGY AEROBIC FITNESS (KNAF)

## Kinesiology Aerobic Fitness 098 <br> Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Specialized aerobic fitness courses related to the needs of Kinesiology students.

## Kinesiology Aerobic Fitness 140A <br> Beginning Walking/Jogging for Fitness

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course will emphasize cardiovascular walking/jogging for health and fitness for men and women who are interested in instruction and practice in cardiovascular conditioning. The walking/jogging class is designed to decrease the risk of coronary heart disorders by increasing heart efficiency, vital lung capacity, and the knowledge of each through aerobic and anaerobic conditioning. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic
Fitness 140A, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aerobic Fitness 143A <br> Boot Camp Workout

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Instruction in overall fitness development. The program develops overall fitness and challenges students to perform aerobic, anaerobic, strength, plyometric and agility exercises to their individual highest level. It uses a variety of environments (i.e. beach, strength lab, track, field, etc). This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Aerobic Fitness 144A

## Beginning Cross Training

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This class will be comprised of aerobic workouts designed to introduce the student to the concept of cross training and trying different work-outs. The class will be divided into sections including walk/jog, step training, cardio boxing, weight training, and flexibility workouts. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Aerobic Fitness 144A, Kinesiology Fitness 147A and 147B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aerobic Fitness 146A <br> Beginning Stability Ball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
A core training and strengthening workout using stability balls and free weights (dumbbells) to build core strength and functional fitness. Designed to tone the entire body with special emphasis on progressively improving posture, balance, flexibility, core strength and coordination. This course will be offered as a half-unit or one-unit class and may not be repeated. CSU/UC

## Kinesiology Aerobic Fitness 146B Intermediate Stability Ball Training

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Kinesiology Aerobic Fitness 146A with a minimum grade of C
An intermediate core training and strengthening workout using stability balls and free weights (dumbbells) to build core strength and functional fitness. Designed to tone the entire body with special emphasis on progressively improving posture, balance, flexibility, core strength and coordination. This course is offered as a half-unit or oneunit class and may not be repeated. CSU/UC

## Kinesiology Aerobic Fitness 150A <br> Beginning Stretch, Flex and Tone

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
A combination of stretching and toning exercises to increase strength, flexibility, and overall body fitness. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 150A, 170A, and Kinesiology Aerobic Fitness 150A may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aerobic Fitness 156A <br> Beginning Cardio Kickboxing

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
A series of boxing and kickboxing exercises are arranged to music, gradually increasing in tempo with a greater emphasis on a non-stop 25-30 minute program. Kicks, punches, calisthenics, and rope jumping are combined to elevate heart rate and strengthen all major muscle groups. Students will learn to apply these self-defense techniques on kick pads and focus mitts to improve accuracy and provide resistance for the muscles. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 140, 155A, Kinesiology Aerobic Fitness 156, 156A, and 156B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aerobic Fitness 156B

## Intermediate Cardio Kickboxing

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Aerobic Fitness 156A with a minimum grade of $C$
A series of boxing and kickboxing exercises are arranged to music, gradually increasing in tempo with a greater emphasis on a non-stop 25-30 minute program. This class is designed to increase competence in kicking and punching, calisthenics, and rope jumping in various combinations to improve fitness. Students will further develop intermediate level self-defense techniques on kick pads and focus mitts to improve accuracy and provide resistance for the muscles. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 140, 155A, Kinesiology Aerobic Fitness 156, 156A, and 156B may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aerobic Fitness 157A Beginning Cardio Pump

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Instruction in overall fitness development. This class is designed to incorporate weight lifting into a cardiovascular routine. It develops strength and endurance of all major muscle groups using routines performed to music. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aerobic Fitness 198

## Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Specialized aerobic fitness courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only. CSU

## KINESIOLOGY AQUATICS (KNAQ)

## Kinesiology Aquatics 098 <br> Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Specialized aquatics courses on topics related to special needs of Kinesiology students. Grade: Pass/No Pass Only.

## Kinesiology Aquatics 198

## Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Specialized aquatics course on topics related to the needs of Kinesiology students. CSU

## Kinesiology Aquatics 201A

## Beginning Swimming

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Instruction and experience in the basic stroke techniques and safety procedures of swimming. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Adapted Activities 201A, 211A, 211B, Kinesiology Aquatics 201A, 201B, and 204 may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Aquatics 201B <br> Lap Swimming

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: Prior experience with basic swim strokes, turns, and treading water.
Individualized swimming program designed to improve swimming techniques and cardiovascular fitness. Emphasis on endurance training. This course is offered as a half unit or one unit class and may not be repeated. A combination of Kinesiology Adapted Activities 201A, 211A, 211B, Kinesiology Aquatics 201A, 201B, and 204 may b $\epsilon$ taken a maximum of four enrollments. CSU/UC

## KINESIOLOGY FITNESS (KNFI)

## Kinesiology Fitness 098 <br> Topics

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Specialized fitness activities courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only.

## Kinesiology Fitness 112A

Beginning Circuit Training
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
An introduction to fundamental principles and practices of circuit training including safety, using cardiovascular and resistance machines, and components of exercise. This course provides the basics of a comprehensive exercise program that combines cardiovascular exercises with strength training. This course is offered as a half-unit or one-unit class and may not be repeated. CSU/UC

## Kinesiology Fitness 112B

## Intermediate Circuit Training

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Fitness 112A with a minimum grade of C/P. A continuation of exercise principles and practices of circuit training covered in Beginning Circuit Training. This course is designed to help students increase cardiovascular conditioning using a combination of resistive strength exercises and endurance training. Must complete Beginning Circuit Training prior to enrollment. This course is offered as a half-unit or one-unit class and may not be repeated. CSU/UC

## Kinesiology Fitness 112C

## Advanced Circuit Training

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Fitness 112B with a minimum grade of C/P. An individualized fitness program developed to promote lifetime fitness. Employs a combination of cardiovascular machines (treadmill, steppers, bicycles, elliptical, rower, etc.), and resistance machines. This course is designed as a continuation of Intermediate Circuit Training and promotes increased cardiovascular and muscular endurance. Educates students on the principles of nutrition and the body's adaptation to exercise. This course is offered as a half-unit or one-unit class and may not be repeated. CSU/UC

## Kinesiology Fitness 114A <br> Beginning Spinning

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This class is geared towards improving one's cardiovascular fitness and muscular strength through a spinning programon a stationary bike. The program covers two basic types of terrain: flat roads and hills through changes in resistance and positions. Spinning emphasizes everyone's individual needs, regardless of athletic ability, taught in a group atmosphere. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

Kinesiology Fitness 114B

## Intermediate Spinning

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Individualized spinning program designed to improve spinning technique and cardiovascular fitness. Emphasis on endurance training. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Fitness 115A

## Beginning Cardiovascular Conditioning

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is offered as a half-unit or one-unit class and may not be repeated. A basic course designed for those people who desire a cardiovascular work-out using a combination of equipment such as stationary bikes, ellipticals, treadmills, rowers, etc. This course will cover elemental information as it regards to aerobic conditioning. This course is offered as a half unit or one unit class and may not be repeated. Grade: Pass/No Pass Only. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Fitness 115B

## Intermediate Cardiovascular Conditioning

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
A course designed for those people who desire a cardiovascular work-out using a combination of equipment such as stationary bikes, ellipticals, treadmills, rowers, etc. This course is a continuation of Beginning Cardiovascular Conditioning and is designed to help students increase their cardiovascular endurance developed as a beginner. This course will cover topics as they relate to aerobic conditioning. This course is offered as a half unit or one unit class and may not be repeated. Grade: Pass/No Pass Only. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Fitness 115C

## Advanced Cardiovascular Conditioning

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
A continuation of Intermediate Cardiovascular Conditioning. This course is designed for students to increase their cardiovascular conditioning using a combination of machines (bicycles, treadmills, ellipticals, etc.), advanced fitness concepts as they relate to lifelong fitness levels will be covered. This course provides students with the opportunity to elevate their endurance and cardiovascular levels to the high-end of the aerobic range. This course is offered as a half unit or one unit class and may not be repeated. Grade: Pass/No Pass Only. A combination of Kinesiology Activities 123, Kinesiology Adapted Activities 208A, 208B, Kinesiology Aerobic Fitness 140, 157A, Kinesiology Fitness 115A, 115B, and 115C may be taken a maximum of four enrollments. CSU/UC

## Kinesiology Fitness 147A

## Beginning Weight Training

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Introductory instruction in basic weight lifting concepts and experiential practice in large muscle area development utilizing guided and free weights. Development will be in muscle size or tone and strength or endurance. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## Kinesiology Fitness 147B

Intermediate Weight Training
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Prerequisite: Kinesiology Fitness 147A with a minimum grade of C This course is designed for students to increase their knowledge and skills competence in large muscle area development utilizing free weights. Individualized exercise programs are designed to teach students intermediate level strategies and techniques. Development will be in muscle size or tone and strength or endurance. This course is offered as a half unit or one unit class and may not be repeated. CSU/UC

## KINESIOLOGY HEALTH EDUCATION (KNHE)

## Kinesiology Health Education 098 <br> Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Specialized health-related courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only.

## Kinesiology Health Education 101 <br> Healthful Living

Unit(s): 3.0 Class Hours: 54 Lecture total.
A comprehensive look at factors that impact people's health, longevity and lifetime wellness. Areas covered will be personal fitness, nutrition, drugs, alcohol and tobacco, AIDS and sexually transmitted diseases, and degenerative diseases including cancer, heart disease, strokes and diabetes. CSU/UC

## Kinesiology Health Education 102 <br> Women's Health Issues

Unit(s): 3.0 Class Hours: 54 Lecture total.
An investigation into traditional and holistic health topics with a special emphasis on women's issues, considering all aspects and concepts of social and political influences, nutrition and fitness, relationships, sexuality, reproductive issues, and careers. Through analysis of these topics, students apply methods to healthy lifestyle choices. CSU/UC

## Kinesiology Health Education 103 <br> Men's Health Issues

Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines the societal, economic, cultural, and gender influences that shape men's health beliefs and practices. Explores specific health issues unique to men such as accessing health care, healthy relationships, domestic abuse, prostate cancer, and alcohol use. Critically examines literature and media to identify interventions within a masculinity framework to improve men's health outcomes. Identification of positive outcomes of healthy men at home, work, and in society. CSU/UC

## Kinesiology Health Education 104 Nutrition and Fitness

Unit(s): 2.0 Class Hours: 36 Lecture total.
An applied nutrition course to improve the nutrition and health of active individuals. The course will focus on lifestyle, disease prevention, fitness, weight control, and the basic concepts of good nutrition. CSU/UC

## Kinesiology Health Education 105

(C-ID KIN 101 = $105+107$ )
First Aid and Personal Safety
Unit(s): 1.5 Class Hours: 27 Lecture total.
This course involves the theory and detailed demonstration of first aid care. Student's learn accident prevention, assessing a victim's condition, and immediate care to accident victims. American Heart Association first aid certification upon successful completion. May be repeated for recertification. Completion of Kinesiology Health Education 105 \& Kinesiology Health Education 107 equate to C-ID KIN 101. CSU/UC

Kinesiology Health Education 106 (C-ID KIN 101) Cardiopulmonary Resuscitation and First Aid
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course involves the theory and detailed demonstration of the first aid care of the injured. The student will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, CPR, and AED certification(s) will be granted upon successful completion of requirements. CSU/UC

Kinesiology Health Education 107
(C-ID KIN 101 = 105 + 107)

## Cardiopulmonary Resuscitation

Unit(s): 2.0 Class Hours: 36 Lecture total.
This course involves the theory and detailed demonstration in artificial respiration and manual artificial circulation (CPR) that is recommended for use in cardiac arrest cases. Instruction in the Automatic External Defibrillator (AED) is included. Successful completion may lead to American Heart Association Heartsaver or Health Care Provider with AED Certificate. May be repeated for recertification. Completion of Kinesiology Health Education 105 \& Kinesiology Health Education 107 equate to C-ID KIN 101. CSU/UC

## Kinesiology Health Education 108 <br> Stress Management

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course examines productive and nonproductive stress and the influence of various types of stress on health and wellness. Topics include the physiological aspects of stress and its effects on health, assessments of personal coping style, strategies for coping effectively with stress, relaxation techniques, mindful awareness, and positive self-talk. Emphasis is placed on practical application of stress management techniques in daily life. (CSU) (Degree Credit) AA GE, CSU GE. CSU

## Kinesiology Health Education 198 <br> Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Specialized health-related courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only. CSU

## KINESIOLOGY INTERCOLLEGIATE ATHLETICS (KNIA)

## Kinesiology Intercollegiate Athletics 098 <br> Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Specialized athletics courses on topics related to the needs of studentathletes. Grade: Pass/No Pass Only.

## Kinesiology Intercollegiate Athletics 125 Conditioning for Football

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: Students should be in good physical health and be able to safely engage in the course content.
This class is designed to prepare the college football athletes to play offense, defense, and special teams. The focus is on skill development and conditioning through resistance training and field work. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 128 Conditioning for Athletes

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
An exercise program designed for athletes who participate in intercollegiate sports. Emphasis will be on the development of speed, endurance, flexibility, and strength. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 133 Off Season Swimming

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: Kinesiology Aquatics 201A with a minimum grade of $C$ or equivalent high school experience.
This course is designed as an advanced aquatics class for student athletes with exceptional swimming talent who have an interest in skills development and conditioning for intercollegiate swimming. Emphasis is placed upon developing competitive strokes and strategies as well as learning collegiate swimming rules and regulations. A variety of training techniques geared toward building strength, speed, and endurance will be implemented. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 171 <br> Wrestling - Off Season

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed as a skills development and conditioning class for student athletes interested in wrestling. Fundamentals of wrestling analysis of opponents strengths and weakness, and knowledge of rules and regulations of the sport are presented. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 198 Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Specialized athletics courses on topics related to the needs of studentathletes. Grade: Pass/No Pass Only. CSU

## Kinesiology Intercollegiate Athletics 201 <br> Baseball Men <br> Unit(s): 3.0 Class Hours: 175 Laboratory total.

Recommended Preparation: High school or higher level baseball experience.
This course is designed for student-athletes with exceptional baseball talent who intend to transfer and play baseball at the 4 -year or professional level. Emphasis is on application of collegiate baseball rules and regulations, offensive and defensive fundamentals and strategies and mental strategies for intercollegiate sports competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 202

## Basketball - Men

Unit(s): 3.0 Class Hours: 175 Laboratory total.
This course is designed for student athletes with exceptional basketball talent so they may compete in intercollegiate basketball. Emphasis is placed upon application of collegiate basketball rules and regulations, offensive and defensive skills and strategies, and mental set for competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to intercollegiate competition. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 204

## Football - Men

Unit(s): 3.0 Class Hours: 162 Laboratory total.
Recommended Preparation: To compete at the collegiate level, students should have prior experience at the high school or club level and must be physically able to safely participate in intercollegiate athletics. If no prior experience is inherent, then tangible attributes such as height, weight, strength, and speed results can be utilized to assess ability.
This course is designed for students with exceptional football talent so they may compete in intercollegiate football. The program provides competition with conference colleges as well as with other California community colleges. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 206

## Swimming - Men

Unit(s): 3.0 Class Hours: 175 Laboratory total.
This class is designed for student athletes with exceptional swimming talent so they may compete in intercollegiate swimming. Emphasis is placed upon stroke technique, starts and turns, and collegiate rules and regulations. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

Kinesiology Intercollegiate Athletics 209

## Water Polo - Men

Unit(s): 3.0 Class Hours: 162 Laboratory total.
This course is designed for student athletes with exceptional water polo talent so they may compete in intercollegiate water polo.
Emphasis is placed upon application of collegiate water polo rules and regulations, offensive and defensive skills and strategies, and mental set for competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 210 <br> Wrestling - Men

Unit(s): 3.0 Class Hours: 162 Laboratory total.
This course is designed for student athletes with exceptional combative skills so they may compete in intercollegiate wrestling. Emphasis is placed on successful techniques and strategies for intercollegiate competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 211 <br> Softball - Women

Unit(s): 3.0 Class Hours: 175 Laboratory total.
Recommended Preparation: High school varsity softball experience.
This course is designed for student-athletes to participate in intercollegiate softball competition. A high-level, competitive program for student athletes with exceptional softball talent. Emphasis is placed upon application of collegiate softball rules and regulations as well as defensive and offensive skills and strategies. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 212 Basketball - Women

Unit(s): 3.0 Class Hours: 175 Laboratory total.
This course is designed for student-athletes with exceptional basketball talent so they may compete in intercollegiate competition. Emphasis is placed upon application of collegiate basketball rules and regulations, offensive and defensive skills and strategies, and mental set for competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 213 <br> Volleyball - Women

Unit(s): 3.0 Class Hours: 162 Laboratory total.
This course is designed for student athletes with exceptional volleyball talent so they may compete in intercollegiate competition. Emphasis will be placed on advanced technical skill development, offensive and defensive systems analysis, sport specific physical fitness. Students must meet the California Community College Athletic Association eligibility requirements and pass a health screening prior to intercollegiate competition. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 216 Soccer - Men

Unit(s): 3.0 Class Hours: 175 Laboratory total.
Recommended Preparation: High school varsity soccer experience. This soccer class is designed for student-athlete sport competition. Emphasis is placed on advanced technical and tactical development. Students must meet CCCAA eligibility requirements and pass a health screening prior to competition. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 217 Swimming - Women

Unit(s): 3.0 Class Hours: 175 Laboratory total.
Recommended Preparation: Kinesiology Intercollegiate Athletics 133 with a minimum grade of $C$ or high school swim team experience. This class is designed for student-athletes with exceptional swimming talent so they may compete in intercollegiate swimming. Emphasis is placed upon stroke technique, starts and turns, and collegiate rules and regulations. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 218 <br> Track - Women

Unit(s): 3.0 Class Hours: 162 Laboratory total.
Recommended Preparation: Successful interscholastic track and field and/or cross country experience or equivalent.
This course is designed for student athletes with advanced running skills so they may compete in intercollegiate track. Emphasis is placed upon application of track \& field techniques, advanced training modalities, rules and regulations of the sport, and strategies for successful intercollegiate competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 219 Cross Country - Women

Unit(s): 3.0 Class Hours: 162 Laboratory total.
Recommended Preparation: Successful interscholastic cross country and/or track and field experience or equivalent.
This course is designed for student athletes with advanced running skills so they may compete in intercollegiate cross country. Emphasis is placed upon application of cross country techniques, advanced training modalities, rules and regulations of the sport and strategies for successful intercollegiate competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 220 <br> Soccer - Women

Unit(s): 3.0 Class Hours: 175 Laboratory total.
Recommended Preparation: High school varsity soccer experience.
This soccer class is designed for student-athlete sport competition.
Emphasis is placed on advanced technical and tactical development. Students must meet CCCAA eligibility requirements and pass a health screening prior to competition. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 221

Water Polo - Women
Unit(s): 3.0 Class Hours: 175 Laboratory total.
Recommended Preparation: Kinesiology Intercollegiate Athletics 227 with a minimum grade of $C$ or former high school water polo team experience.
This course is designed for student athletes with exceptional water polo talent so they may compete in intercollegiate water polo. Emphasis is placed upon application of collegiate water polo rules and regulations, offensive and defensive skills and strategies, and mental set for competition. Students must meet CCCAA eligibility requirements and pass a health screening prior to participation. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 223 Baseball

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: High school or higher level baseball experience.
This course is designed for skill development and conditioning for intercollegiate baseball players. Emphasis is placed upon instruction and training in the skills, fundamentals, knowledge, strategies,
conditioning, and teamwork required for intercollegiate level baseball. This course is offered as a half-unit or one-unit class in the class schedule. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 227 Off Season Water Polo

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed to provide skills development and conditioning for competitive waterpolo players to prepare for intercollegiate competition. Emphasis is placed upon instruction and experience in the fundamentals and strategies of the sport of water polo. This course is offered as a half-unit or one-unit class in the class schedule. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 230 Preseason Football

Unit(s): 0.5 Class Hours: 4.50 Lecture, 18 Laboratory total.
Prerequisite: Health screening clearing student to participate in collegiate football.
This is an intensive course designed to prepare student athletes for a season of competition in intercollegiate football. It will include field work, classroom meeting time, and resistance training. The focus is skill development and preparation for a season of competition. It is included as part of the 175 contact hours allowed for student-athlete skill development and conditioning. Students must have a current health screening and doctor clearance to participate. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 231 Football Camp

Unit(s): 1.0 Class Hours: 9 Lecture, 36 Laboratory total.
Recommended Preparation: Students must be of good health, physically fit, and either have experience at the collegiate, high school, or club level of football, or possess the tangible size and speed of a collegiate prospect.
This is an intensive course designed to prepare student athlete for a season of competition in intercollegiate football. It will include field work, classroom meeting time, and resistance training. The focus is skill development and preparation for a season of competition. It is included in the 175 hours allotted to football for offseason development. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 232 Football

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: Student should be of good health and can safely engage in course content.
Basic elements of the game including fundamental skills in stance, footwork, tackling and blocking techniques will be presented. Offensive and defensive formations and strategies will be practiced. The focus is skill development and conditioning, and is included in the 175 hours allotted to football for offseason development. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 235 Speed and Agility

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This class includes instruction on linear speed, non-linear speed, and jumping ability using state of the art plyometric training and speed specific training tools. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC
Kinesiology Intercollegiate Athletics 240
Advanced Basketball Skills - Men
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This class is designed to focus on skill development and sport conditioning for basketball players with exceptional talent. Emphasis is placed upon application of basketball training techniques, offensive and defensive skills and strategies, and rules and regulations of the game. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 261 Soccer - Women

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Recommended Preparation: High school varsity soccer experience.
This soccer class is designed for student-athlete sport conditioning and technical and tactical skill development. This course is offered as c half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 262 <br> Soccer - Men <br> Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.

Recommended Preparation: High school varsity soccer experience.
This soccer class is designed for student-athlete sport conditioning, and technical and tactical skill development. This course is offered as c half-unit or one-unit class as scheduled. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 270 Softball

Unit(s): 0.5 Class Hours: 36 Laboratory total.
Recommended Preparation: High school or higher level softball experience.
This course is designed for skill development and conditioning for intercollegiate softball players. Fundamentals of fielding, throwing, hitting, and base running. Includes play situations and an emphasis on team offensive and defensive strategy. May be repeated. CSU/UC

Kinesiology Intercollegiate Athletics 271

## Softball - Off Season

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed for skills development and conditioning for exceptional softball players interested in intercollegiate competition. Basic skills and fundamentals of catching, throwing, pitching, hitting and baserunning will be discussed. Offensive and defensive techniques and strategies will be practiced. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 281 <br> Track and Field - Off Season

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed to provide skills development and conditioning for intecollegiate track and field athletes. Students learn the principles of team building while preparing for individual event specific activities. The focus will be on improving event specific technical skills, training methods, and mental set for competitive performance in track and field. Field trips to next level track and field events may occur. This course will be scheduled as a half-unit or one-unit class in the schedule. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 291 <br> Volleyball - Off Season

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
This course is designed as a high-level conditioning and skills development program for volleyball players with exceptional talent. This course is offered as a half-unit or one-unit class. May be repeated. CSU/UC

## Kinesiology Intercollegiate Athletics 293

Sand Volleyball
Unit(s): 3.0 Class Hours: 175 Laboratory total.
This course is designed for student athletes so they may compete in intercollegiate sand volleyball. Emphasis will be placed on advanced technical skill development, offensive and defensive systems analysis, sport specific physical fitness. Students must meet the California Community College Athletic Association eligibility requirements and pass a health screening prior to intercollegiate competition. May be repeated. May be repeated. CSU/UC

## KINESIOLOGY PROFESSIONAL (KNPR)

## Kinesiology Professional 101 (C-ID KIN 100) Introduction to Kinesiology

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions. CSU/UC

## Kinesiology Professional 110

Kinesiology-Related Occupational Work Experience
Unit(s): 1.0-8.0 Class Hours: 60-600 Lecture total.
Prerequisite: Students must be concurrently enrolled or have completed Kinesiology Sports Medicine 101 or the Fitness Specialist Certificate Program. Application must be approved by the Kinesiology Department Chair.
This work experience course consists of supervised paid or unpaid employment in an Athletic, Allied Health, or Fitness related setting. It is designed to assist students in acquiring desirable work habits, attitudes, and skills related to the student's educational major. Credit may be accrued at the rate of one to eight units per semester for a maximum of sixteen units. Seventy five hours of paid work or sixty hours of unpaid work equals one unit of credit. Student repetition is allowed per title 5 section 55253; however, only 1 unit may be applied toward major requirements or a certificate. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Kinesiology Professional 125

Sport Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
An academic and practical examination of the psychological aspects of sport concentrating on the scientifically proven methods of enhancing athletic performance through psychological training. CSU

## Kinesiology Professional 150 <br> Sport and Society

Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines the role of sport in modern society. Looks at how sport influences and shapes global attitudes among nations. Investigates the historical, social, economic, and political impact of sport on society. CSU

## Kinesiology Professional 155 <br> Theory of Soccer

Unit(s): 2.0 Class Hours: 36 Lecture total.
This course is designed for the competitive soccer player. Students will learn and develop a further understanding of the game of soccer. Laws of the game, offensive and defensive techniques and tactics, and the physical preparation for becoming a soccer player will be discussed. CSU/UC

## Kinesiology Professional 156

Sport Psychology Applications - Soccer
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course provides advanced mental training to improve soccer performance. Theories, strategies, and best practices include; mental set, arousal and performance, mental imagery, and motivation as they pertain to preparing for soccer competition. Students will develop necessary knowledge and skills to prepare for intercollegiate competition as well as self-assess readiness for transfer and the selection of transfer program. Open Entry/Open Exit. CSU

## Kinesiology Professional 160 <br> Management of Physical Education and Sport

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course examines all aspects of sports administration including the management process, organization of interscholastic and intercollegiate sports, human resources, fiscal issues, legal liability, and public relations. The course is intended for students interested in a career in physical education, coaching, fitness, and sports administration. CSU

## Kinesiology Professional 165

Theory of Softball
Unit(s): 2.0 Class Hours: 36 Lecture total.
A general overview of rules, regulations, strategies, mental preparation, skill evaluation, and the history of the sport of softball. Includes strategies and winning techniques of the game. May be repeated. CSU/UC

## Kinesiology Professional 170 Sport Ethics

Unit(s): 3.0 Class Hours: 54 Lecture total.
A class designed to examine ethics, moral questions, and value judgements related to sport. Its approach allows students to follow and analyze ethical arguments, think through philosophical issues, and apply them to the artistic expression of sport as well as everyday life. CSU

## Kinesiology Professional 175 Theory of Football

Unit(s): 2.0 Class Hours: 36 Lecture total.
Tactics and strategies applied to specific game situations incorporating evaluation of opponent's development of game plan including offense, defense, and the kicking game. CSU/UC

## Kinesiology Professional 198 <br> Topics <br> Unit(s): 0.1-3.0 Class Hours: 2-54 Lecture total.

Specialized professional studies courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only. CSU

## Kinesiology Professional 199

## Sport Psychology Applications - Baseball

Unit(s): 2.0 Class Hours: 36 Lecture total.
This class provides advanced mental training to improve baseball performance. Theories, strategies, and best practices include; mental set, arousal and performance, mental imagery, and motivation as they pertain to preparing for baseball competition. Students will develop necessary knowledge and skills to prepare for intercollegiate competition as well as self-assess readiness for transfer and the selection of transfer program. Open Entry/Open Exit. CSU

## Kinesiology Professional 200

## Theory of Baseball

Unit(s): 2.0 Class Hours: 36 Lecture total.
Designed for the competitive baseball player. Topics to include offensive and defensive baseball strategies, bunting, baserunning, mental and physical preparation of becoming a baseball player. CSU/ UC

## Kinesiology Professional 202

## Introduction to Personal Training

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is designed to introduce students to the fitness specialist career and prepare students for entry level personal trainer certification exams. Emphasis is placed on professional conduct, introduction of human movement science principles, and exercise program development for apparently healthy adults and children. CSU

## Kinesiology Professional 205

## Techniques of Exercise Leadership

Unit(s): 1.0 Class Hours: 9 Lecture, 45 Laboratory total.
This course is designed to introduce and practice the principles and techniques involved in teaching group exercise and developing personal trainer/client relationships. Emphasis is placed on client assessment, communication skills, program design, exercise adherence, teaching strategies, and professional responsibility and liability. CSU

## Kinesiology Professional 217 <br> Theory of Basketball

Unit(s): 2.0 Class Hours: 36 Lecture total.
This course provides instruction for the competitive basketball player. Topics to include techniques and strategies of basketball, different types of defense and offensive patterns. Emphasis will be placed on the mental aspect of basketball, team play, biomechanics, and film study at a competitive level. Open Entry/Open Exit. CSU/UC

## Kinesiology Professional 218

## Sport Psychology Applications - Basketball

Unit(s): 2.0 Class Hours: 36 Lecture total.
This class provides advanced mental training to improve basketball performance. Theories, strategies, and best practices include; mental set, arousal and performance, mental imagery, and motivation as they pertain to preparing for basketball competition. Students will develop necessary knowledge and skills to prepare for intercollegiate competition as well as self-assess readiness for transfer and the selection of transfer program. Open Entry/Open Exit. CSU

## Kinesiology Professional 275 <br> Sport Psychology Applications - Football

Unit(s): 2.0 Class Hours: 36 Lecture total.
This class provides advanced mental training to improve performance in football. Theories, strategies, and best practices include; mental set, arousal and performance, mental imagery, and motivation as they pertain to preparing for competition. Students will develop necessary knowledge and skills to prepare for intercollegiate competition as well as self-assess readiness for transfer and the selection of transfer program. CSU

## KINESIOLOGY SPORTS MEDICINE (KNSM)

## Kinesiology Sports Medicine 098 <br> Topics

Unit(s): 0.1-3.0 Class Hours: 2-54 Lecture total.
Specialized sports medicine courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only.

## Kinesiology Sports Medicine 101

## Introduction to Sports Medicine

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course is designed to be an introduction to the field of sports medicine/athletic training. It includes exposure to basic human anatomy and common athletic injuries as well as appropriate injury management strategies. CSU/UC

## Kinesiology Sports Medicine 198

## Topics

Unit(s): 0.1-3.0 Class Hours: 2-54 Lecture total.
Specialized sports medicine courses on topics related to the needs of Kinesiology students. Grade: Pass/No Pass Only. CSU

## LAW (LAW)

## Law 058

Legal Interpreting and Translation Spanish/English
Unit(s): $3.0 \quad$ Class Hours: 54 Lecture total.
A course in legal interpretation/translation designed for employment certification of interpreters for government and private legal businesses. Fluency in Spanish and English strongly recommended. Field trips may be required. (Same as Business Application 058)

## Law 100 (C-ID LPPS 110)

Introduction to Legal Studies
Unit(s): 3.0 Class Hours: 54 Lecture total.
Overview of the legal system including the courts, participants and various sources of law in the American legal system. Review of the legal and judicial process in the United States covering the adversarial system, jurisdiction of federal and state courts, and the general process of judicial review. Explanation of different sources of law including statutes, court cases and administrative agency rules. Review of basic legal reasoning and introductory legal research methods. Examination of legal ethics. Introduction to substantive areas of law and the effect the law has in various groups and individuals in our system. CSU/UC

## Law 105 (C-ID BUS 120) <br> The Legal Environment of Business

Unit(s): $3.0 \quad$ Class Hours: 54 Lecture total.
Fundamental legal principles pertaining to business transactions. Introduction to the law as an instrument of social and political control in society. Topics include sources of law and ethics, contracts, torts, agency, judicial and administrative processes, employment law, forms of business organizations, and domestic and international governmental regulations. (Same as Business 105.). CSU/UC

## Law 110

Legal Terminology Spanish/English
Unit(s): 2.0 Class Hours: 36 Lecture total.
The study of terminology used in a law office and the court system. CSU

## Law 299

Cooperative Work Experience Education - Occupational
Unit(s): 1.0-4.0 Class Hours: 60-300 Laboratory total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, section 55253. May be repeated. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## LIBRARY \& INFORMATION STUDIES (LIBI)

## Library \& Information Studies 100 <br> Library Research Fundamentals

Unit(s): 1.0 Class Hours: 18 Lecture total.
This course is designed to teach students basic college-level research skills for effective use of traditional and electronic library resources. Instruction includes print and non-print information sources such as reference books, scholarly material, online subscription databases, and the Internet. CSU/UC

## Library \& Information Studies 103

## Advanced Internet Research

Unit(s): 1.0 Class Hours: 18 Lecture total.
This course focuses on library research strategies for effectively locating and evaluating information on the Internet. Core topics are designing and performing successful search strategies, evaluating online information using critical thinking skills, identifying the ethical and legal aspects of using online sources, and citing sources using a standard documentation style. CSU

## LIBRARY TECHNOLOGY (LIBR)

## Library Technology 053

Library Internship
Unit(s): 3.0 Class Hours: 18 Lecture, 120 Laboratory total.
Prerequisite: Library Technology 101, Library Technology 110, and Library Technology 122 with a minimum grade of C.
Closely supervised fieldwork experiences in two carefully selected library settings that will allow the student to apply learned knowledge and skills. Weekly review seminars and discussions are conducted in the classroom and online. To be taken in the last semester of an A.A. Degree or Certificate in Library Technology. Grade: Pass/No Pass Only.

## Library Technology 054

Children's Library Services
Unit(s): 3.0 Class Hours: 54 Lecture total.
Course explores standard library procedures and practices as they are adapted to a children's library situation. Each student has practice evaluating materials and using various methods for sharing literature with children, e.g. reading aloud, storytimes, displays, and bibliographies.

## Library Technology 101 <br> Introduction to Library Technology

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course provides an introduction to libraries as a career field with particular emphasis on the role of the library technician in various types of library settings. It also provides an overview of library collections, history, organization, staffing, services, terminology, and electronic online resources. CSU

## Library Technology 102 <br> Information Sources for Paraprofessionals: Tools and Techniques

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to information sources in both print and electronic formats. Includes a basic theoretical and practical exploration of the nature and types of information in selected subject fields. Builds skills in information searching and in the evaluation of information and information sources. CSU/UC

## Library Technology 110

## Technical Services

Unit(s): 3.0 Class Hours: 54 Lecture total.
Survey of library technical services, exploring philosophies, ethics, policies, and procedures. Emphasis on materials acquisitions processes and workflows; cataloging and classification principles and rules (MARC, RDA, LC and Dewey Classification systems, and LC Subject Headings); metadata and its impact on user experience; collections preservation and maintenance; and the future of technical services. CSU

## Library Technology 122

## Public Services

Unit(s): 3.0 Class Hours: 54 Lecture total.
Exploration of library public services with special emphasis placed on a variety of issues as they relate to the circulation of library materials, the delivery of reference services, the use of the Internet and full-text databases for reference, and the preparation and delivery of library programs. CSU

## MANAGEMENT (MGMT)

## Management 120

Principles of Management
Unit(s): 3.0 Class Hours: 54 Lecture total.
Principles, methods, and procedures essential to the successful management of human and financial resources. Planning, decision making, staffing, directing, motivating, leading, communicating, controlling, and the application of managerial skills. (Same as Business 120). CSU

## Management 121

## Human Relations and Organizational Behavior

Unit(s): 3.0 Class Hours: 54 Lecture total.
The role of the manager and management's relationship to employees. Includes the application of motivational theories, communications, leadership, and organizational structure. (Same as Business 121). CSU

## Management 122

## Business Communications

Unit(s): 3.0 Class Hours: 54 Lecture total.
Overview of oral and written communication skills used in business; emphasizes guidelines for improving writing and speaking skills, common solutions to common communication problems, ethical issues facing business communicators today, instructions on how to identify areas of legal vulnerability, and tested techniques for communicating successfully in today's high-tech, international business environment. Suggested preparation: English 061 or English For Multilingual
Students 112 or American College English 116. CSU

## Management 125 <br> Organizational Leadership

Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of the universal principles of leadership. Covers the many approaches to leadership, the role of gender and diversity, and leadership ethics. Designed to build repeatable and transferable leadership skills for today's organizational environment. CSU

## Management 135

Human Resource Management
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course covers the goals, activities, and challenges of human resources. Includes equal employment opportunity and diversity, recruitment and selection, leadership and motivation, training and development, compensation, and employee and labor/ management relations. CSU

## MANUFACTURING TECHNOLOGY (MNFG)

## Manufacturing Technology 096

Manufacturing Technology Lab Application
Unit(s): 0.5-4.0 Class Hours: 27-216 Laboratory total.
Corequisite: Manufacturing Technology 174 or Manufacturing
Technology 176 or Manufacturing Technology 177 or Manufacturing Technology 184 or Manufacturing Technology 186 or Manufacturing Technology 194 or Manufacturing Technology 195.
A supplemental learning assistance course that provides supervised use of laboratory equipment for students enrolled in CNC machine courses to complete machine setup and operation projects. Students are expected to complete 24 lab hours for each 0.5 unit of credit. May be repeated up to the maximum number of units. Grade: Pass/No Pass Only.

Manufacturing Technology 103

## Beginning Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course in parametric solid modeling. This course will include a solid modeling overview, solid model construction techniques (extrude, revolve, fillet, chamfer, etc), including the preparation of individual solid components and basic solid model assemblies. (Same as Engineering 103).). CSU
Manufacturing Technology 104

## Solidworks Intermediate Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 103 or Engineering 103 with a minimum grade of $C$.
Intermediate course for solid modeling. Includes a review of the introductory class and changes to the Solidworks interface. Instruction in the use of intermediate Solidworks part modeling skills such as assembly modeling and sub-assemblies is included. (Same as Engineering 104.). CSU

## Manufacturing Technology 105

Solidworks Advanced Solid Modeling
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 104 or Engineering 104 with a minimum grade of $C$.
Advanced course for solid modeling includes a review of the intermediate class and changes to the Solidworks interface. Instruction in the use of Solidworks part modeling, assembly modeling, sub-assemblies, advanced photoworks, and advanced animator emphasized. (Same as Engineering 105). CSU

## Manufacturing Technology 106 Solidworks Drawings

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 103 or Engineering 103 with a minimum grade of $C$.
Recommended preparation: Manufacturing 111 or Engineering 111 with a minimum grade of $C$.
Creation and use of drawing templates, importing of solids data into the drawing template, and modification of the resulting drawings to company standards. CSU

## Manufacturing Technology 107

CSWA Exam Prep
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Manufacturing Technology 104 with a minimum grade of C.

The CSWA exam preparation class introduces students to the SolidWorks certification process, helps them prepare for the CSWA, using sample exams, and administers the Official SolidWorks CSWA exam. CSU

## Manufacturing Technology 111

## Basic Mechanical Blueprint Reading

Unit(s): 2.0 Class Hours: 36 Lecture total.
Reading and interpreting blueprints for manufacturing technologies (Same as Engineering 111). CSU

## Manufacturing Technology 114

## Geometric Dimensioning and Tolerancing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Manufacturing Technology 111 or Engineering 111 with a minimum grade of $C$.
Drawing interpretation utilizing geometric dimensioning and tolerancing (ANSI Y14.5) as applied in engineering, manufacturing, and inspection. CSU

## Manufacturing Technology 115

QC1 Quality Inspection
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course in Quality Control operations. Course includes dimensional inspection, completion of inspection reports, training and expectations for various quality inspector positions, as well as an introduction to various quality concepts that support inspection positions. CSU

## Manufacturing Technology 116

QC Operations with Verisurf Software
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 011 with a minimum grade of C.

Introductory course in the operation of Verisurf inspection software. This course includes a review of Geometric Dimensioning and Tolerancing and operation of Verisurf software during inspection of three dimensional manufactured parts. This software is also used in creation of inspection reports as a form of data recording in a quality control environment. CSU

## Manufacturing Technology 117

QC Operations with PC-DMIS CMM-1
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing 111 with a minimum grade of $C$ Introductory course in the operation of PC-DMIS CMM Software. This course instructs the user how to dimension, program, and inspect features of 3D parts. Course includes dimensional explanation of relevant GD\&T concepts, importing and using of CAD models, and reporting results from each activity. CSU

## Manufacturing Technology 118 QC Operations with PC-DMIS CMM-2

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing 117 with a minimum grade of C Supplementary course in the operation of PC-DMIS CMM Software. This course instructs the user in additional dimensioning, programming, and system menu options. Course includes additional instruction in probe calibrations, dimensioning options, model translations, and scanning functionality. CSU

## Manufacturing Technology 119 <br> QC2: Quality Theory

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 115 with a minimum grade of C
Intermediate course for quality control operations. Course discusses quality theory as well advanced quality operations such as, inspection planning, calibration systems, sampling, quality tools including SPC and their implementation, auditing, corrective and preventative action, lean manufacturing concepts, and customer and supplier relationships. Grade: Pass/No Pass Only. CSU

## Manufacturing Technology 120

## Introduction to Medical Device Quality

Unit(s): 2.0 Class Hours: 36 Lecture total.
The course goal is to teach students an overview of quality system regulations and standard compliance used in the medical device industry. The course content will be applicable to the medical technology disciplines of manufacturing, engineering, welding, and biotechnology. This will be placed within a strategic context to generate discussion regarding the importance of quality management and to relate it to other business and organizational issues. CSU

## Manufacturing Technology 121 Quality Control for Medical Devices <br> Unit(s): 2.0 Class Hours: 36 Lecture total.

Prerequisites: Manufacturing Technology 120 with a minimum grade of $C$. The course goal is to teach students quality control elements to support the medical device industry. The course content will be applicable to the medical technology disciplines of manufacturing, engineering, welding, and biotechnology. Students will be taught the concepts and principles of quality control and gain knowledge of the relevant tools, models and techniques. The course provides "real world" applications and discussions of current and relevant topics of quality systems. CSU

## Manufacturing Technology 128 <br> Basic Metals Technology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Basic metals terminology and its application in modern industry. Involves metal classification systems, destructive metal testing, metal refining, and heat treatment of various metals with resulting strength and structural changes. CSU

## Manufacturing Technology 130A <br> CATIA Beginning Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introductory course in parametric solid modeling CAD using CATIA software. Topics include: CAD overview, sketching, basic solid model creation (base features, pads, pockets, grooves, shafts, etc.), sketch constraints, reference elements, hole features, feature editing, assembly and drawing creation. (Same as Engineering 130A). CSU

## Manufacturing Technology 130B <br> CATIA Intermediate Solid Modeling

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Manufacturing Technology 130A with a minimum grade of $C$.
Intermediate course in parametric solid modeling CAD using CATIA software. Topics: intermediate/advanced level sketching and modeling (sweeps, ribs, slots), feature transformation, assemblies, drafting workbench, surface modeling, and other CATIA modules. (Same as Engineering 130B). CSU

## Manufacturing Technology 153 Technical Mathematics

Unit(s): 3.0 Class Hours: 54 Lecture total.
Ratios and proportions, formulas, measurements (linear, surface, and volume), geometric construction, and right triangles. Basics of algebra, geometry, and trigonometry for the manufacturing industry. CSU

## Manufacturing Technology 156A

Beginning Robotic Welding
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C .
Corequisite: Concurrent enrollment in Manufacturing Technology 157A or Welding 157A.
The course is a basic programming course that teaches students how to safely manipulate the robot through proper use of the robotic controller and teach pendant. This course also introduces the student to the gas metal and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques, and base and filler metal identification. This course is an introduction to the beginning robotic/laser technology. (Same as Welding 156A.). CSU

## Manufacturing Technology 156B

Intermediate Robotic Welding
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Manufacturing Technology 156A or Welding 156A and Manufacturing Technology 157A or Welding 157A with a minimum grade of $C$.
Corequisite: Concurrent enrollment in Manufacturing Technology 157B or Welding 157B.
The robotic welding course teaches students how to safely manipulate the robot through proper use of the robotic controller and Teach Pendant. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification and welding procedures. Students will be able to input welding procedures, jog frames, circular moves, weaving, copy, delete, commands, six point tool center and other activities related to the robotic welding process. (Same as Welding156B). CSU

## Manufacturing Technology 156C <br> Advanced Robotic Welding

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Manufacturing Technology 156B or Welding 156B with a minimum grade of $C$.
Corequisite: Concurrent enrollment in Manufacturing Technology 157C or Welding 157C.
The Advanced Robotic Welding course teaches students how to safely manipulate the robot through proper use of the robot controller and Teach Pendant. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification and welding procedures. Students will be able to create programs in robotic welding safety,TPP Management, USER Frames, coordinated motion,TAST,TAST-RPM, position registers \& offsets, touch \& sensing and activities relating to the robotic welding process. (Same as Welding 156C). CSU

## Manufacturing Technology 157A

## Basic Robotic Programming

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C.
Corequisite: Concurrent enrollment in Manufacturing Technology 156A or Welding 156A.
This is a basic programming course that teaches students how to safely manipulate an industrial robot through proper use of a controller. Topics include safe operating practices, linear movements, coordinate systems, Teach Pendant programming, and software/ hardware integration. (Same as Welding 157A). CSU

## Manufacturing Technology 157B <br> Intermediate Robotic Programming

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Manufacturing Technology 156A or Welding 156A and Manufacturing Technology 157A or Welding 157A with a minimum grade of C .
Corequisite: Concurrent enrollment in Manufacturing Technology 156B or Welding 156B.
This course is a programming course that teaches students how to safely manipulate an industrial robot through proper use of a controller. Topics include safe operating practices, circular movements, robot set-up, advanced Teach Pendant programming and functions, and auxiliary hardware. (Same as Welding 157B). CSU

## Manufacturing Technology 157C

## Advanced Robotic Programming Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Manufacturing Technology 156B or Welding 156B and Manufacturing Technology 157B or Welding 157B with a minimum grade of C.
Corequisite: Concurrent enrollment in Manufacturing Technology 156C or Welding 156C.
This is an advanced programming course that teaches students how to safely manipulate an industrial robot through proper use of a controller. Topics include safe operating practices, logic commands, and coordinate systems, advanced Teach Pendant programming, network integration, simulations, and software/hardware integration. (Same as Welding 157C). CSU

## Manufacturing Technology 158 <br> Basic Machining Concepts and Operations

Unit(s): 3.0 Class Hours: 18 Lecture, 126 Laboratory total.
Fundamental operations on lathes, milling machines, grinders, and drill presses, including precision measurements and layout. Equips students with skills and theory necessary to enter or upgrade within the machinist trade. CSU

## Manufacturing Technology 159

## Advanced Turning Concepts and Operations

Unit(s): 3.0 Class Hours: 18 Lecture, 126 Laboratory total. Prerequisite: Manufacturing Technology 158 or Manufacturing Technology 188 or Engineering 158 with a minimum grade of C. Machine turning theory and skill development with emphasis on lathe principles, capabilities, and operations. Includes construction, tool grinding, and turning machine operations such as diameter turning and boring, external and internal single point treading. CSU

## Manufacturing Technology 168 <br> Advanced Milling Concepts and Operations

Unit(s): 3.0 Class Hours: 18 Lecture, 126 Laboratory total.
Prerequisite: Manufacturing Technology 158 with a minimum grade of C.

Advanced machine tool operation and setup with emphasis on milling machine principles, use and capabilities, accessories, and operations. Includes operations with the offset boring head and rotary table. CSU

## Manufacturing Technology 169

Job Shop Skills
Unit(s): 0.5-3.0 Class Hours: 27-162 Laboratory total.
Prerequisite: Manufacturing Technology 159 and Manufacturing Technology 168 with a minimum grade of $C$.
Experience in planning, setup and machining of a wide variety of projects using all machine tools. Students will build upon the skills and theory gained in beginning and advanced Manufacturing Technology classes or by on-the-job experience. Open Entry/Open Exit. CSU

## Manufacturing Technology 171 <br> CNC Program Writing

Unit(s): $4.0 \quad$ Class Hours: 72 Lecture total.
Recommended Preparation: Manufacturing Technology 111 and Manufacturing Technology 158 with a minimum grade of $C$.
Introductory course for manual CNC program writing. This course will include coordinate system, absolute/incremental programming, circulaı interpolation, cutter radius compensation, canned cycles, and program formatting. CSU

## Manufacturing Technology 173

## Mastercam - 2D Geometry, 2D Toolpaths

Unit(s): 3.0 Class Hours: 54 Lecture total.
Computer assisted numerical control programming of machine tools using Mastercam software. Creation of 2D-part geometry. 2D-part programming including contouring, pocketing, drilling, and tapping. CSU

Manufacturing Technology 174
CNC Milling Center Set Up and Operation
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 158 and Manufacturing Technology 171 with a minimum grade of $C$.
Basic setup and operation of numerically controlled milling machines. Students will set up and operate a 3 axis CNC milling machine.
Requires enrollment in 1.5 hours of scheduled lab for 0.5 unit. Labs are scheduled at the first class meeting. CSU

## Manufacturing Technology 175

Mastercam - 3D Geometry, 3D Surfaces
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 173 with a minimum grade of C.

Continued instruction of computer assisted numerical control
programming. Advanced concepts and methods of creating 3D
geometry and 3D surfaces using Mastercam 3D software. CSU

## Manufacturing Technology 176 <br> CNC Turning Center Set Up and Operation

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 158 and Manufacturing Technology 171 with a minimum grade of C .
Setup and operation of numerically controlled lathe with emphasis on the application of the Fanuc controlled machine and CNC machining methods used in industry. Requires enrollment in 1.5 hours of scheduled lab for 0.5 unit. Labs are scheduled at the first class meeting. CSU

## Manufacturing Technology 177

Mastercam - 3D Toolpath and CAM Applications
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 175 with a minimum grade of C.

Advanced concepts in the manufacturing of machine parts using MASTERCAM software and CNC machining centers. Emphasis placed on programming and machining 3 dimensional surfaces. Problem solving in roughing, finishing, fixturing, and machining of a variety of part configurations. CSU

## Manufacturing Technology 178

## Mastercam Lathe

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 171 and Manufacturing Technology 173 with a minimum grade of $C$.
Computer assisted numerical control programming of machine tools using MASTERCAM lathe software. Emphasis placed on lathe toolpaths: facing, turning, grooving, boring, and threading. CSU

## Manufacturing Technology 184

Advanced CNC Mill Set Up and Operation
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 171 and Manufacturing Technology174 with a minimum grade of C.
Advanced set-up and operation of CNC Machining Center. Student will learn the advanced concepts in set up and operation of the state-of-the-art milling equipment. Course curriculum will include instruction on boring cycles, reaming cycle, thread milling, 4th AXIS rotary table, and multiple fixture offsets. Requires enrollment in 1.5 hours of scheduled lab per week for 0.5 unit. Lab hours are scheduled at the first class meeting. CSU

Manufacturing Technology 186
Advanced CNC Lathe Programming, Setup and Operation
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 171 and Manufacturing Technology 176 with a minimum grade of $C$.
Corequisite: Manufacturing Technology 096 with a minimum grade of C.

Advanced programming, set-up, and operation of CNC lathe. Course curriculum will include instruction on C-Axis with live tooling option, subprogram for C-Axis, tapered I.D. and O.D. thread, canned cycles, uses of digital probe for tool offset, and programmable tailstock. Requires enrollment in 1.5 hours of scheduled lab per week for 0.5 unit. Lab hours are scheduled at the first class meeting. CSU

## Manufacturing Technology 188

## Machine Technology Survey

Unit(s): 3.0 Class Hours: 18 Lecture, 126 Laboratory total.
Machine tool set-up and operation for students who desire general knowledge of machine tools and processes. All the basic machine tools are used. Not intended for Manufacturing Technology majors. (Same as Engineering 188). CSU

Manufacturing Technology 194
CNC Horizontal Mill Setup and Operation
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 171 and Manufacturing Technology 174 with a minimum grade of $C$.
Corequisite: Manufacturing Technology 096 with a minimum grade of C.

Set-up and operation of CNC Horizontal Machining Center. Students will learn the concepts necessary for set-up and operation of the state-of-the-art horizontal milling machine. Course curriculum will include instruction on multi fixtures, rapid pallet changing, and ability to machine several sides at once with a single set-up using fully programmable 4th axis to boost productivity, cut lead times, and lower production costs. Requires registration in 2 hour lab scheduled lab session for use of specialized equipment. Lab registration will be done during the first class session each semester. CSU

## Manufacturing Technology 195 <br> Mastercam 5 Axis Mill Toolpath and Application

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Manufacturing Technology 174 and Manufacturing Technology 175 with a minimum grade of $C$.
Students will use Mastercam Software and Blade Expert to create various Multi Axis Toolpaths. Course includes programming, setup and operation of a 5 -Axis DMU-50 milling machine with Siemens CNC control to complete various student's group projects. CSU

## MARKETING (MKTG)

## Marketing 111 <br> Principles of Retailing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Overview of the retail industry. Structure, scope, and evolution of retail institutions; retail decision making is emphasized in relation to the following topics: organization and store management; merchandise assortment, pricing, and layout; identifying markets; and advertising, promotion, and sales. CSU

## Marketing 113

Principles of Marketing
Unit(s): 3.0 Class Hours: 54 Lecture total.
The process of developing products that will satisfy the many needs of consumers and businesses. Includes market research techniques, pricing, distribution, and promotion. CSU

## Marketing 120

Understanding Consumer Behavior - Getting Them to Buy, Buy, Buy
Unit(s): 1.0 Class Hours: 18 Lecture total.
This course will explore the science, mechanics, dynamics, and culture of consumers and their behavior. Understanding your consumer leads to long term relationships, which translates to sales and profits for your business. Students will learn how to analyze consumer behavior using the latest tools, techniques, and technology. CSU

## Marketing 121

Negotiating - Getting to a Win-Win
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn the techniques of successfully negotiating a Win-Win business transaction. By learning the different negotiating styles, students will gain skills working with customers in all business segments. CSU

Marketing 122
Sales Strategies That Build Business Relationships and Increase Sales
Unit(s): 2.0 Class Hours: 36 Lecture total.
Learn how professional sales people build relationships with customers and clients that lead to increased sales. Learn how to effectively communicate, persuade, overcome objections, and close the deal. CSU

Marketing 123
Marketing and Technology - Trends and Cutting Edges
Unit(s): 1.0 Class Hours: 18 Lecture total.
This course will cover the latest trends in mixed marketing technologies. Learn to use the latest technologies to drive awareness, create demand, and close sales. Discover the latest trends, strategies, and tools for using technology for marketing - what they are, how they work, and how to get started. CSU

## Marketing 124 <br> Cause Marketing and Public Relations - Doing Well by Doing Good <br> Unit(s): 1.0 Class Hours: 18 Lecture total. <br> This course will cover how companies can be successful by doing good, helping society and people. Learn about not-for-profit businesses and socially responsible for-profit businesses. Learn how authentic corporate giving, cause marketing, and the power of public relations can help drive the triple bottom line-profits, people and planet. CSU

## Marketing 125

Advertising and Promotion - Get the Word Out and Keep Your Customers Buying
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course will provide students with an in-depth look into cuttingedge advertising and promotion strategies used by small, medium, and large companies. Students will learn how to create an advertising campaign, including the planning, costs, and creative design process. Students will learn how promotions are used to increase sales, to build brand loyalty, and to build relationship with customers. CSU

## Marketing 126

Distributing Product and Services - Reaching Customers Where They Shop
Unit(s): 2.0 Class Hours: 36 Lecture total.
This course will teach the latest and most cost effective strategies to reach your customer. Students will learn how an efficient B2B and/ or B2C distribution system utilizing marketing intermediaries, direct sales, online distribution, and global markets can increase profits. Supply Chain strategies, channel evaluation, and relationships will be highlighted. CSU
Marketing 127
Introduction to E-Commerce
Unit(s): 3.0 Class Hours: 54 Lecture total.
Electronic commerce from a managerial perspective focusing on the retailing, business-to-business, and service industries. Topics include E-Commerce infrastructure, intranets and extranets, electronic payment systems, marketing research, advertising, E-Commerce strategies, and privacy issues. (Same as Business 127). CSU

## MATHEMATICS (MATH)

## Mathematics N06

Essential Mathematics
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: A student will be placed in Mathematics N06 if they do not qualify for Math N48 or a higher course according to the Santa Ana College Mathematics Department's placement standards.
Reviews whole numbers, fractions, decimals, percents, geometric formulas and signed numbers. Not applicable to associate degree.

## Mathematics N48 <br> Pre-Algebra/Algebra Basics

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics N06 with a minimum grade of C or placement into Mathematics N48 according to the Santa Ana College Mathematics Department's placement standards.
For students who have little or no previous algebra experience. This course offers an introduction to basic algebra concepts, math vocabulary, and algebraic operations. This course is intended to be a bridge from basic arithmetic to elementary algebra. Not applicable to associate degree.

## Mathematics 019

Support for Math 219 Probability and Statistics
Unit(s): 0.5 Class Hours: 36 Laboratory total.
Corequisite: Concurrent enrollment in Mathematics 219.
A review of mathematics needed to be successful in Probability and
Statistics. Topics are drawn from Pre-Algebra and Algebra. Intended to be taken concurrently with Math 219 for students who did not directly place into Math 219 or for students who would like to supplement their learning with Prerequisite skills. Grade: Pass/No Pass Only.

## Mathematics 030

## Coping With Math Anxiety

Unit(s): 1.0 Class Hours: 18 Lecture total.
Covers the concept of math anxiety - what causes it and how to overcome it. Includes review and practice of basic math skills.

## Mathematics 040

Support for College Algebra
Unit(s): 0.5 Class Hours: 36 Laboratory total.
Corequisite: Concurrent enrollment in Mathematics 140.
A review of mathematics topics from Elementary and Intermediate Algebra which are needed to be successful in College Algebra. Intended to be taken concurrently with College Algebra (Mathematics 140) for students who did not directly place into Mathematics 140, or for students who would like to supplement their learning with Prerequisite skills. Grade: Pass/No Pass Only.

## Mathematics 070

## Geometry

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Mathematics 060 or Mathematics 084 with a minimum grade of $C$ or placement into Mathematics 070 on the Mathematics Level 2 Placement Exam and a course equivalent to Mathematics 060. Basic Euclidean geometry. Includes concepts of lines, planes, triangles, congruence, proofs, inequalities, parallel lines, similarity, areas, and volumes.

## Mathematics 083 <br> Beginning and Intermediate Algebra for Liberal Arts and Social Science

Unit(s): 6.0 Class Hours: 108 Lecture total.
Prerequisite: Mathematics N48 with a minimum grade of C or placement into Mathematics 083 according to the Santa Ana College Mathematics Department's placement standards.
A combined course in algebra that includes systems of equations, inequalities, graphs and functions, radicals, quadratic polynomials, rational expressions, exponential and logarithmic functions, and problem solving aimed specifically at liberal arts and social science majors.

## Mathematics 083BR <br> Bridge to BSTEM Math Pathway Liberal Arts and Social Science

Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: Mathematics 083 with a minimum grade of C .
An overview of the mathematics and algebra skills needed for students transitioning from the Statistics and Liberal Arts Math (SLAM) pathway to the Business and STEM (BSTEM) pathway. Topics include linear equations, systems of equations, inequalities, graphs and functions; radicals, quadratic polynomials, rational expressions; exponential and logarithmic functions. Grade: Pass/No Pass Only.

## Mathematics 084

## Beginning and Intermediate Algebra

Unit(s): 6.0 Class Hours: 108 Lecture total.
Prerequisite: Mathematics N 48 with a minimum grade of C or placement into Mathematics 084 according to the Santa Ana College Mathematics Department's placement standards.
A combined course in algebra that includes systems of equations: inequalities, graphs and functions; radicals, quadratic polynomials, rational expressions; exponential and logarithmic functions, and problem solving.

## Mathematics 105

## Mathematics for Liberal Arts Students

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Mathematics 083 or Mathematics 084 with a minimum grade of $C$ or equivalent skills as measured by placement into Mathematics 105 according to the Santa Ana College Mathematics Department's placement standards.
An overview of mathematics for the liberal arts student. Topics will include problem solving, financial management, probability, statistics, and selected other topics such as set theory, geometry, logic, mathematical modeling, and the history of mathematics. CSU/UC

## Mathematics 140 <br> College Algebra

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 084 with a minimum grade of C or equivalent skills as measured by placement into Mathematics 140 according to the Santa Ana College Mathematics Department's placement standards.
Survey of advanced topics in algebra: equations, inequalities and functions involving polynomials, rationals, exponentials, and logarithms with applications and graphing; sequences and series. CSU/UC

## Mathematics 141

## College Algebra With Support

Unit(s): 4.5 Class Hours: 72 Lecture, 36 Laboratory total.
Prerequisite: Mathematics 084 with a minimum grade of C or equivalent skills as measured by placement into Mathematics 141 according to the Santa Ana College Mathematics Department's placement standards.
Survey of advanced topics in algebra: equations, inequalities and functions involving polynomials, rationals, exponentials, and logarithms with applications and graphing; sequences and series. Course includes just-in-time review of topics from arithmetic, Elementary Algebra, Intermediate Algebra, and/or other topics as necessary. Intended for students who did not directly place into Mathematics 140 or for students who would like to supplement their learning with Prerequisite skills needed for College Algebra. CSU/UC

## Mathematics Course Sequence for BSTEM Majors

The Santa Ana Mathematics Department strongly recommends students who plan on transferring to a four-year school should work carefully with a counselor and the catalog of the school of transfer to select the most appropriate mathematics course. The sequence below gives a summary of the mathematics sequence of courses for Business and STEM majors (BSTEM). The BSTEM pathway is designated for students planning to major in Business, Science, Technology, Engineering, or Mathematics.

| Developmental |  |  |  |
| :---: | :---: | :---: | :---: |
| Level Courses for <br> BSTEM Majors <br> (OPTIONAL <br> COURSES) | N06 <br> Essential | Math N48 <br> Pre-Algebra/ <br> Mathematics | Math 084 <br>  |
| Algebra Basics |  |  |  |

Transfer Level Course for BSTEM Majors


Mathematics Course Sequence for SLAM Majors
The Santa Ana Mathematics Department strongly recommends students who plan on transferring to a four-year school should work carefully with a counselor and the catalog of the school of transfer to select the most appropriate mathematics course. The sequence below gives a summary of the mathematics sequence of courses for students in the SLAM Pathway. The SLAM pathway is for majors that require students to take Statistics, Liberal Arts Mathematics, or those who plan on teaching elementary school.

| Developmental |
| :---: | :---: | :---: | :---: |
| Level Courses |
| for SLAM Majors |
| (OPTIONAL |
| COURSES) | | N06 |
| :---: |
| Essential |
| Mathematics | | Math N48 |
| :---: |
| Pre-Algebra/ |
| Algebra Basics | | Math 083 |
| :---: |
|  |
| Intermediate |
| Algebra for |
| SLAM Majors |

SAC also offers optional free non-credit refresher courses in pre-algebra (LRN 164) and basic math (HSMTH158) that you can join anytime. Contact a counselor for more information.

## Transfer Level Course for SLAM Majors

| Math 219 | Math 105 | Math 104 |
| :---: | :---: | :---: |
|  <br> Probability <br> (add Math 019 for <br> support*) | Miberal Arts | Mathematics for |
| Elementary School |  |  |
| Matics |  |  |

Students interested
in Psychology can
also take Psych210
to satisfy this
requirement


#### Abstract

*Support courses (040 and 019) give extra class time with your Math instructor where you can strengthen the prerequisite skills and concepts needed to successfully complete Math 140 or Math 219.

If you have already taken Pre-calculus or Calculus you should contact a counselor for placement in the proper mathematics course.


## Mathematics 145 (C-ID MATH 130) Finite Mathematics

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 080 or Mathematics 081 or Mathematics 084 with a minimum grade of $C$ or equivalent skills as measured by the Math Level 3 Exam and a course equivalent to Mathematics 080, or Mathematics 081, or Mathematics 084.
Linear systems and matrix algebra, linear programming and the simplex method, mathematics of finance, algebra of sets, introduction to probability and counting, the binomial distribution, descriptive statistics, introduction to the normal curve. Application to the fields of business, economics, and biological and behavioral sciences are emphasized. CSU/UC

## Mathematics 150 (C-ID MATH 140)

Calculus for Biological, Management and Social Sciences Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Mathematics 140 or Mathematics 145 with a minimum grade of C; or placement into Math 150 according to the Santa Ana College Mathematics Department's placement standards.
Single and multi-variable calculus including limits, derivatives, integrals, exponentials, and logarithmic functions and partial derivatives. Applications are drawn from biology, social science, and business. CSU/UC

## Mathematics 162 (C-ID MATH 851) Trigonometry

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 140 with a minimum grade of C or equivalent skills as measured by placement into Mathematics 162 according to the Santa Ana College Mathematics Department's placement standards.
Angles and their measurement, trigonometry functions and their applications, including vector problems. Use of trigonometric identities. Graphing the basic functions and variations, solving trigonometric equations. Graphing using polar coordinates, and use of complex numbers. CSU

## Mathematics 165

## Introduction to Math Tutoring

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total. Role and responsibility of the math tutor. Includes training in individualized and small group instruction, communication skills, cultural awareness, learning styles, problem solving techniques, new technologies, and an overview of the math curriculum. (Students will be required to spend 16 hours in a designated tutoring center as part of the arranged hours.). CSU

## Mathematics 170 (C-ID MATH 155) Pre-Calculus Mathematics

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 162 with a minimum grade of C or equivalent skills as measured by the Mathematics Level 4 Exam and a course equivalent to Mathematics 162.
Advanced algebraic topics. Study of rational, trigonometric, exponential and logarithmic functions, and analytic geometry. Preparation for Mathematics 180. CSU/UC

## Mathematics 180 (C-ID MATH 210) (C-ID MATH 900S = MATH 180 or $180 \mathrm{H}+185$ ) Single Variable Calculus I

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 140 and Mathematics 162 or Mathematics 170 with a minimum grade of $C$ or equivalent skills as measured by placement into Mathematics 180 according to the Santa Ana College Mathematics Department's placement standards.
Limits and continuity, derivatives and integrals of algebraic, trigonometric, and other transcendental functions. Applications including extrema tests, related rates, and areas. CSU/UC

## Mathematics 180H (C-ID MATH 210) (C-ID MATH 900S = MATH 180 or $180 \mathrm{H}+185$ ) Honors Single Variable Calculus I

Formerly: Mathematics 180 H , Honors Analytic Geometry and Calculus Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above and Mathematics 170 with a minimum grade of $C$ or better or equivalent skills as measured by the Mathematics Level 4 Exam and a course equivalent to Mathematics 170.
An in-depth study of limits and continuity, derivatives and integrals of algebraic, trigonometric, and other transcendental function with the emphasis on theory and challenging problems. Applications include extrema tests, related rates and areas, volumes, arc length, and surface areas. CSU/UC

## Mathematics 185 (C-ID MATH 220) <br> (C-ID MATH 900S = MATH 180 or $180 \mathrm{H}+185$ ) <br> Single Variable Calculus II

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 180 or Mathematics 180 H with a minimum grade of C.
Applications of integrals, including volumes, work, arc length, and surface area. Integration techniques, differential equations, conics, parametric equations, polar coordinates, improper integrals, sequences, and infinite series. CSU/UC

## Mathematics 204 (C-ID MATH 120) <br> Mathematical Concepts for Elementary School Teachers

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 083 or Mathematics 084 with a minimum grade of $C$ or equivalent skills as measured by placement into Mathematics 204 according to the Santa Ana College Mathematics Department's placement standards.
Designed for prospective elementary teachers, the course emphasizes problem solving techniques and mathematical structure associated with numeration, set theory, elementary number theory, real number system, ratio, proportion, and percent. The course includes instructional delivery design and activity-based explorations. CSU/UC

## Mathematics 219 (C-ID SOCI 125) (C-ID MATH 110) Statistics and Probability

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 083 or Mathematics 084 with a minimum grade of $C$ or equivalent skills as measured by placement into Mathematics 219 according to the Santa Ana College Mathematics Department's placement standards.
Beginning course in statistics. Includes descriptive statistics, graphical displays of data, probability, confidence intervals, hypothesis testing, regression, contingency tables, ANOVA, and non-parametric statistics. Includes use of technology. CSU/UC

## Mathematics 219H (C-ID SOCI 125) (C-ID MATH 110)

## Honors Statistics and Probability

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: High school or college GPA of 3.0 or higher and Mathematics 083 or Mathematics 084 with a minimum grade of $C$ or equivalent skills as measured by placement into Mathematics 219 according to the Santa Ana College Mathematics Department's placement standards.
Enhanced format for the beginning course in statistics and probability, using a seminar approach and computers and individual research, and presentations. Includes descriptive statistics, graphical displays of data, probability, confidence intervals, hypothesis testing, regression, contingency tables, ANOVA, and non-parametric statistics, with applications designed around the individual interests of students. CSU/ UC

Mathematics 221

## Statistics and Probability With Support

Unit(s): 4.5 Class Hours: 72 Lecture, 36 Laboratory total.
Prerequisite: Mathematics 083 or Mathematics 084 with a minimum grade of $C$ or equivalent skills as measured by placement into Mathematics 211 according to the Santa Ana College Mathematics Department's placement standards.
Beginning course in statistics. Includes descriptive statistics, graphical displays of data, probability, confidence intervals, hypothesis testing, regression, contingency tables, ANOVA, and non-parametric statistics. Includes use of technology. Integrated review includes concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and critical thinking skills from descriptive statistics that are needed to understand the basics of college-level statistics. Intended for students who did not directly place into Mathematics 219 or for students that would like to supplement their learning with Prerequisite skills needed for Statistics. CSU/UC

## Mathematics 280 (C-ID MATH 230)

Intermediate Calculus
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 185, second semester calculus, with a minimum grade of $C$.
Vectors and three-dimensional space, functions of several variables, partial derivatives, and multiple integrals. Vector calculus, Green's Theorem, Stoke's Theorem, and the Divergence Theorem. CSU/UC

## Mathematics 287 (C-ID MATH 910S)

Introduction to Linear Algebra and Differential Equations
Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Mathematics 280 with a minimum grade of $C$.
Topics include matrices, determinants, vector spaces, linear systems of equations, linear product spaces, first and second order differential equations, systems of differential equations, and the Laplace transform. CSU/UC

## Mathematics 319

Quantitative Research Methods for Healthcare Professionals
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program Mathematics 219 or Mathematics 219 H or Psychology 210 with a minimum grade of C.
This course will develop skills and tools for understanding and performing quantitative research in healthcare sciences. The focus of the course will be on statistical research methods prevalent in healthcare sciences: including principles of experimental design, appropriate sampling, and running quantitative tests to determine the validity of claims.

## MEDICAL ASSISTANT (MA)

Medical Assistant 001
Cooperative Work Experience Education - Occupational
Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
Prerequisite: Medical Assistant 051A, Medical Assistant 051B, Medical Assistant 053 and Medical Assistant 055 with a minimum grade of $C$.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become production employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Medical Assistant 020

Bloodborne and Airborne Pathogen Standards
Unit(s): 0.5 Class Hours: 9 Lecture total.
Presentation of California Occupational Safety and Health Act (Cal-OSHA) Bloodborne and Airborne Pathogen Standards for occupational at-risk exposure to hepatitis, HIV-AIDS, and Tuberculosis including compliance requirements, exposure control measures, exposure determination, protective equipment, and post exposure practices.

## Medical Assistant 030 Phlebotomy

Unit(s): 1.0 Class Hours: 13.5 Lecture, 13.5 Laboratory total.
This phlebotomy course is designed for health care workers and provides a comprehensive introduction to the practice of phlebotomy, with focus on safety procedures, equipment and point-of-care testing.

## Medical Assistant 051A <br> Beginning Medical Terminology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to medical terms including structural analysis of prefixes, combining form/roots, and suffixes. Emphasis on terms related to anatomy, physiology, diagnostic tests and pathology of the digestive, renal-urinary, and reproductive systems. Also, terms related to pregnancy and the newborn.

## Medical Assistant 051B <br> Advanced Medical Terminology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Medical Assistant 051A with a minimum grade of $C$. Continuation of Medical Assistant 051A. Includes medical terms related to anatomy, physiology, diagnostic tests and pathology of the nervous, cardiovascular, respiratory, circulatory, musculoskeletal, skin, sensory, and the endocrine systems.

## Medical Assistant 053

Medical Assistant - Administrative Front Office
Unit(s): 3.0 Class Hours: 54 Lecture total.
Medical front office training including the role, responsibilities, professionalism, medical ethics and laws, medical records, filing, billing and collection, banking, bookkeeping, reception, telephone techniques, oral and written communication, resume, and job seeking skills. Also includes a unit on office first aid and life threatening illnesses.

## Medical Assistant 054

Medical Insurance and Billing Forms
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Medical Assistant 051A with a minimum grade of C . Instruction in the rules, regulations, and completion of medical insurance forms for Medicare, Medi-Cal, Tricare, MediMedi, State Disability, Worker's Compensation, and private commercial insurance carriers. Includes legal and ethical guidelines, and instruction in procedure coding using current procedural terminology and ICD-10-CM.

## Medical Assistant 055 <br> Medical Assistant - Clinical Back Office <br> Unit(s): 3.0 Class Hours: 54 Lecture total <br> Medical back office with emphasis on asepsis, sterilization, gloving and ungloving, assisting physician with exams and minor office surgical procedures, vital signs, vision testing, wound care, dressings, bandaging, specimen collections, medications, dosage calculations and injection techniques.

## Medical Assistant 056 <br> Computer Applications for the Medical Office

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Medical Assistant 051A and Medical Assistant 053 with a minimum grade of $C$.
An introduction to the computer with practical applications for a medical office/clinical setting, including building patient databases, patient scheduling, procedure codes, and diagnostic codes. Generate computerized billing records, posting to accounts, insurance claims forms, generating reports, electronic data interchange and electronic medical records.

## Medical Assistant 098

## Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Courses on a variety of contemporary topics will be offered to meet the interests and needs of students in Medical Assisting.

## MUSIC (MUS)

## Music 009A

## Music Laboratory

Unit(s): 0.3 Class Hours: 18 Laboratory total.
Prerequisite: Concurrent enrollment in a music course.
Supervised work on instrumental, vocal, music theory, or digital music assignments and projects. Beginning level assignments are geared toward attainment of skills relating to the corequisite music class. Accumulation of 16 hours earns 0.3 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Music 009B

## Music Laboratory II

Unit(s): 0.3 Class Hours: 18 Laboratory total.
Prerequisite: Music 009A with a minimum grade of C and concurrent enrollment in a music class.
Supervised work on instrumental, vocal, music theory, or digital music assignments and projects. More advanced beginning level assignments are geared toward attainment of skills relating to the corequisite music class. Accumulation of 16 hours earns 0.3 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Music 009C <br> Music Laboratory III

Unit(s): 0.3 Class Hours: 18 Laboratory total.
Prerequisite: Music 009B with a minimum grade of C and concurrent enrollment in a music class.
Supervised work on instrumental, vocal, music theory, or digital music assignments and projects. Intermediate level assignments are geared toward attainment of skills relating to the corequisite music class. Accumulation of 16 hours earns 0.3 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Music 009D

Music Laboratory IV
Unit(s): 0.3 Class Hours: 18 Laboratory total.
Prerequisite: Music 009C with a minimum grade of $C$ and concurrent enrollment in a music class.
Supervised work on instrumental, vocal, music theory, or digital music assignments and projects. Advanced level assignments are geared toward attainment of skills relating to the corequisite music class. Accumulation of 16 hours earns 0.3 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Music 101 (C-ID MUS 100) <br> Music Appreciation <br> Unit(s): 3.0 Class Hours: 54 Lecture total.

Designed to increase awareness and appreciation of music from the European classical tradition in relation to general culture and history. Develops basic understanding of musical elements and deepens student's experience of music. Recommended for non-music majors. CSU/UC

## Music 101H (C-ID MUS 100) Honors Music Appreciation

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
An enriched approach designed for honors students. The European classical music tradition through study of musical elements, stylistic features, culture, and history. Readings, guided listening assignments, required concert attendance, and special projects. Recommended for non-music majors. CSU/UC

## Music 102 <br> World Music <br> Unit(s): 3.0 Class Hours: 54 Lecture total.

Music from the Far East, Southeast Asia, Africa, the Middle East, Europe and the Americas. Students are guided to enjoy and to understand music from diverse cultures. Investigation of the interconnections of culture, aesthetics, and musical styles. Concert attendance and assigned listening required. CSU/UC

## Music 102H

## Honors World Music

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: High School or college GPA of 3.0 or above.
An enriched, in-depth study of music from Asia, Africa, the Middle East, Europe, and the Americas. Seminar-style critical investigation of the interconnections of style, culture, and aesthetics to promote enjoyment and understanding of world music. CSU/UC

## Music 103

## Jazz in America

Unit(s): 3.0 Class Hours: 54 Lecture total.
A historical survey of the development and evolution of jazz in America from its earliest roots in African and European music. The study will also include the social and economic conditions which influenced this art form. CSU/UC

## Music 104

Rock Music History and Appreciation
Unit(s): 3.0 Class Hours: 54 Lecture total.
Historical survey of rock music from its beginnings in the 50's to the present. Major rock and pop styles will be discussed. Personalities and musical styles will be related to the social, political, and cultural context of the time. CSU/UC

## Music 105

## Film Music Appreciation

Unit(s): 3.0 Class Hours: 54 Lecture total.
A study of the history and development of film music in the twentieth and twenty-first century. Students are guided through a critical examination of a variety of music soundtracks by prominent composers and will explore how the music reflects changes in our society and culture. CSU/UC

## Music 109

## Reading and Making Music

Unit(s): 2.0 Class Hours: 36 Lecture total.
Introduction to music reading. Practical experience in learning how to perform melodies, rhythms, and simple chords from a written score. Recommended for beginning instrumental and voice students, and those preparing for music theory. CSU/UC

## Music 110 (C-ID MUS 110)

Music Fundamentals and Culture
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the notation and primary elements of tonal music throughout history from Western and global cultures. Examples from music literature will demonstrate staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. History and social context of these concepts will be discussed. Development of skills in handwritten notation is expected. CSU/UC

## Music 111 (C-ID MUS 120) (C-ID MUS 125)

Basic Music Theory and Musicianship I
Unit(s): 4.0 Class Hours: 72 Lecture, 18 Laboratory total. Introductory level course in music theory and its applications in traditional and modern musical practice. Includes detailed study of rhythm, notation, scales, intervals, chords, diatonic harmony, and voice leading as well as sight singing and other musicianship skills. Ability to read music in at least one clef recommended. Required of music majors; open to non-majors. CSU/UC

## Music 112 (C-ID MUS 130) (C-ID MUS 135) Music Theory and Musicianship II

Unit(s): 4.0 Class Hours: 72 Lecture, 18 Laboratory total.
Prerequisite: Music 111 with a minimum grade of C .
Continued study of harmony and ear training. Includes writing phrases and cadences, non-harmonic tones, harmonization, voice leading, melodic construction, figured bass, chord progression, and keyboard harmony. Required for music majors; open to non-majors. CSU/UC

## Music 113A

Basic Musicianship Skills
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Ear training and in-class sightsinging preparation for students not ready for Music 114A. Arranged hours in Music Lab for computer programs and ear training CD's. Basic knowledge of scales and intervals recommended. A combination of Music 113A, Music 113B, Music 114A, and Music 114B may be taken a maximum of four enrollments. CSU/UC

## Music 113B

## Musicianship Skills

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total. Prerequisite: Music 113A with a minimum grade of C.
Continued ear training and in-class sightsinging preparation for students not ready for Music 114A. Arranged hours in Music Lab for computer programs and ear training CD's. Basic knowledge of scales and intervals recommended. Grade: Pass/No Pass Only. A combination of Music 113A, Music 113B, Music 114A, and Music 114B may be taken a maximum of four enrollments. CSU/UC

## Music 114A (C-ID MUS 145) <br> Musicianship

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Music 112 with a minimum grade of C.
Competency-based sightsinging, rhythm, ear training, and dictation (melodic/harmonic) for performers and transferring music majors. Ear training software in the Music Lab is used for aural exercises. CSU/UC

## Music 114B (C-ID MUS 155) <br> Musicianship

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Prerequisite: Music 114A with a minimum grade of C.
Competency-based sightsinging, rhythm, ear training, and dictation (melodic/harmonic) for performers and transferring music majors. Ear Training software in the Music Lab is used for aural exercises. B semester uses more advanced materials. CSU/UC

## Music 115A (C-ID MUS 160)

Applied Music (Private Instruction)
Unit(s): 1.5 Class Hours: 92 Laboratory total.
Prerequisite: Audition and concurrent enrollment in either a music ensemble or music theory course.
Weekly lesson in voice, piano, band/orchestral instrument, or classical guitar. Five hours on-campus practice per week and attendance at weekly recital required. B, C, and D semesters require study of more advanced repertoire. No more than a total of 4 semesters of credit may be earned in a combination of Music 115A, Music 115B, Music 115 C, Music 115 D and Music 215. Requires audition and concurrent enrollment in either a music ensemble or music theory course. Open Entry/Open Exit. A combination of Music 115A, Music 115B, Music 115C, Music 115D, and Music 215 may be taken a maximum of four enrollments. CSU/UC

## Music 115B (C-ID MUS 160)

## Applied Music (Private Instruction)

Unit(s): 1.5 Class Hours: 92 Laboratory total.
Prerequisite: Audition and concurrent enrollment in either a music ensemble or music theory course.
Weekly lesson in voice, piano, band/orchestra instrument, or classical guitar, covering more advanced repertoire than Music 115A. Five hours on-campus practice per week and attendance at weekly recital required. No more than a total of 4 semesters of credit may be earned in a combination of Music 115A, Music 115B, Music 115 C, Music 115 D and Music 215. Requires audition and concurrent enrollment in either a music ensemble or music theory course. Open Entry/Open Exit. A combination of Music 115A, Music 115B, Music 115C, Music 115D, and Music 215A may be taken a maximum of four enrollments. CSU/ UC

## Music 115C (C-ID MUS 160)

Applied Music (Private Instruction)
Unit(s): 1.5 Class Hours: 92 Laboratory total.
Prerequisite: Audition and concurrent enrollment in either a music ensemble or music theory course.
Weekly lesson in voice, piano, band/orchestral instrument, or classical guitar, covering more advanced repertoire than Music 115B. Five hours on-campus practice per week and attendance at weekly recital required. No more than a total of 4 semesters of credit may be earned in a combination of Music 115A, Music 115B, Music 115C, Music 115D and Music 215. Requires audition and concurrent enrollment in either a music ensemble or music theory course. Open Entry/Open Exit. A combination of Music 115A, Music 15B, Music 115C, and Music 215 may be taken a maximum of four enrollments. CSU/UC

## Music 115D (C-ID MUS 160)

Applied Music (Private Instruction)
Unit(s): 1.5 Class Hours: 92 Laboratory total.
Prerequisite: Audition and concurrent enrollment in either a music ensemble or music theory course.
Weekly lesson in voice, piano, band/orchestral instrument, or classical guitar, covering more advanced repertoire than Music 115C. Five hours on campus practice per week and attendance at weekly recital required. No more than a total of 4 semesters of credit may be earned in a combination of Music 115A, Music 115B, Music 115C, Music 115D and Music 215. Requires audition and concurrent enrollment in either a music ensemble or music theory course. Open Entry/Open Exit. A combination of Music 115A, Music 115B, Music 115C, Music 115D, and Music 215 may be taken a maximum of four enrollments. CSU/UC

Music 121

## Beginning Voice

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Group instruction designed to develop basic principles of solo and choral voice production, diction, breath control, and posture. Practice outside of class required. Recommended for non- music majors and for music majors not studying privately. A combination of Music 121, Music 122, Music 123, and Music 124 may be taken a maximum of four enrollments. CSU/UC

## Music 122

## Intermediate Voice

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 121 with a minimum grade of $C$.
Group instruction designed to develop intermediate principles of solo and choral voice production, diction, breath control, and posture.
Vocal analysis of each student emphasized. Practice outside of class required. Song literature matched to student level. Designed for both music majors and non-music majors. A combination of Music 121, Music 122, Music 123, and Music 124 may be taken a maximum of four enrollments. CSU/UC

## Music 123

## Advanced Voice

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 122 with a minimum grade of $C$.
Group instruction designed to present advanced vocal exercises for solo and choral vocal production. Instruction includes song literature in English and several foreign languages. Practice outside of class required. Designed for both music majors and non-music majors. A combination of Music 121, Music 122, Music 123, and Music 124 may be taken a maximum of four enrollments. CSU/UC

## Music 124

Advanced Vocal Production and Repertoire
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 123 with a minimum grade of C .
Continuation of group instruction for students who have completed three semesters of voice and can perform at an advanced level. Further develops advanced vocal and choral production through a variety of vocalize styles and techniques. Instruction includes advanced English and foreign language song literature. Practice outside of class required. Designed for both music majors and nonmusic majors. A combination of Music 121, Music 122, Music 123, and Music 124 may be taken a maximum of four enrollments. CSU/UC

## Music 135 (C-ID MUS 180) <br> Concert Chorale

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Rehearsal and performance of standard and current choral repertoire.
Designed to train students in mixed ensemble singing. Public performance emphasized. Each semester requires performance of a variety of new and different repertoire. Designed for students who have basic singing skills. May be repeated. CSU/UC

## Music 136 <br> Collegiate Choir

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Mixed chorus which rehearses and performs a variety of music, including classical, folk tunes, and songs from Broadway musicals. Each semester requires performance of new repertoire. May be repeated. Grade: Pass/No Pass Only. CSU/UC

## Music 137 (C-ID MUS 180) Chamber Choir

Unit(s): 1.0 Class Hours: 72 Laboratory total.
Prerequisite: Audition.
Rehearsal and performance of chamber choir repertoire from various historical periods. Course designed for festival and concert performance. Each semester requires the performance of new repertoire. May be repeated. CSU/UC

Music 140
Instrumental Methods for Winds and Percussion
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total. Instrumental instruction on woodwinds, brass, or percussion in an ensemble setting at the beginning and intermediate levels. Fundamental skills developed through rehearsal and in-class performance of technical exercises and beginning band repertoire. CSU/UC

## Music 141 <br> Instrumental Ensembles

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Study, rehearsal, and performance of music for small commercial instrumental groups. Music literature will differ each semester. Previous instrumental performance experience recommended. May be repeated. CSU/UC

## Music 142 <br> Creating Music on the Digital Audio Workstation <br> Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.

Basic techniques in creating music with computer assisted technology, including the production of software instrument tracks, drum track programming, audio recording, editing, mixdown, and use of the software sampler. Students learn practical applications through creation of musical projects. CSU

## Music 143

Intermediate Techniques on the Digital Audio Workstation
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 142 with a minimum grade of $C$.
Intermediate techniques in creating music with computer assisted technology including digital sound manipulation, time and pitch editing, virtual mixing, auxiliary tracks, MIDI effects, and use of the software sampler. Students learn practical applications and electronic composition through creation of musical projects. CSU

## Music 144

## Projects in Electronic Music

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 143 or Music 147 with a minimum grade of C. Exploration of digital recording and MIDI concepts for commercial applications. Individual projects will improve and extend students' skills in the areas of composition, sequencing, and recording.
Assignments will help prepare students for level 1 certification in logic. CSU

Music 145
Jazz Improvisation and Performance Workshop
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Performance and analysis of jazz standards and popular pieces in a practical workshop setting. Elements of improvisation and ensemble playing are stressed. Assumes a rudimentary understanding of chords and scales. Open to all instrumentalists and vocalists. CSU/UC

## Music 146

Digital Recording Studio Techniques I
Unit(s): 2.0 Class Hours: 27 Lecture, 27 Laboratory total. Introductory class in computer-based hard disk recording. Emphasis on digital sound manipulation, editing, mixdown, and microphone techniques. CSU

## Music 147

Digital Recording Studio Sound Design
Unit(s): 2.0 Class Hours: 36 Lecture total.
Techniques of sound design in the digital recording studio including creation of sampler instruments, classic analog synthesizer programming, and other techniques of original sound creation using digital audio manipulation. Some prior experience on a digital audio workstation recommended. CSU

## Music 148

Music Scoring for Film and Multimedia
Unit(s): 2.0 Class Hours: 27 Lecture, 27 Laboratory total.
Techniques of scoring music, audio, and sound effects to video and multimedia. Compositional elements of scoring to picture as well as technical elements of creating digital audio tracks are covered. Experience with digital recording and/or working with a digital audio workstation is necessary. CSU/UC

## Music 149

## The Business of Music

Unit(s): 2.0 Class Hours: 36 Lecture total.
Introduction to the business and legal aspects of the music industry. This course covers current trends and issues for performing and recording careers in music. Topics include copyright, royalties, recording contracts, performing rights organizations, publishing, and publicity. CSU

## Music 152

## Beginning Audio Production

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total. Introduction to the theory and practice of audio production for radio, stage, television, film and digital recording applications. Students will learn the fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Students gain hands on experience recording, editing, mixing and mastering audio. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software. (Same as TV/Video Communications 152). CSU/UC

## Music 153

## Introduction to Game Audio

Unit(s): 2.0 Class Hours: 27 Lecture, 27 Laboratory total.
Introduction to the techniques and implementation of audio production in game design including the incorporation of music, dialog and sound effects. Recording, editing, digital effect application, looping, layering, and mixing for an interactive game environment are covered. CSU

## Music 161 <br> Class Piano I

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Group instruction for beginners emphasizing note reading, basic keyboard skills, chord patterns and sight reading. Practice outside of class required. Practice pianos available on campus. Required for music majors whose principal instrument is not piano. A combination of Music 161, Music 162, Music 163, Music 164A, and Music 164B may be taken a maximum of four enrollments. CSU/UC

## Music 162

Class Piano II
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 161 with a minimum grade of C.
Group instruction for those possessing basic piano skills, but still classified as beginners. Emphasizes note reading, keyboard technique, chord patterns, and sightreading. Daily practice required. Practice pianos available on campus. Required for music majors whose principal instrument is not piano. A combination of Music 161, Music 162, Music 163, Music 164A, and Music 164B may be taken a maximum of four enrollments. CSU/UC

## Music 163

## Class Piano III

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 162 with a minimum grade of $C$.
Instruction for students who have completed two semesters of piano and are ready for the intermediate level. Emphasizes building technique, sight reading, and performance. Daily practice required. Practice pianos available on campus. A combination of Music 161, Music 162, Music 163, Music 164A, and Music 164B may be taken a maximum of four enrollments. CSU/UC

## Music 164A <br> Intermediate Piano Repertoire I

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Prerequisite: Music 163 with a minimum grade of C .
Instruction for intermediate level students. Emphasizes solo material, technique, sight reading, interpretation, and performance. Daily practice required. Practice pianos available on campus. A combination of Music 161, Music 162, Music 163, Music 164A, and Music 164B may be taken a maximum of four enrollments. CSU/UC

## Music 164B

## Intermediate Piano Repertoire II

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total.
Prerequisite: Music 164A with a minimum grade of C.
Continuation of instruction for advanced intermediate level students.
Emphasizes solo material, technique, sight reading, and performance. Daily practice required. Practice pianos available on campus. A combination of Music 161, Music 162, Music 163, Music 164A, and Music 164B may be taken a maximum of four enrollments. CSU/UC

## Music 168

## Stylistic Interpretation of Piano Repertoire

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total. Prerequisite: Music 163 with a minimum grade of C .
Style characteristics of Baroque, Classical, Romantic and 20th century music studied through representative piano compositions. Students learn to play expressively within currently accepted performance practices for each period. Not for beginners. CSU/UC

## Music 169 <br> Harmonization At the Keyboard

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Recommended Preparation: Music 161 with a minimum grade of C or similar beginning experience playing the piano.
Beginning keyboard harmonization skills. Includes playing by ear and learning accompaniment patterns in several styles from simple chord progressions. A combination of Music 169 and Music 269 may be taken a maximum of four enrollments. CSU/UC

## Music 171 (C-ID MUS 180) <br> Concert Band

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Study and rehearsal of band music for concert performances on campus and in the community. Each semester requires performance of new and different repertoire. Designed for students with basic performance skills. May be repeated. CSU/UC

## Music 173

## Beginning Rhythms in Percussion and Drums

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
The introduction of snare drum and drum set in a class situation.
Designed to teach the basics of percussion and drum set performance for the beginning student. Emphasis on rhythmic reading, rudimental techniques, and basic drum set coordinates in various styles. CSU/UC

## Music 175 (C-ID MUS 180) <br> Jazz Ensemble

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Study, rehearsal, and performance of contemporary jazz/rock music for the jazz ensemble with help in developing techniques of improvisation. Each semester requires performance of new and different jazz repertoire. Designed for students with basic performance skills. May be repeated. CSU/UC

## Music 176 <br> Jazz Band <br> Unit(s): 1.0 Class Hours: 54 Laboratory total.

Advanced study, rehearsal, and performance of standard and contemporary jazz literature. Includes advanced techniques in improvisation. Each semester requires performance of new and different repertoire. Designed for students with basic performance skills. May be repeated. CSU/UC

## Music 178

## Mariachi

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Mixed ensemble for the study, rehearsal, and performance of Mariachi repertoire with an emphasis on the music from Jalisco. Each semester requires the performance of different repertoire. Designed for students who have basic performance skills. May be repeated. CSU/UC

## Music 180A <br> String Methods

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Beginning instruction on violin, viola, cello, or string bass. Fundamental skills developed through in-class rehearsal and performance of technical exercises and beginning orchestral repertoire. A combination of Music 180A and Music 180B may be taken a maximum of four enrollments. CSU/UC

## Music 180B <br> Intermediate String Methods

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 180A with a minimum grade of C.
Intermediate instruction on violin, viola, cello, or string bass. Skills developed through in-class rehearsal and performance of intermediate: technical exercises and orchestral repertoire. A combination of Music 180A and Music 180B may be taken a maximum of four enrollments. CSU/UC

Music 181 (C-ID MUS 180) Chamber Orchestra
Unit(s): 1.0 Class Hours: 54 Laboratory total.
Rehearsal and performance of standard repertoire for chamber orchestra. Each semester requires the performance of a variety of different repertoire. Designed for students who have basic performance skills. May be repeated. CSU/UC

## Music 185

## Beginning Classical Guitar

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Basic instruction in guitar technique and music nomenclature as related to performance of entry level solo and ensemble repertoire. Student must furnish nylon string guitar. A combination of Music 185, Music 186, Music 187, and Music 188 may be taken a maximum of four enrollments. CSU/UC

## Music 186

## Intermediate Classical Guitar

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 185 with a minimum grade of C.
Instruction at the intermediate level in solo, duo, and trio repertoire. Emphasizes technique studies and performance styles of 18th century music. Student must provide nylon string guitar. A combination of Music 185, Music 186, Music 187, and Music 188 may be taken a maximum of four enrollments. CSU/UC

## Music 187 <br> Advanced Classical Guitar

Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total. Prerequisite: Music 186 with a minimum grade of $C$. Instruction at the advanced level in solo, duo, and trio repertoire. Emphasizes advanced technical studies and etudes and performance styles of 16th through 20th century music. Student must provide nylon string guitar. A combination of Music 185, Music 186, Music 187, and Music 188 may be taken a maximum of four enrollments. CSU/UC

## Music 188

## Advanced Classical Guitar Technique and Repertoire

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 187 with a minimum grade of C.
Study of advanced guitar technique, solo literature, and performance practices of Renaissance, Baroque, and Classical styles through 20th century music. Student must provide nylon string guitar. A combination of Music 185, Music 186, Music 187, and Music 188 may be taken a maximum of four enrollments. CSU/UC

## Music 189

## Guitar Ensemble

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Rehearsal and performance of standard and current repertoire for guitar ensemble. Each semester requires the performance of a variety of different repertoire. Designed for students who can read notes in first position. May be repeated. CSU/UC

## Music 190 <br> Introduction to Protools

Unit(s): 1.5 Class Hours: 18 Lecture, 27 Laboratory total.
Fundamental features and applications of ProTools audio software used in post-production for television, film and music. Orientation to functions, user interface and actual operation of digital audio workstation. Techniques and aesthetics associated with creation of well-mixed soundtracks are addressed. Hands-on practice with digital recording and editing of soundtracks. (Same as Television/Video Communications 190). CSU

## Music 198

Topics
Unit(s): 0.5-1.0 Class Hours: 9-18 Lecture total.
Topics of special interest offered to meet the interests and needs of students of music. CSU

## Music 213 (C-ID MUS 140)

## Theory 3

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Music 112 with a minimum grade of C .
Continuation of diatonic harmony from Music 112. Chromatic harmony introduced. Includes non-dominant seventh chords, secondary dominants, modulation, and altered chords. Keyboard harmony. Concurrent enrollment in Music 114A recommended. Required for music majors; open to non-majors. CSU/UC

Music 214 (C-ID MUS 150)
Theory 4
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Music 213 with a minimum grade of $C$.
Continuation of Music 213. Late 19th century harmonic technique, and important aspects of 20th century style. Analysis and writing of short, derivative compositions. Keyboard harmony. Concurrent enrollment in Music 114B recommended. Required for music majors; open to nonmajors. CSU/UC

## Music 215A

Applied Music (Advanced Private Instruction)
Unit(s): 1.5 Class Hours: 92 Laboratory total.
Prerequisite: Music 115D with a minimum grade of $C$ and audition and concurrent enrollment in a music ensemble or music theory course.
Advanced lessons in classical music in voice, piano, band/orchestral instrument, or guitar. Weekly requirements include five hours oncampus practice per week, weekly lessons, and weekly recital attendance. CSU/UC

## Music 216

Advanced Harmony and Composition I
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Music 214 with a minimum grade of C .
Extension of harmonic studies of Music 213 and Music 214 into complete small compositions. Emphasizes learning to write effectively for the piano. Introduction to simple contrapuntal techniques and how to combine words with music. CSU/UC

Music 217
Advanced Harmony and Composition II
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Music 214 with a minimum grade of C .
Extension of Music 213 and Music 214 harmonic studies into complete small compositions. Emphasizes development technique. Explores highly chromatic harmony, dissonance, and selected 20th century styles. CSU/UC

## Music 218

## Music Notation Using Finale Software

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Computer notation skills using Finale software. Covers various methods for inputting musical elements as well as editing, layout techniques, and score preparation. Intended for music students, music teachers, amateurs, and professionals. CSU

Music 241

## Chamber Music Ensemble

## Unit(s): 1.0 Class Hours: 54 Laboratory total.

Prerequisite: Audition.
Rehearsal and performance of music of various periods and styles for small instrumental, vocal, or combined ensembles. Each semester requires performance of new repertoire. Designed for students with previous performance experience. Audition required. May be repeated. CSU/UC

## Music 245

Intermediate Jazz Improvisation and Performance Workshop
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 145 with a minimum grade of C. Prerequisite: Audition.
Performance and analysis of jazz standards and popular pieces in a practical workshop setting at an intermediate level. Elements of improvisation and ensemble playing are stressed. Open to all instrumentalists and vocalists. CSU

Music 268

## Intermediate Keyboard Repertoire

Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 168 with a minimum grade of $C$.
Style characteristics of Baroque, Classical, Romantic, and 20th century music studied through intermediate level piano compositions. Students learn to play expressively within currently accepted performance practices for each period. A combination of Music 168 and Music 268 may be taken a maximum of four enrollments. CSU/UC

## Music 269

Intermediate Harmonization at the Keyboard
Unit(s): 1.0 Class Hours: 18 Lecture, 18 Laboratory total.
Prerequisite: Music 169 with a minimum grade of $C$.
Intermediate keyboard harmonization skills. Includes playing by ear and learning accompaniment patterns in jazz, popular and classical styles using a variety of chord progressions. A combination of Music 169 and Music 269 may be taken a maximum of four enrollments. CSU/UC

## Music 271 (C-ID MUS 180) <br> Symphonic Band

Unit(s): 1.0 Class Hours: 54 Laboratory total.
The rehearsal and performance of band music. Preparation of standard band repertoire for performances in the community. Each semester requires performance of a variety of new and different repertoire. Designed for students with intermediate or advanced performance skills. May be repeated. CSU/UC

## NURSING-CONTINUING EDUCATION (NCE)

## Nursing-Continuing Education 145 Advanced Cardiac Life Support

Unit(s): 1.5 Class Hours: 27 Lecture total.
Prerequisite: Nursing-Registered 201 and Nursing-Registered 201L with a minimum grade of $C$.
Examines principles of caring for patients experiencing cardiopulmonary emergencies. Includes arrhythmia recognition, psychomotor skills, and medications used to manage cardiac arrest. Current BLS card and fee required. Must contact Health Science Skills Lab at (714) 546-6869 for paperwork BEFORE registration. Grade: Pass/No Pass Only. CSU

## Nursing-Continuing Education 150

Registered Nurse Competency Refresher Course
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation: Successful completion of a Registered Nursing Program.
This course focuses on Registered Nurse graduates who have been unable to find employment in the acute care setting and/or refresher RNs. This course will enhance both the recently graduated RN's and refresher RN's knowledge, skills, confidence and marketability prior to and during their job search. The course has three components: 1) Classroom theory, 2) Simulation, and 3) Skills practice with competency testing. Grade: Pass/No Pass Only. CSU

## NURSING-REGISTERED (NRN)

## Nursing-Registered 098 <br> Topics

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Courses on a variety of contemporary topics will be offered to meet the interests and needs of students in the Nursing area. Not offered every semester.

## Nursing-Registered 105 <br> Cooperative Work Experience - Occupational EducationOccupational

Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
Co-Requisite: Concurrent enrollment in Nursing-Registered 201L or Nursing-Registered 202L.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Nursing-Registered 106A

Health Science Skills Laboratory - First Semester
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Enrollment in the Registered Nursing Program, any N.C.E. courses, or RN re-entry.
Supervised use with supplemental learning assistance of the skills lab to assist the student in the development of clinical competency of nursing fundamentals and mastery of fundamental psychomotor skills content addressed in courses Nursing-Registered 161, NursingRegistered 161L, Nursing-Registered 163 and Nursing-Registered163L. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Nursing-Registered 106B

Health Sciences Skills Laboratory - Second Semester
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Enrollment in the Registered Nursing Program, any N.C.E. courses, or RN re-entry.
Supervised use with supplemental learning assistance of skills lab to assist the student in development of clinical competency of nursing concepts pertaining to maternal-child health and mastery of psychomotor skills related to maternal-child biological and psychosocial needs addressed in courses Nursing-Registered 164, Nursing-Registered 164L, Nursing-Registered 165, and NursingRegistered 165L. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

Nursing-Registered 106C
Health Sciences Skills Laboratory - First Year Refresher
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Enrollment in the Registered Nursing Program, EMT, any N.C.E. courses, or RN re-entry.

Supervised use with supplemental learning assistance of skills lab to assist the re-entry student or EMT student in the expansion of clinical competency of principles of nursing and mastery of basic to intermediate pyschomotor skills content addressed in courses Nursing. Registered 161, Nursing-Registered 161L, Nursing-Registered 163, Nursing-Registered 163L, Nursing-Registered 164, NursingRegistered 164L, Emergency Medical Technician 101 or Emergency Medical Technician 105. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Nursing-Registered 160

## Introduction to Pharmacology

Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: Biology 239 and Biology 249 and Biology 139 or Biology 229 and English 101 or English 101H with a minimum grade of C. Corequisite: Concurrent enrollment in Nursing-Registered 161 and Nursing-Registered 161L.
This course introduces the concepts within the four domains of Person Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: safety and infection control, diversity, health promotion, communication, professional behavior, clinical reasoning/judgment, health care system, and ethics. Upon completion, students should be able to identify safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 161 <br> Principles of Nursing Practice

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Biology 239 and Biology 249 and Biology 139 or Biology 229 and English 101 or English 101H with a minimum grade of C. Corequisite: Concurrent enrollment in Nursing-Registered 160 and Nursing-Registered 161L.
This course introduces the concepts within the four domains of Person, Health and IIIness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: elimination, metabolism, oxygenation, tissue integrity, comfort, emergencies, safet)' and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, healthcare system, and ethics. Upon completion, students should be able to identify safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 161L <br> Principles of Nursing Practice Lab

Unit(s): 2.5 Class Hours: 135 Laboratory total.
Prerequisite: Biology 239 and Biology 249 and Biology 139 or Biology 229 and English 101 or English 101H with a minimum grade of C. Corequisite:
Corequisite: Concurrent enrollment in Nursing-Registered 160 and Nursing-Registered 161.
This clinical course applies the concepts of Nursing-Registered 161 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: elimination, metabolism, oxygenation, tissue integrity, comfort, emergencies, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/ judgment, healthcare system, ethics, and clinical competency. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 162

Pharmacological Concepts
Unit(s): 1.5 Class Hours: 27 Lecture total.
Prerequisite: Nursing-Registered 160 and Nursing-Registered 161 with a minimum grade of C, and Nursing-Registered 161L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 163 and Nursing-Registered 163L.
This course further develops the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, metabolism, central nervous system, cellular regulation, oxygenation, perfusion, reproduction, inflammation,infection, mobility, comfort, stress and coping, mood \& affect, cognition, safety \& infection control, communication, professional behavior, clinical reasoning/judgment, and ethics. Upon completion, students should be able to identify safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 163 <br> Simple Concepts

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Nursing-Registered 160 and Nursing-Registered 161 with a minimum grade of $C$, and Nursing-Registered 161L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 162 and Nursing-Registered 163L.
This course further develops the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, elimination, metabolism, perfusion, inflammation, tissue integrity, infection, mobility, comfort, cognition, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, and ethics. Upon completion, students should be able to explain safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 163L <br> Simple Concepts Lab

Unit(s): 2.5 Class Hours: 135 Laboratory total.
Prerequisite: Nursing-Registered 160 and Nursing-Registered 161 with a minimum grade of C, and Nursing-Registered 161L with a minimum grade of $P$.

Corequisite: Concurrent enrollment in Nursing-Registered 162 and Nursing-Registered 163.
This clinical course applies the concepts of Nursing-Registered 163 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, elimination, metabolism, perfusion, inflammation, tissue integrity, infection, mobility, comfort, cognition, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, ethics, and clinical competency. Upon completion, students should be able to demonstrate safe nursing care incorporating the concepts identified in this course. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 164 <br> Family Health Concepts

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Nursing-Registered 162 and Nursing-Registered 163 with a minimum grade of $C$, and Nursing-Registered 163 L with a minimum grade of $P$.
This course further describes the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: physical growth and development, psychosocial development, cognitive development, metabolism, cellular regulation, perfusion, reproduction, infection, comfort, emergencies, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/ judgment, and ethics. Upon completion, students should be able to interpret safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 164L Family Health Concepts Lab

Unit(s): 2.0 Class Hours: 108 Laboratory total.
Prerequisite: Nursing-Registered 162 and Nursing-Registered 163 with a minimum grade of C, and Nursing-Registered 163L with a minimum grade of $P$.
This clinical course applies the concepts of Nursing-Registered 164 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: physical growth and development, psychosocial development, cognitive development, metabolism, cellular regulation, perfusion, reproduction, infection, comfort, emergencies, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, ethics, and clinical competencies. Upon completion, students should be able to employ safe nursing care incorporating the concepts identified in this course. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 165 <br> Health Illness Concepts

Unit(s): 2.5 Class Hours: 45 Lecture total.
Prerequisite: Nursing-Registered 164 with a minimum grade of $C$, and Nursing-Registered 164L with a minimum grade of $P$.
This course relates the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: psychosocial development, cognitive development, metabolism, cellular regulation, oxygenation, inflammation, infection, comfort, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, and ethics. Upon completion, students should be able to differentiate safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 165L <br> Health Illness Concepts Lab

Unit(s): 2.5 Class Hours: 135 Laboratory total.
Prerequisite: Nursing-Registered 164 with a minimum grade of $C$, and Nursing-Registered 164L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 165.
This clinical course applies the concepts of Nursing-Registered 165 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: psychosocial development, cognitive development, metabolism, cellular regulation, oxygenation, inflammation, infection, comfort, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, and ethics. Upon completion, students should be able to differentiate safe nursing care incorporating the concepts discussed in this course. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 170 <br> Pharmacological Concepts of Nursing

Unit(s): 2 Class Hours: 36 Lecture total.
Prerequisite: Biology 239, Biology 249, and Biology 139 or Biology 229, and English 101 or English 101 H with a minimum grade of C. Corequisite: Concurrent enrollment in Nursing-Registered 171 and Nursing-Registered 171L.
This pharmacology course introduces the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain related to pharmacology including: fluid and electrolyte balance, metabolism, central nervous system, cellular regulation, oxygenation, perfusion, reproduction, inflammation,infection, mobility, comfort, stress and coping, mood \& affect, cognition, safety \& infection control, communication, professional behavior, diversity, health promotion, healthcare systems, clinical reasoning/judgment, and ethics. Further emphasis is placed on dosage calculations, drug classifications, and application of the nursing process to drug administration. Upon completion, students should be able to identify safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 171 <br> Principles of Nursing Practice and Simple Concepts

Unit(s): 4.5 Class Hours: 81 Lecture total.
Prerequisite: Biology 239, Biology 249, and Biology 139 or Biology 229, and English 101 or English 101 H with a minimum grade of C.
Corequisite: Concurrent enrollment in Nursing-Registered 170 and Nursing-Registered 171L.
This course introduces and develops the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: elimination, metabolism, fluid and electrolyte balance, perfusion, inflammation, infection, mobility, cognition, oxygenation, tissue integrity, comfort, emergencies, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, healthcare system, and ethics. Upon completion, students should be able to identify and explain safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 171L <br> Principles of Nursing Practice and Simple Concepts Lab

Unit(s): 4.5 Class Hours: 243 Laboratory total.
Prerequisite: Biology 239, Biology 249, and Biology 139 or Biology 229, and English 101 or English 101 H with a minimum grade of C.
Corequisite: Concurrent enrollment in Nursing-Registered 170 and Nursing-Registered 171.
This clinical course applies the concepts of Nursing-Registered 171 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: elimination, metabolism, fluid and electrolyte balance, perfusion, inflammation, infection, mobility, cognition, oxygenation, tissue integrity, comfort, emergencies, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, healthcare system, ethics, and clinical competency. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 172 <br> Family Health and IIIness Concepts

Unit(s): $4 \quad$ Class Hours: 72 Lecture total.
Prerequisite: Nursing-Registered 170 and Nursing-Registered 171 with a minimum grade of C, and Nursing-Registered 171L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 172L. This course describes and relates the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: physical growth and development, psychosocial development, cognitive development, metabolism, cellular regulation, perfusion, reproduction, infection, comfort, emergencies, oxygenation, inflammation, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, and ethics. Upon completion, students should be able to differentiate safe nursing care incorporating the concepts discussed in this Family Health and Illness Concepts course. CSU

## Nursing-Registered 172L <br> Family Health and IIIness Concepts Lab

Unit(s): 4.5 Class Hours: 243 Laboratory total.
Prerequisite: Nursing-Registered 170 and Nursing-Registered 171 with a minimum grade of C, and Nursing-Registered 171L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 172.
This clinical course applies the concepts of Nursing-Registered 172 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: physical growth and development, psychosocial development, cognitive development, metabolism, cellular regulation, perfusion, reproduction, infection, comfort, emergencies, oxygenation, inflammation, safety and infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, and ethics. Upon completion, students should be able to differentiate safe nursing care incorporating the concepts discussed in this Family Health and Illness Concepts Lab. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 198 <br> Topics <br> Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.

Courses on a variety of contemporary topics will be offered to meet the interests and needs of students in the nursing area. Not offered every semester. Open Entry/Open Exit. CSU

## Nursing-Registered 200

## Role Transition

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Acceptance into the Nursing Program.
Bridge course for LVN or transfer student with an emphasis on RN role development. Application of the nursing process within the Santa Ana College Nursing Conceptual Framework. Review of test-taking strategies, medication calculations, fluid balance, and skills testing. Open to all nursing students; required of advanced placement. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 206A

## Health Sciences Skills Laboratory - Third Semester

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Enrollment in the Registered Nursing Program, any N.C.E. courses, or RN re-entry.
Supervised use with supplemental learning assistance of skills lab to assist the student in development of clinical competency of mental health nursing and mastery of psychomotor skills content addressed in courses Nursing-Registered 261, Nursing-Registered 261L, NursingRegistered 262, and Nursing-Registered 262L. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Nursing-Registered 206B

Health Sciences Skills Laboratory - Fourth Semester
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Enrollment in the Registered Nursing Program, any N.C.E. courses, or RN re-entry.
Supervised use with supplemental learning assistance of skills lab to assist the student in development of clinical competency of advanced medical/surgical nursing concepts and mastery of advanced medical/ surgical psychomotor skills content addressed in courses NursingRegistered 263, Nursing-Registered 263L and Nursing-Registered 264L. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Nursing-Registered 206C

Health Sciences Skills Laboratory - Second Year Transition Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Enrollment in the Registered Nursing Program, any N.C.E. courses, or RN re-entry.
Supervised use with supplemental learning assistance of skills lab to assist the RN refresher, advanced placed nursing student, or EMT student in the development and maintenance of clinical competency of nursing theoretical knowledge and mastery of advanced psychomotor skills content necessary for the transition into clinical practice as addressed in courses Nursing-Registered 261, Nursing-Registered 261L, Nursing-Registered 262, Nursing-Registered 262L, NursingRegistered 263, Nursing-Registered 263L, and Nursing-Registered 264L, Emergency Medical Technician 101, or Emergency Medical Technician 105. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Nursing-Registered 261 <br> Mental Health Concepts

Unit(s): 1.5 Class Hours: 27 Lecture total.
Prerequisite: Nursing-Registered 165 with a minimum grade of C , and Nursing-Registered 165L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 261L. This course examines the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: metabolism, emergencies, stress \& coping, mood \& affect, cognition, addictive behavior, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, health care system, and ethics. Upon completion, students should be able to analyze safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 261L <br> Mental Health Concepts Lab

Unit(s): 1.5 Class Hours: 81 Laboratory total.
Prerequisite: Nursing-Registered 165 with a minimum grade of $C$, and Nursing-Registered 165L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 261.
This clinical course applies the concepts of Nursing-Registered 261 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: metabolism, emergencies, stress \& coping, mood \& affect, cognition, addictive behavior, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, health care system, ethics and clinical competency. Upon completion, students should be able to utilize safe nursing care incorporating the concepts identified in this course. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 262 <br> Acute Concepts

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Nursing-Registered 261 with a minimum grade of $C$, and Nursing-Registered 261L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 262L.
This course correlates the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: metabolism, central nervous system regulation, cellular regulation, oxygenation, perfusion, inflammation, infection, mobility, comfort, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, and ethics. Upon completion, students should be able to analyze safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 262L <br> Acute Concepts Lab

Unit(s): 3.0 Class Hours: 162 Laboratory total.
Prerequisite: Nursing-Registered 261 with a minimum grade of $C$, and Nursing-Registered 261L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 262.
This clinical course applies the concepts of Nursing-Registered 262 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: metabolism, central nervous system regulation, cellular regulation, oxygenation, perfusion, inflammation, infection, mobility, comfort, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, ethics, and clinical competency. Upon completion, students should be able to validate safe nursing care incorporating the concepts identified in this course. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 263 Complex Concepts

Unit(s): 3.5 Class Hours: 63 Lecture total.
Prerequisite: Nursing-Registered 262 with a minimum grade of C, and Nursing-Registered 262L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 263L.
This course formulates the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, metabolism, central nervous system regulation, oxygenation, perfusion, tissue integrity, infection, mobility, comfort, emergencies, safety \& infection control, diversity, health promotion, communication, professional behavior, clinical reasoning/judgment, health care system, and ethics. Upon completion, students should be able to synthesize safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 263L <br> Complex Concepts Lab

Unit(s): 2.5 Class Hours: 135 Laboratory total.
Prerequisite: Nursing-Registered 262 with a minimum grade of C, and Nursing-Registered 262L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 263.
This clinical course applies the concepts of Nursing-Registered 263 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, metabolism, central nervous system regulation, oxygenation, perfusion, tissue integrity, infection, mobility, comfort, emergencies, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, health care system, ethics, and clinical competency. Upon completion, students should be able to synthesize safe nursing care incorporating the concepts discussed in this course. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 264L Preceptorship Lab

Unit(s): 2.5 Class Hours: 135 Laboratory total.
Prerequisite: Nursing-Registered 263 with a minimum grade of C, and Nursing-Registered 263L with a minimum grade of $P$.
This clinical course applies the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on developing leadership skills including time management, prioritization, and delegation in an independent clinical environment precepted by an experienced registered nurse. Upon completion, students should be able to manage safe nursing care incorporating the concepts identified and discussed in the nursing curriculum. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 271

Mental Health and Acute Concepts
Unit(s): 4 Class Hours: 72 Lecture total.
Prerequisite: Nursing-Registered 172 with a minimum grade of C and Nursing-Registered 172L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 271L.
This course examines the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: metabolism, emergencies, stress \& coping, mood \& affect, cognition, addictive behavior, central nervous system regulation, cellular regulation, oxygenation, perfusion, inflammation, infection, mobility, comfort, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, health care system, and ethics. Upon completion, students should be able to analyze safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 271L

Mental Health and Acute Concepts Lab
Unit(s): 4.5 Class Hours: 243 Laboratory total.
Prerequisite: Nursing-Registered 172 with a minimum grade of $C$ and Nursing-Registered 172L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 271.
This clinical course applies the concepts of Nursing-Registered 271 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: metabolism, emergencies, stress \& coping, mood \& affect, cognition, addictive behavior, central nervous system regulation, cellular regulation, oxygenation, perfusion, inflammation, infection, mobility, comfort, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, health care system, ethics and clinical competency. Grade: Pass/No Pass Only. CSU

## Nursing-Registered 272

Complex Concepts
Unit(s): 3.5 Class Hours: 63 Lecture total.
Prerequisite: Nursing-Registered 271 with a minimum grade of $C$ and Nursing-Registered 271L with a minimum grade of $P$.
Corequisite: Concurrent enrollment in Nursing-Registered 272L. his course formulates the concepts within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, metabolism, central nervous system regulation, oxygenation, perfusion, tissue integrity, infection, mobility, comfort, emergencies, safety \& infection control, diversity, health promotion, communication, professional behavior, clinical reasoning/judgment, health care system, and ethics. Upon completion, students should be able to synthesize safe nursing care incorporating the concepts discussed in this course. CSU

## Nursing-Registered 272L <br> Complex Concepts and Preceptorship Lab <br> Unit(s): 4.5 Class Hours: 243 Laboratory total.

Prerequisite: Nursing-Registered 271 with a minimum grade of C and Nursing-Registered 271L with a minimum grade of P.
Corequisite: Concurrent enrollment in Nursing-Registered 272.
This clinical course applies the concepts of Nursing-Registered 272 within the four domains of Person, Health and Illness, Environment, and Nursing. Emphasis is placed on the concepts within each domain including: fluid and electrolyte balance, metabolism, central nervous system regulation, oxygenation, perfusion, tissue integrity, infection, mobility, comfort, emergencies, safety \& infection control, diversity, health promotion, communication, professional behaviors, clinical reasoning/judgment, health care system, ethics, and clinical competency. Additional emphasis is placed on developing leadership skills including time management, prioritization, and delegation in an independent clinical environment precepted by an experienced registered nurse. Upon completion, students should be able to manage safe nursing care incorporating the concepts identified and discussed in the nursing curriculum. Grade: Pass/No Pass Only. CSU

## NUTRITION AND FOOD (NUTR)

## Nutrition and Food 101 <br> The Food System and Career Opportunities

Unit(s): 1.5 Class Hours: 27 Lecture total.
Exploration of career opportunities and projected employment trends in dietetics, food science, and the food industry. Includes educational requirements for nutrition and dietetics majors, skill preparation, professional organizations, and ethics. CSU

## Nutrition and Food 110 Food Sanitation and Safety

Unit(s): 3.0 Class Hours: 54 Lecture total.
Basic principles of sanitation and safety applied to commercial food service operations to comply with state regulations for sanitation certification. Includes certification knowledge of food borne illnesses and steps of food handling; personal hygiene, procurement,
preparation, storage and service and equipment use, care, selection, and accident prevention. (Same as Culinary Arts 110). CSU

## Nutrition and Food 115 (C-ID NUTR 110) Nutrition

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: English 101 or English 101H Scientific concepts of nutrition related to the function of nutrients in basic life processes and current health issues with emphasis on individual needs. CSU/UC

## Nutrition and Food 115H (C-ID NUTR 110) <br> Honors Nutrition

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above
Recommended Preparation: English 101 or English 101H
Seminar style, content enriched for honors students, to provide a critical and extensive exploration of the major areas of nutrition. Includes issues related to diet-related conditions. CSU/UC

## Nutrition and Food 116 (C-ID NUTR 120) <br> Principles of Food Preparation

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Negative T.B. test or chest X-ray
Recommended Preparation: English 101 or English 101H
Application of food science principles with emphasis on ingredient function and interaction, food preparation techniques, sensory evaluation standards, food safety and sanitation, and nutrient composition of food. CSU

## Nutrition and Food 118

Cultural Foods
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Negative T.B. test or chest X-ray.
Explores the rich cross-cultural variety of food traditions and the ways that food in all cultures creates group identity. Examination of regional, ethnic, cultural, religious, historical and social influences on food patterns and cuisines. Laboratory work includes preparation of traditional foods discussed in class. CSU/UC

## Nutrition and Food 120

## Food Service Nutrition

Unit(s): 2.0 Class Hours: 36 Lecture total.
Principles of nutrition and their application to personal lifestyle and a professional kitchen through an analysis of marketing, food trends, menu design and recipe modification. CSU
Nutrition and Food 121
Sports Nutrition
Unit(s): 3.0 Class Hours: 54 Lecture total.
Overview of the role nutrition plays in sports and athletic performance. An emphasis on energy and nutrient needs, determination of hydration status, sport specific nutrient recommendations, body composition, and supplementation guidelines. CSU

## OCCUPATIONAL STUDIES (OS)

## Occupational Studies 301

Therapeutic Approaches to the Older Adult
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will build upon the developmental concepts of aging to examine quality of life in older adulthood. The focus of this course will be on evaluating older adults from an occupational perspective and analyzing the skills needed to maintain independence and to successfully participate in meaningful activities throughout the older years.

## Occupational Studies 304

## Movement Theory \& Analysis

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
Movement is a significant aspect of occupational performance. This course will focus on current theories of motor control and motor learning with an emphasis of how these theories can be applied to provide evidence-based practice to those with motor dysfunction.

## Occupational Studies 305 <br> Advanced Pediatric Practice for the Occupational Therapy Assistant (OTA)

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will build upon developmental concepts related to pediatric Occupational Therapy (OT) practice. The focus of this course will be to look at specific settings related to pediatric occupational therapy practice. It will focus on evaluating the pediatric client related to acute hospital care and school based intervention.

## Occupational Studies 310 <br> Community - Based Occupational Therapy Practice

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will focus on the practice of Occupational Therapy (OT) in community-based settings. This will include an in-depth analysis of both the history and growth of OT practice in the community. Students will analyze the role of OT in community settings with a variety of populations.

## Occupational Studies 312 <br> Advanced Practice Areas in Occupational Therapy (OT)

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will provide a study of the advanced practice areas in occupational therapy. Advance practice areas in occupational therapy include: physical agent modalities (PAMs), hand therapy and feeding and swallowing. This class will focus on the theory and application of PAMs for the use in occupational therapy; the fundamentals of hand therapy including treatment guidelines in occupational therapy; and feeding and swallowing issues with the occupational therapy client.

## Occupational Studies 325

Applying Research to Occupational Therapy Intervention
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will provide an in-depth study of utilizing evidence to develop effective treatment plans in Occupational Therapy. The focus will be on critically evaluating available research to develop best practice in intervention.

## Occupational Studies 402

Neurological Principles in Human Performance
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will provide an in-depth study of the neurologic principles used in rehabilitation practice. This will focus on understanding the structures and function of the central and peripheral nervous systems and to the sequelae of injury to these systems. There will be an emphasis on cognitive, visual, and perceptual problems in adults with acquired brain injury.

## Occupational Studies 403

Leadership for the Occupational Therapy Assistant (OTA)
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will explore leadership roles that are available to the OTA and the skills that are needed to assume them. The focus will be on leadership, advocacy, marketing, quality improvement, supervision, and scholarship. Students will also explore volunteerism and active participation in professional organizations.

## Occupational Studies 410 <br> Healthcare Systems

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This course will cover the various healthcare systems that influence the practice of occupational therapy. Topics will include economics, types of insurance, healthcare policies, ongoing healthcare reform, and the role of technology. As a part of this course students will complete an independent, in-depth study of one of the key practice areas in OT as identified by the American Occupational Therapy Association (AOTA).

## Occupational Studies 412 <br> Capstone Seminar

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program.
This Capstone Seminar is designed to demonstrate the student's accumulated training through the development of a project that reflects theory, advanced knowledge of practice, and innovation. The theme of each project will be facilitating engagement in occupation with the use of a therapeutic product. Each student will complete a project that is individually mentored and demonstrates an increased level of self-direction. Grade: Pass/No Pass Only.

## OCCUPATIONAL THERAPY ASSISTANT (OTA)

## Occupational Therapy Assistant 100

Medical Terminology and Documentation for the O.T.A.
Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: Biology 149 or Biology 239 and Biology 249 with a minimum grade of $C$.
This course will offer an introduction to basic medical terminology and documentation appropriate to practice needs of the Occupational Therapy Assistant. CSU

## Occupational Therapy Assistant 101 Foundations of Occupation and Occupational Therapy

 Unit(s): 4.0 Class Hours: 72 Lecture total.This course defines and explores occupation as it is used to provide the foundation for study of the occupational therapy profession. It further provides an overview of the history and development of occupational therapy as well as the dimensions of past and present practice. CSU

## Occupational Therapy Assistant 101L Exploration of Occupation Through Activity

Unit(s): 2.0 Class Hours: 114.75 Laboratory total.
Prerequisite: English 101 or English 101H, and 3 units of Communication Studies 101 or Communication Studies 101H, or Communication Studies 102, Communication Studies 140, Communication Studies 145, Communication Studies 152 with a minimum grade of $C$.
In this lab class, students will explore the meaning and variability of occupation through self-analysis of occupational patterns, perform task analysis of varied activities, and have the opportunity to observe and practice teaching and learning skills. CSU

Occupational Therapy Assistant 102
Psychosocial Function and Dysfunction
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Occupational Therapy Assistant 101 and Occupational Therapy Assistant 101L with a minimum grade of C.
This course will define and explore psychosocial phenomena commonly seen by the Occupational Therapy Assistant and will examine evaluation techniques, functional deficits, and methods of treatment. CSU

Occupational Therapy Assistant 102L Psychosocial Components of Occupation
Unit(s): 2.5 Class Hours: 144 Laboratory total.
Prerequisite: Occupational Therapy Assistant 100, Occupational Therapy Assistant 101, and Occupational Therapy Assistant 101L with a minimum grade of $C$.
This course will explore the occupational therapy assistant's role in therapeutic relationships, in administering assessments used primarily in pediatric, adolescent, and adult psychosocial settings, and in therapeutic group design and facilitation. CSU
Occupational Therapy Assistant 103

## Physical Function and Dysfunction

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Occupational Therapy Assistant 102 and Occupational Therapy Assistant 102L with a minimum grade of C.
This course will focus on the occupational function of the child, adolescent, and adult which emphasizes the physical components of development, the continuum of function/dysfunction of the client and the role of the O.T.A. in assessment and treatment of commonly seen physical dysfunction diagnosis. CSU
Occupational Therapy Assistant 103L

## Physical Components of Occupation

Unit(s): 2.5 Class Hours: 144 Laboratory total.
Prerequisite: Occupational Therapy Assistant 102 and Occupational Therapy Assistant 102L with a minimum grade of C.
This lab course explores the Occupational Therapy Assistant's role in safety, assessments and treatment techniques commonly used by occupational therapists in physical dysfunction settings. CSU
Occupational Therapy Assistant 110
Human Occupation Across Lifespan
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course will explore human occupation across lifespan with an emphasis on the relationship between human development and occupational choice. Physical, cognitive, psychological, social, and linguistic developmental milestones and changes will be covered from fetal development through old age. CSU

## Occupational Therapy Assistant 111

## Applied Kinesiology

Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: Occupational Therapy Assistant 101 with a minimum grade of $C$.
This course will focus on understanding human movement as an integral component of occupational performance and will examine how kinesiology and biomechanics are utilized in treatment by the Occupational Therapy Assistant. CSU
Occupational Therapy Assistant 115
Human Disease and Occupation
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Occupational Therapy Assistant 101 with a minimum grade of C.
This class will explore diseases that are commonly seen in occupational therapy practice and the effect they have on participation in occupation. Each disease will be covered in terms of etiology, prognosis, prevention, pathophysiology, medical management, precautions, and lifestyle redesign required as a result of the disease. CSU

## Occupational Therapy Assistant 201

Contemporary Models of Occupational Therapy Practice Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Occupational Therapy Assistant 102 and Occupational Therapy Assistant 102L with a minimum grade of C.
This lecture/lab course explores the multiple roles of the occupational therapy assistant in documentation, service management, professional behaviors, non-traditional roles, and contemporary models of practice. CSU
Occupational Therapy Assistant 202

## Level II Fieldwork - Part I

Unit(s): 6.0 Class Hours: 360 Laboratory total.
Prerequisite: Occupational Therapy Assistant 103, Occupational Therapy Assistant 103L and Occupational Therapy Assistant 201 with a minimum grade of $C$.
Supervised fieldwork experience in an occupational therapy practice setting that will provide the student appropriate opportunities to apply learned knowledge and skills. Grade: Pass/No Pass Only. CSU

## Occupational Therapy Assistant 203 <br> Level II Fieldwork - Part II

Unit(s): 6.0 Class Hours: 360 Laboratory total.
Prerequisite: Occupational Therapy Assistant 103, Occupational
Therapy Assistant 103L, and Occupational Therapy Assistant 201 with a minimum grade of $C$.
Supervised fieldwork experience in an occupational therapy practice setting that will provide the student appropriate opportunities to apply knowledge and skills learned in the classroom. Grade: Pass/No Pass Only. CSU

## PARALEGAL (PARA)

## Paralegal 100

The Paralegal Profession
Unit(s): 3.0 Class Hours: 54 Lecture total.
Overview of the legal system including the courts, participants and various sources of law in the American legal system. Review of the legal and judicial process in the United States covering the adversarial system, jurisdiction of federal and state courts, and the general process of judicial review. Explanation of different sources of law including statutes, court cases and administrative agency rules. Review of basic legal reasoning and introductory legal research methods. Examination of legal ethics. Introduction to susbstantive areas of law and the effect the law has in various groups and individuals in our system. Review of the role paralegals play in the legal system and the process to become a paralegal. CSU

## Paralegal 101

## Law Office Management

Unit(s): 2.0 Class Hours: 36 Lecture total.
Structure and procedures of the law office. Emphasis on time management, the role of paralegals and paralegal administrators in the law office, ethics in the law office, client property regulations, time keeping and billing, and technology management in a law office. CSU

Paralegal 105
Cooperative Work Experience Education - Occupational
Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. A student can earn 1 to 4 units per semester, up to a maximum of 16 units total. Additionally, students must work 75 paid hours or 60 non-paid hours per unit earned. Grade: Pass/No Pass Only. CSU

Paralegal 107 (C-ID AJ 122)
Principles and Procedures in the Criminal Justice System
Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination and analysis of due process in criminal proceedings from pre-arrest through trial and appeal, utilizing statutory law and state and constitutional law precedents. (Same as Paralegal 107). CSU

## Paralegal 120

## Computers in the Law Office

Unit(s): 4.0 Class Hours: 72 Lecture total.
Exploration of technology utilized in a legal service office environment.
Study of legal focused software and applications. CSU

## Paralegal 121

Ethics and Professional Responsibility
Unit(s): 2.0 Class Hours: 36 Lecture total.
Ethics and professional responsibility for paralegals: fees, client funds, billing, advertising, solicitation, unauthorized practice, deceit, and confidentiality; conflict of interest, suppressing evidence, reporting misconduct and professional practice obligations. CSU

## Paralegal 122

## Elder Law

Unit(s): 2.0 Class Hours: 36 Lecture total.
Law and procedures for the aging population. Interviewing, advance directives, wills, trusts, guardianships, patients' rights in healthcare decisions, entitlement programs, managed care, long-term care insurance, viatical settlements, living facilities, financial planning, social security, and elder abuse. Field trips may be required. CSU

## Paralegal 130

Legal Transactions
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Paralegal 100 with a minimum grade of C or concurrent enrollment.
Introduction to contracts and drafting legal documents. Contract formation, performance, and breach and third party interests. Students will learn to draft various contracts and other documents and will select, edit, and customize formbook and computerized forms in real property, family law, and estate planning. CSU

## Paralegal 131

## Advanced ADR Practice

Formerly: Alternate Dispute Resolution
Unit(s): 2.0 Class Hours: 36 Lecture total.
Study of the practical aspects of the Paralegal's role in assisting an attorney in Alternative Dispute Resolution. CSU

Paralegal 132

## Family Law and Procedure

Unit(s): 2.0 Class Hours: 36 Lecture total.
Study of basic substantive law and procedures in family law area: Court procedures for divorce, annulment, temporary and permanent support, restraining orders, division of community property, and child custody procedures including adoption and paternity actions. May require a field trip. CSU
Paralegal 133

## Workers Compensation Law and Procedure

Unit(s): 2.0 Class Hours: 36 Lecture total.
Laws and procedures related to workers compensation. Covers medical-legal problems attendant to on-the-job injuries, disabilities and benefits due employees, court litigation, administrative hearings, and out-of-court processes. May require field trips. CSU

## Paralegal 134

## Probate Law and Procedure

Unit(s): 2.0 Class Hours: 36 Lecture total.
Probate and estate planning procedures. Skills required to draft probate documents, assist attorneys in administration of estates, and monitoring asset and fiduciary accountings. Basic probate laws, wills, trusts, and taxes. Field trip may be required. CSU

## Paralegal 135

## Bankruptcy Law and Procedure

Unit(s): 2.0 Class Hours: 36 Lecture total.
Federal bankruptcy act and court procedures for the paralegal, the functions of the bankruptcy trustee, and a detailed examination of the process of being declared a bankrupt. May require a field trip. CSU

## Paralegal 136

Real Property Law and Procedure
Unit(s): 2.0 Class Hours: 36 Lecture total.
A study of the laws and procedures of real property. A study of the role of a paralegal in a law practice that specializes in real property law with an emphasis on the landlord/tenant relationship. Field trips may be required. CSU

## Paralegal 137

Tort and Insurance Law
Unit(s): 2.0 Class Hours: 36 Lecture total.
In class study of the theory of torts and the paralegals role in assisting an attorney in the delivery of legal services to a client. The course will study theory of liability, remedies, procedures and the ethical responsibilities in assisting an attorney in a tort related practice. Field trips may be required. CSU

## Paralegal 138

## Law of Business Organizations

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Paralegal 100 with a minimum grade of C or concurrent enrollment.

Laws of the California Corporations Code. Students prepare articles of incorporation, minutes, by-laws, stock, and stock transfer. Agency law and partnership laws. CSU

## Paralegal 139

## Fundamentals of Labor Law

Unit(s): 2.0 Class Hours: 36 Lecture total.
An introduction to labor law and the judicial system. The course will examine major areas of labor law including the complaint, conference, hearings and appeals. CSU

## Paralegal 140

## Immigration Law and Procedure

Unit(s): 2.0 Class Hours: 36 Lecture total.
Basic study of Immigration Law in the United States, with focus on preparation of those forms used by immigrants to secure benefits.
Computerized preparation of forms and procedures for filing with INS will be emphasized. Marketing procedures for paralegals involved in Immigration Law will be analyzed, and ethical considerations to avoid the illegal practice of law will be covered. CSU

## Paralegal 143

## Civil Litigation Overview

Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Paralegal 100 with a minimum grade of C or concurrent enrollment.
Overview of California civil procedure from acceptance of case to trial. Planning litigation, pleadings, motions, discovery, and trial preparation. CSU

## Paralegal 144

## Introduction to eDiscovery

Formerly: Discovery Techniques
Unit(s): 2.0 Class Hours: 36 Lecture total.
Focus on the discovery phase of litigation with specific instruction on eDiscovery. The study of the California Rules of Court, California Statutes and procedures for e-filing and eDiscovery regulations regarding the retention and production of electronic data in a civil litigation case. Practical applications for paralegals. CSU

## Paralegal 145

## Civil Litigation Overview

Unit(s): 4.0 Class Hours: 72 Lecture total.
Overview of California procedures from acceptance of a case through trial. Planning litigation, motions, discovery, and trial preparation. Preparation of pleadings. Overview of California discovery rules, preparation of discovery documents, and responses. CSU

## Paralegal 146

## Tort Law and Alternative Dispute Resolution

Unit(s): 4.0 Class Hours: 72 Lecture total.
Intentional torts, negligence, strict liability, product liability, damages, immunity, and defenses to torts. Principles of insurance law and procedures for the investigation of personal injury cases. Principles of dispute resolution through negotiation, mediation, and arbitration. Students will mediate impartially and use tools to maximize
negotiation effectiveness. The course includes application of mediatior skills in the law office. CSU

## Paralegal 147

International Commercial Agreements and Distribution
Law
Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn to create business contracts in the global marketplace and how to use the U.N. Convention on Contracts for the International Sale of Goods. Learn about contracts with foreign sales representatives and laws regulating international distribution. Learn about international limited liability companies and foreign direct investment laws. (Same as Business 147). CSU

## Paralegal 148

## International Intellectual Property Law

Unit(s): 1.0 Class Hours: 18 Lecture total.
Learn international intellectual property law - patents, copyrights, trademarks, and trade secrets. Learn international treaties relating to intellectual property rights. Learn technology licensing agreements and international franchising. (Same as Business 148). CSU

## Paralegal 149

## The Law of Global Commerce

Unit(s): 1.0 Class Hours: 18 Lecture total.
How countries join together to create trade. Includes NAFTA, GATT, the EU, and other trade agreements around the world. Explore law in different legal systems as well as U.S. export regulations. (Same as Business 149). CSU

Paralegal 150
Legal Transactions
Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Paralegal 100 with a minimum grade of C or concurrent enrollment.
Introduction to contracts and drafting legal documents for corporations and real estate transactions. Contract formation, performance, breach and third party interests. Students will learn the laws of the California Corporations Code and the laws governing real estate transactions. Students will learn to draft various contracts and other documents and will select, edit and customize formbook and computerized forms in real property, corporations, family law, and estate planning. CSU

## Paralegal 246

Legal Research and Analysis
Unit(s): 4.0 Class Hours: 72 Lecture total.
Recommended Preparation: Law 100 or Paralegal 100 with a minimum grade of C. Prerequisite: Paralegal 100 with a minimum grade of $C$ or concurrent enrollment.
Principles of legal research, legal analysis, and techniques for the Paralegal to assist an attorney in the delivery of legal services to their client. CSU

## Paralegal 248

## Advanced Research and Writing

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Paralegal 100 and Paralegal 246 with a minimum grade of $C$.
Advanced projects in legal research and writing emphasis on legal form and style. Field trips may be required. CSU

## Paralegal 297

The Professional Paralegal
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Paralegal 100, Paralegal 101, Paralegal 120, Paralegal 121, Paralegal 246, and either (Business 101 or Business 105) or all of the following: (Paralegal 107, Paralegal 130, Paralegal 131, Paralegal 136, Paralegal 137, and Paralegal 138) with a minimum grade of C.
This is the capstone class to the paralegal degree formally known as Paralegal 298. Students will demonstrate their knowledge of ethics, legal principles, and the technical skills necessary for entry level employment as a paralegal. Grade: Pass/No Pass Only. CSU

## Paralegal 299

## Cooperative Work Experience Education

Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. A student can earn 1 to 4 units per semester, up to a maximum of 16 units total. Additionally, students must work 75 paid hours or 60 non-paid hours per unit earned. Grade: Pass/No Pass Only. CSU

## PHARMACY TECHNOLOGY (PHAR)

## Pharmacy Technology 048

Introduction to Pharmacy Technology
Unit(s): 2.0 Class Hours: 36 Lecture total.
Overview of the SAC Pharmacy Technician training program. Definition of the roles and preview of the opportunities open to pharmacy technicians in various practice settings. Presentation of pharmaceutical dosage forms, the drug development process, and drug classification systems. Introduction to prescription labeling and to the law and ethics of pharmacy practice.

## Pharmacy Technology 051

## Body Systems I

Unit(s): 3.5 Class Hours: 63 Lecture total.
Anatomy, physiology, pathology, and pharmacology of the musculoskeletal, respiratory, renal, and cardiovascular systems. Basic terminology, with emphasis on word analysis and construction, medical abbreviations, and lay terms. Trade/generic names and indications for each body system.

## Pharmacy Technology 052 <br> Body Systems II

Unit(s): 3.5 Class Hours: 63 Lecture total.
Anatomy, physiology, pathology, and pharmacology of the
integumentary, endocrine, gastrointestinal, and nervous systems. Basic terminology, with emphasis on word analysis and construction, medical abbreviations, and lay terms. Trade/generic drug names and indications for medications in each body system. Emphasis on top 200 drugs.

## Pharmacy Technology 054A <br> Beginning Pharmacy Calculations

Unit(s): 1.0 Class Hours: 18 Lecture total.
Recommended Preparation: Mathematics N06
This course introduces students to calculations related to drug dosage and preparation of medications. Interconversion of units in the metric and common systems of measurement are included. There is emphasis on unit-cancellation for solving pharmacy situation problems, as well as a strong verbal component.

## Pharmacy Technology 054B

## Advanced Pharmacy Calculations

Unit(s): 1.0 Class Hours: 18 Lecture total.
Prerequisite: Pharmacy Technology 054A with a minimum grade of C. Students will learn calculations related to drug dosage using body surface area, measurements of strength, and preparation of medications. Calculations of dosage strength include ratio strength, percentage strength, and milligram percentage strength. Common dilutional calculations and alligation methods are included. There is emphasis on unit-cancellation for solving pharmacy situation problems as well as strong verbal component.

## Pharmacy Technology 056 Pharmacy Operations

Unit(s): 4.5 Class Hours: 54 Lecture, 81 Laboratory total.
Prerequisite: Pharmacy Technology 048, Pharmacy Technology 051, or Pharmacy Technology 052 and Pharmacy Technology 054B with a minimum grade of C. Typing proficiency minimum of $30 \mathrm{wpm} 95 \%$ accuracy. Typing proficiency minimum of $30 \mathrm{wpm} 95 \%$ accuracy. Hands-on training in customer service, inventory control, compounding, packaging, record-keeping, and drug distribution in the outpatient pharmacy setting. Includes prescription lab simulations and use of computers.

## Pharmacy Technology 056L Pharmacy Technology Skills Lab

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total. Corequisite: Pharmacy Technology 056.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Pharmacy Operations lab class. Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/No Pass Only. Open Entry/ Open Exit.

## Pharmacy Technology 057 Inpatient Pharmacy Services

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Pharmacy Technology 048, and Pharmacy Technology 051 or Pharmacy Technology 052, and Pharmacy Technology 054B with a minimum grades of C. (Typing proficiency of 30 WPM and 95\% accuracy.)
Technical aspects of drug distribution for the inpatient (hospital) pharmacy setting. Hands-on training in medication order processing, pharmacy patient profile maintenance, medication preparation (includes packaging), and inpatient drug distribution using manual and automated systems. Includes electronic and manual recordkeeping, pharmacy law, and CQI. Hands-on training in medication reconciliation in the emergency room setting. Develop and enhance communication and patient-interviewing skills through various communication methods.

Pharmacy Technology 057L Pharmacy Technology Skills Lab
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corequisite: Pharmacy Technology 057.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Inpatient Pharmacy Services lab class (Pharmacy Technology 057). Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills Lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy, in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Pharmacy Technology 060

Sterile Products
Unit(s): 4.5 Class Hours: 54 Lecture, 90 Laboratory total.
Prerequisite: Pharmacy Technology 048 and Pharmacy Technology 051 or Pharmacy Technology 052 and Pharmacy Technology 054B with a minimum grade of C. (Typing proficiency of 30 WPM and 95\% accuracy.)
Application of aseptic techniques and use of the laminar flow hood in the preparation of sterile products in accordance to USP 797. Emphasis on parenteral calculations, sterile dosage forms, and quality assurance procedures. Includes the pharmacology of antimicrobial and antineoplastic drugs.

## Pharmacy Technology 060L

## Pharmacy Technology Skills Lab

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corequisite: Pharmacy Technology 060.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Sterile Products lab class (Pharmacy Technology 060). Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills Lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/ No Pass Only. Open Entry/Open Exit.

## Pharmacy Technology 072A

## Pharmacy Technology Externship Outpatient

Unit(s): 0.5-1.5 Class Hours: 45-90 Laboratory total.
Prerequisite: Pharmacy Technology 056 and Communication Studies 097 or Communication Studies 101 or Communication Studies 101 H or Communication Studies 102 with a minimum grade of C. Background checks, health screenings, current TB clearance and drugs test clearance.
On-site training in the outpatient (retail) practice setting. Students must complete Pharmacy Technology 056 lab class to qualify for the outpatient rotation. Students must pass the trade-generic test prior to placement. Some sites require additional background, health screenings, and drugs tests. Completion of the outpatient rotation Pharmacy Technology 072A is required for the Basic Certificate. Completion of Pharmacy Technology 072A, Pharmacy Technology 072B, Pharmacy Technology 072C rotations (320 hours) is required for the advanced certificate and Associate Degree. At the end of the rotation, the instructor will use the attendance records and competency forms as input from preceptors to assess the student learning outcomes and to help determine final grades. Students can refer to the course overview to understand the details of final grade assignments. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Pharmacy Technology 072B

## Pharmacy Technology Externship Inpatient

Unit(s): 0.5-2.5 Class Hours: 40-135 Laboratory total.
Prerequisite: Pharmacy Technology 056 and Pharmacy Technology 057 and Communication Studies 097 or Communication Studies 101 or Communication Studies 101 H or Communication Studies 102 with a minimum grade of C. Background checks, health screenings, current TB clearance and drugs test clearance.
On-site training in the inpatient (hospital) practice setting. Students must complete the following lab courses prior to placement: Pharmacy Technology 057 and Pharmacy Technology 056. Students must pass the trade-generic test prior to placement. Some sites require additional background, health screenings, and drugs tests. Completion of Pharmacy Technology 072A, Pharmacy Technology 072B, Pharmacy Technology 072C rotations (320 hours) is required for the advanced certificate and Associate Degree. At the end of the rotation, the instructor will use the attendance records and competency forms as input from preceptors to assess the student learning outcomes and to help determine final grades. Students can refer to the course overview to understand the details of final grade assignments. Open Entry/Open Exit.

## Pharmacy Technology 072C <br> Pharmacy Technology Externship Sterile Products

Unit(s): 0.5-2.5 Class Hours: 40-135 Laboratory total.
Prerequisite: Pharmacy Technology 060 and Communication Studies 097 or Communication Studies 101 or Communication Studies 101 H or Communication Studies 102 with a minimum grade of C. Background checks, health screenings, current TB clearance and drugs test clearance.

On-site training in the home infusion or sterile products pharmacy practice setting. Students must complete the following lab course prior to placement: Pharmacy Technology 060. Students must pass the trade-generic test prior to placement. Some sites require additional background, health screenings, and drugs tests. Completion of Pharmacy Technology 072A, Pharmacy Technology 072B, Pharmacy Technology 072C rotations (320 hours) is required for the advanced certificate and Associate Degree. At the end of the rotation, the instructor will use the attendance records and competency forms as input from preceptors to assess the student learning outcomes and to help determine final grades. Students can refer to the course overview to understand the details of final grade assignments. Open Entry/Oper Exit.

## Pharmacy Technology 072L1

## Pharmacy Technology Skills Lab

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corequisite: Concurrent enrollment in Pharmacy Technology 056. Returning students who took Pharmacy Technology 056 can take Pharmacy Technology 072L-1 alone.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Outpatient Pharmacy Technology Externship rotation (Pharmacy Technology 072). Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.
Pharmacy Technology 072L2

## Pharmacy Technology Skills Lab

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corequisite: Pharmacy Technology 057L. Returning students who took Pharmacy Technology 057 can take Pharmacy Technology 072L-2 alone.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Inpatient Pharmacy Technology Externship rotation ( Pharmacy Technology 072). Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills Lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

Pharmacy Technology 072L3
Pharmacy Technology Skills Lab
Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corequisite: Pharmacy Technology 060. Returning students who took Pharmacy Technology 060 can take Pharmacy Technology 072L-3 alone.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Pharmacy Externship Sterile Products rotation (Pharmacy Technology 072). Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Pharmacy Technology 084L Pharmacy Technology Skills Lab

Unit(s): 0.5-1.0 Class Hours: 27-54 Laboratory total.
Corequisite: Concurrent enrollment in Pharmacy Technology 084,
Sterile Products Update. Returning students who took Pharmacy
Technology 060 or Pharmacy Technology 084 can take Pharmacy Technology 084L alone.
Supervised use of the Pharmacy Technology skills lab (a supplemental learning assistance course) to assist the students in developing competency in the technical skills required to successfully complete the Sterile Products Update class ( Pharmacy Technology 084). Additionally, this Skills Lab class allows students working in one setting of pharmacy to come back and practice skills in another setting. Skills lab class also allows students with significant time lapsed from program attendance to prepare for externship or job placements. Significant time lapsed is defined as 1 year by departmental policy in compliance with the American Society of Health-System Pharmacists' re-accreditation body. Lab hours verified by sign-in. One-half (0.5) unit is required for the Advanced Certificate and A.S. degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## PHILOSOPHY (PHIL)

## Philosophy 106 (C-ID PHIL 100) Introduction to Philosophy

Unit(s): 3.0 Class Hours: 54 Lecture total.
A survey of historical and contemporary ideas on how to live the good life. CSU/UC

Philosophy 106H (C-ID PHIL 100) Honors Introduction to Philosophy
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
An enriched approach designed for honors students. A survey of historical and contemporary ideas on how to live the good life. CSU/UC

## Philosophy 108 (C-ID PHIL 120) Ethics

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to key historical and modern theories of philosophical ethics and the application of these theories to ethical issues facing society today. Assists in clarifying our thinking about morality/ethics. Course increases awareness of values in personal and contemporary issues. CSU/UC

Philosophy 110 Critical Thinking
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C.
College-level critical thinking and writing. Promotes self-awareness, independent thinking, and improved academic expression. Examines philosophical methods of reasoning and composition, and the uses of informal logic and criticism in personal life, college, work, and democratic society. CSU/UC

## Philosophy 110H

## Honors Critical Thinking

Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: English 101 or English 101H with a minimum grade of C and a high school or college GPA of 3.0 or above.
An enriched approach designed for honors students in a seminar setting. College-level critical thinking and writing. Promotes selfawareness, independent thinking, and improved academic expression. Examines philosophical methods of reasoning and composition, and the uses of informal logic and criticism in personal life, college, work, and democratic society. CSU/UC

## Philosophy 111 (C-ID PHIL 110) Introductory Logic <br> Unit(s): 4.0 Class Hours: 72 Lecture total. <br> Beginning course in formal and applied logic. Covers cognitive language, formal argument, proof, basic propositional and predicate logic, and philosophy of logic. Emphasizes active student involvement and practical application to college life. CSU/UC

## Philosophy 112

World Religions
Unit(s): 3.0 Class Hours: 54 Lecture total.
A philosophical overview of the world's great religions. Includes historical origin and growth of each religion, major doctrines, and influence. Religions dealt with include Primitive, Hinduism, Jainism, Buddhism, Taoism, Confucianism, Judaism, Christianity and Islam. CSU/UC

## Philosophy 118

## History of Philosophy

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to philosophy from an historical perspective: getting acquainted with the thoughts of the world's great philosophers.
Provides a survey of the dominant philosophies of the ancient, medieval, and modern worlds. CSU/UC

## PHOTOGRAPHY (PHOT)

## Photography 009

## Photography Lab

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Concurrent enrollment in a photography course. Sign-in/out supervised laboratory. Work on assignments from other photography courses or on independent projects. Completion of new and more advanced assignments each semester. Accumulation of 24 hours earns 0.5 unit. Requires concurrent enrollment in a photography course. May be repeated. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Photography 150

History of Photography
Unit(s): 3.0 Class Hours: 54 Lecture total.
A survey of the history, aesthetics, and technical evolution of photography including an in-depth view of artistic styles and individual photographers' contributions from the 19th century to the present. CSU/UC

## Photography 180

Beginning Photography
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
This course provides students with an introduction to visual concepts, basic image capture, and camera functions with digital cameras.
Software basics for photographic imaging and digital printing. CSU/UC

## Photography 185A

## Landscape Photography

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Photography 180 with a minimum grade of C .
This course concentrates on producing images under available light conditions found in natural and man-made environments. Topics include creating awareness of light and its function along with learning techniques for exposing under many different lighting conditions. CSU

## Photography 185B

## Landscape Photography

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Photography 185A with a minimum grade of C.
Continued instruction in cityscape, seascape, and landscape
photography with special attention given to documentary, pictorial, and metaphorical styles. A DSLR camera required. CSU

## Photography 191

## Commercial Studio Practices

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Photography 180 with a minimum grade of C.
Instruction in specialized technical alternatives utilized in commercial studio photography. Emphasis will be on professional image-making with digital cameras, using scanning, digital printing, and commercial lighting techniques. CSU

## Photography 194

Digital Workflow
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Photography 180 with a minimum grade of $C$
This class will provide a foundation for capturing and processing RAW digital photo files with high end digital imaging hardware and software. Emphasis on creating organization of files for client needs. CSU

## Photography 196

## Commercial Photography

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Photography 180 with a minimum grade of C.
This course instructs the student with lighting and studio techniques as commonly used in professional photographic applications. The emphasis will be on light and the use of lighting equipment in both studio and location situations. CSU

## Photography 197

## Intermediate Commercial Photography

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Photography 196 with a minimum grade of $C$. Intermediate techniques in commercial photography using available and studio lighting. Further studies in the commercial subject areas of portrait/wedding, architecture, table top/product illustration, stock photography and photojournalism. CSU

## Photography 291

## Wedding and Quinceañera Photography

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Photography 180 with a minimum grade of $C$. Instruction in fundamental concepts, equipment demands, and photographic techniques used by contemporary wedding/Quinceañerc photographers. CSU

Photography 292
Portrait Photography
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Photography 180 with a minimum grade of $C$. In this course the student will learn portrait styles and techniques using both natural, and artificial lighting in the studio and on location. CSU

## Photography 294

Color Photographic Expression
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Photography 180 with a minimum grade of $C$.
Introduction to the theory and practice of color in Fine Art Photography. Printing color photographs as a fine art medium. Course includes lectures, interpretive (field) assignments, laboratory work, research of well-known photographers using color in fine art photography and critiques. Camera required. CSU

## PHYSICAL SCIENCE (PSC)

## Physical Science 115 <br> Concepts in Physical Sciences for Educators

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
An investigation of basic principles of physics and chemistry including matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The interdependence of chemistry and physics will be emphasized. Designed for non-science majors, concepts are introduced in lab through inquiry and further developed during discussion. Completion of Mathematics N48 is recommended. (Same as Chemistry 115). CSU/UC

## Physical Science 117

Physical Science Survey
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to the methods of science and concepts relating to mechanics, states of matter, waves, heat, electricity, light, atomic structure, and chemical reactions. May include topics from Earth and space science. Emphasis is on basic principles, relationships, and applications to modern civilization. This course is open to all majors. Concurrent enrollment in Physical Science 118 is highly recommended. CSU/UC
Physical Science 118
Physical Science Survey Laboratory
Unit(s): 1.0 Class Hours: 54 Laboratory total. Laboratory course to accompany Physical Science 117. Laboratory topics include: motion, forces, energy, thermodynamics, electricity, circuits, optics, and chemical reactions. CSU/UC

## PHYSICS (PHYS)

## Physics 109

## Survey of General Physics

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
The study of important phenomena in physics. Topics include mechanics, fluids, thermodynamics, sound, light, electricity, magnetism, and modern physics. Recommended for all students interested in a conceptual approach to physics and students planning on taking more advanced courses in physics. CSU/UC

## Physics 210 (C-ID PHYS 105) (C-ID PHYS 205)

## Principles of Physics I

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 180 or Mathematics 180 H with a minimum grade of $C$.
A calculus-based physics course designed for students majoring in the life sciences, pre-medicine, and related disciplines. Topics include classical mechanics, wave motion, and thermodynamics. CSU/UC

Physics 211 (C-ID PHYS 110)

## Principles of Physics II

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Physics 210 and Mathematics 180 or Mathematics 180 H with a minimum grade of $C$.
A calculus-based physics course designed for students majoring in the life sciences, pre-medicine, and related disciplines. Topics include: electricity and magnetism, light, optics, and modern physics. CSU/UC

Physics 217 (C-ID PHYS 205)

## Engineering Physics I

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 180 or Mathematics 180 H with a minimum grade of $C$.
Principles of classical mechanics including particle dynamics, forces, work, energy, momentum, rotational motion, equilibrium, harmonic motion, and gravity. This course is designed for students majoring in physical sciences and engineering. CSU/UC
Physics 227 (C-ID PHYS 210)

## Engineering Physics II

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Physics 217 and Mathematics 185 with a minimum grade of $C$.
Introduces the basic principles of electricity and magnetism. The main topics are electrostatics, circuits, magnetism, electro-magnetic induction, and Maxwell's equations. This course is designed for students majoring in physical sciences and engineering. CSU/UC

## Physics 237

## Engineering Physics III

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Physics 217 and Mathematics 185 with a minimum grade of C.
Introduces the basic principles of fluids, thermodynamics, sound, light, optics, and modern physics. This course is designed for students majoring in physical sciences and engineering. CSU/UC

## Physics 279 (C-ID PHYS 105) <br> College Physics I

Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 162 with a minimum grade of $C$.
A trigonometry-based physics course. Topics include: mechanics,
thermodynamics, fluids, oscillatory motion, and sound. CSU/UC

## Physics 289 (C-ID PHYS 110)

College Physics II
Unit(s): 4.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: Physics 279 and Mathematics 162 with a minimum grade of $C$.
A trigonometry-based physics course. Topics include: light, electricity, magnetism, and modern physics. CSU/UC

## POLITICAL SCIENCE (POLT)

## Political Science 101 (C-ID POLS 110) <br> American Government and Politics

Formerly: Political Science 101, Introduction to American Governments Unit(s): 3.0 Class Hours: 54 Lecture total.
Study of United States national government and California state and local governments. Satisfies graduation requirement for American institutions and state requirements for California state government. CSU/UC

Political Science 101H (C-ID POLS 110)
Honors American Government and Politics Governments
Formerly: Political Science 101H, Honors Introduction to American Governments
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above. A student-oriented exploration of the historical and contemporary principles of American government. Study groups and individual computer-based research focus on basic political concepts of American national and state governments. Satisfies graduation requirement for American Institutions and state requirements for California state government. CSU/UC

Political Science 200 (C-ID POLS 120) American Political Thought
Unit(s): 3.0 Class Hours: 54 Lecture total.
Examination of various theoretical approaches to politics within the American political context. Analysis of selected political theories and their application to American politics. CSU/UC
Political Science 200H (C-ID POLS 120) Honors American Political Thought
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Examination of various theoretical approaches to politics within the American political context. Analysis of selected political theories and their application to American politics. CSU/UC

Political Science 201 (C-ID POLS 130) Introduction to Comparative Politics
Unit(s): 3.0 Class Hours: 54 Lecture total.
A comparative analysis of different kinds of political systems, including their histories, political institutions, processes and policies, the environment in which they occur, and their consequences. CSU/UC

## Political Science 220 (C-ID POLS 140) International Politics

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions, interactions and processes as they relate to global issues. CSU/UC

Political Science 235
Identity Politics
Unit(s): 3.0 Class Hours: 54 Lecture total.
An inquiry into the history of racial/ethnic minority groups in American politics with an emphasis on political coalitions among different minority groups in contemporary politics. CSU/UC

## PSYCHOLOGY (PSYC)

## Psychology 100 (C-ID PSY 110)

Introduction to Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the major theories, methods, concepts, ethical issues, and findings in the major fields in psychology including (but not limited to): biological bases of behavior, perception, cognition and consciousness, learning, memory, emotion, motivation, development, personality, social psychology, psychological disorders and therapeutic approaches, and applied psychology. CSU/UC

## Psychology 100H (C-ID PSY 110)

Honors Introduction to Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Seminar-style, content enriched course for honors students exploring the major theories, methods, concepts, ethical issues, and findings in the major fields in psychology including (but not limited to): biological bases of behavior, perception, cognition and consciousness, learning, memory, emotion, motivation, development, personality, social psychology, psychological disorders and therapeutic approaches, and applied psychology. CSU/UC

## Psychology 140

Introduction to Psychology of Adulthood And Aging
Unit(s): 3.0 Class Hours: 54 Lecture total.
Examines psychological and related biological and social changes that occur in adulthood and old age and how these changes vary with ethnicity, gender and social class. Topics include longevity, health, successful aging, intimate and family relationships and mental disorders of adulthood. Designed to help students understand their own and others' aging and to familiarize them with issues in the field of gerontology. CSU/UC

## Psychology 157 (C-ID CDEV 100)

Introduction to Child Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Survey of human development from conception through adolescence. Covers major theories of development (cognition, perception, language, personality, social, etc.) and their application to parenting, teaching, and other interactions with children. (No credit if student has taken Child Development 107.). CSU/UC

## Psychology 170

Multicultural Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduces students to important issues related to cultural diversity
in the field of psychology. Major areas of psychology will be explored from a multicultural perspective, including research, mental health, social psychology, and identity development. Exploration of historically underrepresented populations in the U.S. will be emphasized. CSU/UC

## Psychology 180 (C-ID PSY 180) <br> Introduction to Lifespan Psychology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to human development from a psychological perspective. Explores human development from conception through death, including biological and environmental influences. Theories and research of physical, cognitive, personality, and social development are examined from classical and contemporary perspectives. Attentior will also be given to both normative and non-normative development. CSU/UC

## Psychology 200 (C-ID PSY 150)

## Introduction to Biological Psychology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Explores relationships between physiological structures of the body and human behavior. Focuses on the organization and function of the brain, spinal cord, peripheral nervous system, glands, sensory and perceptual systems. Relates physiological functioning to motivated behavior, addiction, and psychological disorders. CSU/UC
Psychology 210 (C-ID SOCI 125) (C-ID MATH 110)
Statistics for the Behavioral Sciences
Unit(s): 4.0 Class Hours: 72 Lecture total.
Prerequisite: Mathematics 083 or Mathematics 084 with a minimum grade of C; OR placement into Psychology 210 on the Mathematics Level 3 placement Exam and a course equivalent to Mathematics 083 or Mathematics 084.
Introduces psychology and behavioral science majors to descriptive and inferential statistical methods. Knowledge of these methods is essential to the understanding, interpretation, and performance of scientific research. Topics covered include probability theory, hypothesis testing, correlation, analysis of variance, the graphical representation of data, basic research design, and the use of computel software to perform statistical analyses. CSU/UC

Psychology 219 (C-ID PSY 200)

## Introduction to Research Methods in Psychology

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Mathematics 219 or Psychology 210 (may be taken concurrently) and Psychology 100 with a minimum grade of C .
Emphasizes methods of study in psychology, experimental design, analysis of variables contributing to experimental results, and data treatment. CSU/UC

## Psychology 230 (C-ID PSY 115)

Psychology and Effective Behavior
Unit(s): 3.0 Class Hours: 54 Lecture total.
Introduction to psychoanalytic, behavioristic, cognitive, humanistic and existential theories of personality as they relate to dealing effectively with the changing demands of everyday life. Covers personal growth, self-concept, stress and coping, personal goals and motivation, and interpersonal relationships in relation to culture, gender, ethnicity, historical cohort, and socio-economic status. Includes exercises for increasing self-awareness, identifying personals goals, and for building skills for effective living and well-being. CSU/UC
Psychology 240 (C-ID PSY 170)
Introduction to Social Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Psychology 100 or Sociology 100 with a minimum grade of $C$.
An exploration of the interlocking dynamics of psychology and sociology focusing on the impact of social groups on individuals and on other groups. Content includes self-development, interaction, attitudes, conformity, friendship, love, aggression, group dynamics. (Same as Sociology 240). CSU/UC

## Psychology 250

## Introduction to Abnormal Psychology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Psychology 100 or Psychoogy 100 H with a minimum grade of $C$.
Introduction to the commonly diagnosed psychological disorders. Includes psychophysiological disorders, anxiety, depression, substance abuse, sexual dysfunctions, schizophrenia, developmental, cognitive, and personality disorders. Emphasis is on identification, symptomatology, etiology, and methods of therapeutic intervention. CSU/UC

## READING (READ)

## Reading N50

Groundwork for Reading
Unit(s): 3.0 Class Hours: 54 Lecture total.
A reading course for students needing to build vocabulary and enhance reading comprehension. Recommended for students in English N50 or English For Multilingual Students 055. Not applicable to associate degree. Grade: Pass/No Pass Only.

## Reading N80

Fundamentals of Reading
Unit(s): 3.0 Class Hours: 54 Lecture total.
Instruction in basic reading skills including techniques for improving vocabulary and spelling, word attack skills, and reading comprehension. Recommended for students in English N60 or English Multilingual Students 055 or English Multilingual Students 107. Not applicable to associate degree. Grade: Pass/No Pass Only.

Reading 096

## Individualized Reading Skills

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Individualized instruction in vocabulary, comprehension, critical evaluation, and reading rate. Grade: Pass/No Pass Only. Open Entry/ Open Exit.
Reading 098
Topics in Reading
Unit(s): 1.0-3.0 Class Hours: 18-54 Lecture total.
Specialized courses on topics related to current needs of students. Not offered every semester. Grade: Pass/No Pass Only.

## Reading 101

Introduction to Academic Reading
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Successful completion of Reading N80 (with a grade of C or better) or appropriate score on college placement test is recommended.
Instruction toward students' mastery of higher-level vocabulary, reading comprehension at the level of proficiency, critical evaluation of college-level text and improvement of reading rate. CSU

## Reading 101A

## Modules in Academic Reading - Vocabulary

Unit(s): 1.0 Class Hours: 18 Lecture total.
Intensive instruction in college-level vocabulary, including dictionary skills, word analysis, etymology, and context clues. Material may be discipline-specific, such as vocabulary in the humanities, social sciences, CTE, and STEM. CSU

## Reading 101B

Modules in Academic Reading - Comprehension
Unit(s): 1.0 Class Hours: 18 Lecture total.
Intensive instruction in college-level reading comprehension. Includes identification of the main idea and details that support it. Study reading strategies will include annotations, summaries, outlines, mapping. Material may be discipline-specific, such as text from the humanities, social sciences, CTE, and STEM. CSU

## Reading 101C

Modules in Academic Reading - Analysis and Critical Evaluation
Unit(s): 1.0 Class Hours: 18 Lecture total.
Intensive instruction in advanced reading comprehension and critical evaluation of college-level text. Material may be discipline-specific, such as text from the humanities, social sciences, CTE, and STEM. CSU
Reading 101X
Acceleration to Academic Reading
Unit(s): 3.0 Class Hours: 54 Lecture total.
Accelerated instruction in basic reading skills culminating in students' mastery of higher-level vocabulary, reading comprehension at the level of proficiency and critical evaluation of college-level text. CSU

## Reading 102

## Academic Reading

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Successful completion of Reading 101 (with a grade of C or better) or appropriate score on college placement test is recommended.
Introduces a repertoire of reading strategies aimed at preparing students for comprehension of complex college-level reading material. Advanced reading strategies provide the foundation for the development of critical reading and the recognition of patterns of academic thought. Reading strategies for specific disciplines, including the social sciences, business, humanities and the arts, mathematics and the natural sciences are presented. CSU

## Reading 150 <br> Critical Reading

Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: Completion of or concurrent enrollment in English 101 or English 101H is recommended.
This course addresses the relationship between critical reading and critical thinking, including emphasis on the development of critical reading and thinking skills that facilitate the interpretation, analysis, criticism, and advocacy of ideas encountered in academic reading. CSU/UC

## Reading 198

## Topics

Unit(s): 1.0-3.0 Class Hours: 18-54 Lecture total.
Specialized courses on topics related to current needs of students. Not offered every semester. CSU

## SOCIOLOGY (SOC)

## Sociology 100 (C-ID SOCI 110) Introduction to Sociology

Unit(s): 3.0 Class Hours: 54 Lecture total.
The scientific study of human societies and behavior focusing on the process of social interaction, patterns of social inequality, and the influence of social institutions on individuals as members of social groups. Special emphasis provided to explain factors promoting social stability and social change. CSU/UC

## Sociology 100H (C-ID SOCI 110)

## Honors Introduction to Sociology

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above. A seminar-style, content-enriched course to provide a critical and extensive exploration of the sociological perspective, methods, and theories of social interaction, stability and change. Focuses on the importance of sociology for understanding individuals in a social context and provides a comprehensive understanding of and scientific way of thinking about society. CSU/UC

## Sociology 112 (C-ID SOCI 130)

Relationships, Marriages, and Family Dynamics
Unit(s): 3.0 Class Hours: 54 Lecture total.
In-depth examination of the process of developing intimate relationships leading to committed partnerships and marriages with emphasis on effective communication techniques, understanding relationship dynamics, parenting, diverse family systems and overcoming family stressors at each life stage. CSU/UC

## Sociology 140 (C-ID SOCI 115) Social Problems

Unit(s): 3.0 Class Hours: 54 Lecture total.
An extensive survey of contemporary social trends and problems through sociological analysis concentrating on their causes, complexities, consequences, and possible solutions. Special emphasis will be placed on the problems in the U.S., with consideration of the global perspective. CSU/UC

## Sociology 140H (C-ID SOCI 115)

## Honors Analysis of Social Trends and Problems

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
A seminar-style, in-depth sociological analysis and critique of U.S. social trends and problems with an emphasis on contemporary and historical social policy with additional consideration of global perspectives. CSU/UC
Sociology 240 (C-ID PSY 170) Introduction to Social Psychology
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Sociology 100 or Psychology 100 with a minimum grade of $C$.
An exploration of the interlocking dynamics of psychology and sociology focusing on the impact of social groups on individual and on other groups. Content includes self-development, interaction, attitudes conformity, friendship, love, aggression, group dynamics. CSU/UC

## Sociology 401

The Sociology of Health, Illness, and Healing
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Limitation on enrollment: Student must be admitted to the Occupational Studies program Sociology 100 or Sociology 100H with a minimum grade of C .
This course analyzes the social contexts of health, illness, and organized medical care. It examines empirical research and theory of the changing concepts of health, illness and medical practice in their socio-historical contexts. Topics will include: social epidemiology, the biomedical and social construction of health/illness, the experience of illness, the historical transformation of the health professions and the health work force, disparities in health care, medical technology, globa comparisons of health care and health care reform.

## SPANISH (SPAN)

## Spanish N51 <br> Spanish for Public Personnel

Unit(s): 3.0 Class Hours: 54 Lecture total.
Designed for those needing basic Spanish conversation and vocabulary in a specific field of work, such as law enforcement, fire safety, health, and education. Includes clear and concise communication for emergency situations. Not applicable to associate degree.

## Spanish 101 (C-ID SPAN 100) Elementary Spanish I

Unit(s): 5.0 Class Hours: 90 Lecture total.
Practice and integration of pronunciation, grammar, vocabulary, common idioms, listening, speaking, reading, and writing techniques for the expression of ideas orally and in writing. Introduction to Hispanic culture. Designated sections focus on skills for Spanish speakers. Spanish 101 is equivalent to two years of high school Spanish. CSU/UC

Spanish 101H (C-ID SPAN 100)

## Honors Elementary Spanish I

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
Enhanced and intensive practice and integration of pronunciation, grammar, vocabulary, common idioms, listening, speaking, reading, and writing techniques for the expression of ideas orally and in writing. Enriched introduction of Hispanic culture. Note: Some sections are designated for Spanish speakers. Spanish 101 H is equivalent to two years of high school Spanish. CSU/UC

## Spanish 102 (C-ID SPAN 110)

## Elementary Spanish II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Spanish 101 or Spanish 101H or two years of high school Spanish with a minimum grade of C. All Cal State and UC universities Spanish programs require a minimum grade of C in Spanish 101 or two years in high school with a passing grade.
A college-level Spanish class focusing on further training in language skills providing avenues for the expression of ideas orally and in writing. Additional study of Hispanic culture. Designated sections focus on skills for Spanish speakers. Spanish 102 is equivalent to the third year of high school Spanish. CSU/UC

## Spanish 102H (C-ID SPAN 110)

Honors Elementary Spanish II
Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Spanish 101 or Spanish 101H or two years of high school Spanish with a minimum grade of C , and a high school or college GPA of 3.0 or above. All Cal State and UC universities have the same prerequisites for Spanish 102H.
Further enhanced and intensive training in language skills for the expression of ideas orally and in writing. Additional enriched study of Hispanic culture. Note: Some sections are designated for Spanish speakers. Spanish 102 H is equivalent to the third year of high school Spanish. CSU/UC

## Spanish 195A

Advanced Conversational Spanish
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Spanish 102 or Spanish 102 H with a minimum grade of C .
Further development of conversational skills. Review of language structures as well as reinforcement of new vocabulary and idioms through discussions of reading selections dealing with historical and current events to deepen appreciation of Hispanic cultures. CSU/UC

## Spanish 195B

## Advanced Conversational Spanish

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Spanish 195A with a minimum grade of C.
Continuation of development of conversational skills. Provides avenues for the expression of ideas introduced in literary and current event readings through discussions and class presentations to deepen appreciation of Hispanic cultures. CSU/UC

## Spanish 198

Topics in Spanish
Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
A specialized course on topics related to current needs of students. CSU
Spanish 201 (C-ID SPAN 200)

## Intermediate Spanish I

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Spanish 102 or Spanish 102 H or three years of high school Spanish with a grade of C. These Prerequisites are also required in Cal State and UC Spanish universities.
A college level Spanish class focusing on expansive review of usage and grammar, discussions of interpretive readings, conversation, and composition. CSU/UC

Spanish 201H (C-ID SPAN 200)
Honors Intermediate Spanish I
Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Spanish 102 or Spanish 102 H with a minimum grade of $C$ and a high school or college GPA of 3.0 or above. All four year public universities, Cal State and University of California Spanish Programs require the same prerequisites for Intermediate Spanish level course. An enriched exposure of Hispanic history, culture, and literature in a seminar setting. In-depth analysis of grammatical structures. Further use of argumentative oral strategies. Enhanced development of conversation and composition. Independent research by students to use/evaluate library and electronic information sources. CSU/UC

## Spanish 202 (C-ID SPAN 210)

## Intermediate Spanish II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Spanish 201 or Spanish 201H or four years of high school Spanish with a minimum grade of $C$.
A college-level Spanish class focusing on expansive review of usage and grammar; discussions in Spanish of interpretive reading materials; conversation and composition. CSU/UC

## Spanish 202H (C-ID SPAN 210)

Honors Intermediate Spanish II
Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Spanish 201 or Spanish 201 H with a minimum grade of C and a high school or college GPA of 3.0 or above or four years of high school spanish with a passing grade.
An enriched exposure of Hispanic history, culture, and literature in a seminar setting. In-depth analysis of grammatical structures. Enhanced development of conversation and composition. Further use of argumentative oral strategies. Independent research by students to use/evaluate library and electronic information sources. CSU/UC

## Spanish 212 <br> College Business Spanish

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Spanish 202 or Spanish 202H with a minimum grade of C or three years of high school Spanish with a minimum grade of $C$.
A course designed to give intermediate level students a solid foundation in business vocabulary, basic business and cultural concepts, and a situational practice necessary to be successful in today's Spanish-speaking business world. The course is designed for students majoring in Spanish, International Studies, and International Business. CSU/UC

## Spanish 213

## College Spanish Composition

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Spanish 201 with a minimum grade of C or three years of high school Spanish with a minimum grade of C; OR concurrent enrollment in Spanish 201.
Writing of composition through discussions and interpretive readings. CSU/UC

## SPECIAL SERVICES (SPEC)

## Special Services N44

## Reading Development for the Deaf

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Prerequisite: Student must be eligible for DSPS services from Deaf and Hard of Hearing Program and Services.
Reading comprehension development for the deaf or hard of hearing students. Includes assessment of current skills and the development of an individualized program of study with the goal upon completion of enrolling in the college's reading course sequence. Not applicable to associate degree. Open Entry/Open Exit.

## Special Services N50A

## English for the Deaf and Hard of Hearing

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Language function and composition for the deaf or hard of hearing student. Includes assessment of current skills and development of an individualized program of study with the goal of enrolling in the college English course sequence. Student must submit proof of audiologically verifiable hearing loss. Not applicable to associate degree. Open Entry/ Open Exit.

## Special Services N50B

## English for the Deaf and Hard of Hearing

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
Mechanics of the English language and composition for the deaf or hard of hearing students as they prepare to place into college level English courses. Includes continuing improvement of English comprehension skills and grammar in increasingly complex sentence structures, writing skills, vocabulary development and disability related issues. Student must submit proof of audiologically verifiable hearing loss. Not applicable to associate degree. Open Entry/Open Exit.

## Special Services N84

## Employment Preparation

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
A comprehensive course designed to prepare students for the transition from school to employment. Includes identifying appropriate job/career goals, assessing personal strengths, developing skills to obtain employment such as resume writing and interviewing, and utilizing contemporary technologies for securing meaningful employment, retention and advancement. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Special Services N91

## Computer Assisted Cognitive Learning

Unit(s): 0.5-1.5 Class Hours: 27-81 Laboratory total.
Prerequisite: Verified brain impairment.
Fundamentals of Cognitive Retraining is designed for individuals who have sustained an acquired brain impairment and who are experiencing cognitive difficulties. Instruction focuses on improving attention and concentration, perceptual processing skills, and memory. Arranged schedule. May be repeated. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Special Services N92

## Assistive Computer Technology Instruction

Unit(s): 0.5-2.0 Class Hours: 18 Lecture, 27 Laboratory total.
This course is intended for students with disabilities. Emphasis is on mastering appropriate assistive computer technologies and to provide instruction in Windows, Microsoft Office and Internet/E-Mail access. Not applicable to associate degree. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## Special Services N94

## Intermediate Cognitive Retraining

Unit(s): 0.5-1.5 Class Hours: 27-81 Laboratory total.
Prerequisite: Verified brain impairment.
Intermediate Cognitive Retraining is designed for students who have sustained and acquired brain impairment. Instruction focuses on the use of compensatory memory strategies, utilizing critical thinking/ problem solving skills and improving organizational skills. Arranged schedule. May be repeated. Grade: Pass/No Pass Only.

## Special Services N95

## Cognitive Retraining - Academic Transition

Unit(s): 0.5-1.5 Class Hours: 27-81 Laboratory total.
Prerequisite: Verified brain impairment
Cognitive Retraining - Academic Transition is designed for students who have sustained an acquired brain impairment. Instruction focuses on utilizing and applying cognitive skills in the areas of reading, written language, and study skills strategies to achieve success in an academic program. Arranged schedule. May be repeated. Grade: Pass,' No Pass Only.

## SPEECH-LANGUAGE PATHOLOGY ASSISTANT (SLPA)

## Speech-Language Pathology Assistant 118

 Introduction to Speech-Language Pathology Assisting Unit(s): 1.0 Class Hours: 18 Lecture total.Overview of the field of speech-language pathology, professional standards, legal and ethical issues, and scope of responsibilities of the speech-language pathologist and the speech-language pathology assistant in health care and educational settings. CSU

## Speech-Language Pathology Assistant 119

Speech-Language and Hearing Development Across the Life Span
Unit(s): 3.0 Class Hours: 54 Lecture total.
Study of normal speech, hearing, and language development across the life span. Topics will include differentiation of normal from disordered communication and communication development in bilingual populations. CSU/UC

## Speech-Language Pathology Assistant 120

Speech-Language Pathology Clinical Management and Procedures
Unit(s): 2.0 Class Hours: 36 Lecture total.
Prerequisite: Speech Language Pathology Assistant 118 with a minimum grade of $C$.
Organizational and functional skills required in the speech-language pathology workplace. Includes interdisciplinary and supervisory relationships, client and public interaction, safety issues, technical writing, data collection, record keeping, and computer applications. CSU

## Speech-Language Pathology Assistant 150 Observation of Speech-Language Pathology Clinical Practices

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: Speech-Language Pathology Assistant 118 with a minimum grade of $C$ and concurrent enrollment in Speech-Language Pathology Assistant 160.
Beginning clinical observation of practices and procedures required in speech-language pathology. Observation sites will be in both educational and medical settings. CSU

## Speech-Language Pathology Assistant 160

 Introduction to Communicative Disorders And Treatment Unit(s): 3.0 Class Hours: 54 Lecture total.An overview of communication disorders, including classification, assessment and remediation of speech, language, swallowing, and hearing disorders in children and adults. Role of speech-language pathologist and audiologist in educational and medical settings. CSU/ UC

## Speech-Language Pathology Assistant 180 <br> Speech-Language Pathology Screening Processes and Intervention Procedures

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Speech-Language Pathology Assistant 120 and SpeechLanguage Pathology Assistant 150 and Speech-Language Pathology Assistant 160 with a minimum grade of C .
Screening tools, processes, and intervention procedures used for clients with communication disorders. Administration of screening tests and completion of protocols. Equipment utilized in therapeutic treatment. CSU

## Speech-Language Pathology Assistant 190

Speech-Language Pathology Assistant Clinical Fieldwork I
Unit(s): 2.0 Class Hours: 4.50 Lecture, 108 Laboratory total.
Prerequisite: Speech-Language Pathology Assistant 120 and
Speech-Language Pathology Assistant 150 and Speech-Language Pathology Assistant 160 with a minimum grade of C and application to Department Coordinator required semester prior to enrollment; current negative TB clearance; current CPR and First Aid Certification; fingerprinting and background check may be required.
Corequisite: Concurrent enrollment in Speech-Language Pathology Assistant 180.
Beginning application of supervised clinical practice procedures as required of a speech-language pathology assistant in an educational or clinical setting. CSU

## Speech-Language Pathology Assistant 200

## Adult and Geriatric Communication Disorders

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Speech-Language Pathology Assistant 160 with a minimum grade of $C$.
Speech, language, and hearing disorders experienced by the adult and geriatric populations. Assessment tools and treatment strategies used to treat acquired disorders such as adult aphasia, dysarthria, and hearing loss. CSU

## Speech-Language Pathology Assistant 250

Speech-Language Pathology Assistant Clinical Fieldwork II
Unit(s): 2.0 Class Hours: 4.50 Lecture, 108 Laboratory total.
Prerequisite: Speech-Language Pathology Assistant 180 and SpeechLanguage Pathology Assistant 190 with a minimum grade of $C$ and application to Department Coordinator required semester prior to enrollment; current negative TB clearance; current CPR and First Aid Certification; fingerprinting and background check may be required. Advanced application of clinical practice procedures in a clinical or educational setting by the speech-language pathology assistant under the supervision of a speech-language pathologist. CSU

## STUDY SKILLS (STDY)

## Study Skills 101 <br> College Study Skills

Unit(s): 1.0 Class Hours: 18 Lecture total.
A course designed to teach effective college study skills while also helping students create positive academic and lifelong learning habits. Topics include time management, exam preparation, lecture notetaking, memorization, test taking strategies, stress management, and exam preparation. CSU

## Study Skills 109

College Learning Skills
Unit(s): 3.0 Class Hours: 54 Lecture total.
This course provides effective success strategies to enhance student self-development, academic, and lifelong learning skills for the college student. The techniques include values, goal-setting, dealing with money, stress management, diversity, motivation, health, and time-management. Students learn personal growth methods and develop strategies to effectively deal with issues to ensure personal, educational, and career success. CSU

## TV/VIDEO COMMUNICATIONS (TELV)

## TV/Video Communications 009A <br> TV/Video Communications Laboratory

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Corequisite: Concurrent enrollment in TV/Video Communications 110 or TV/Video Communications 112 or TV/Video Communications 115A or TV/Video Communications 115B or TV/Video Communications 130 or TV/Video Communications 150 or TV/Video Communications 152.
Sign-in/out supervised work on beginning television projects/ production assigned in a 100 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 009B

TV/Video Communications Laboratory
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: TV/Video Communications 009A with a minimum grade of $P$.
Corequisite: Concurrent enrollment in TV/Video Communications 110
or TV/Video Communications 112 or TV/Video Communications 115A or TV/Video Communications 115B or TV/Video Communications 130 or TV/Video Communications 150 or TV/Video Communications 152.
Sign-in/out supervised work on intermediate television projects/ production assigned in a 100 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 009C <br> TV/Video Communications Laboratory

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: TV/Video Communications 009B with a minimum grade of $P$.
Corequisite: Concurrent enrollment in TV/Video Communications 110
or TV/Video Communications 112 or TV/Video Communications 115A or TV/Video Communications 115B or TV/Video Communications 130 or TV/Video Communications 150 or TV/Video Communications 152.
Sign-in/out supervised work on advanced television projects/ production assigned in a 100 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 010A TV/Video Communications Advanced Laboratory I

Unit(s): 0.5 Class Hours: 27 Laboratory total.
Corequisite: Concurrent enrollment in TV/Video Communications 215 or TV/Video Communications 230A or TV/Video Communications 230B or TV/Video Communications 230C or TV/Video
Communications 230D or TV/Video Communications 260.
Sign-in/out supervised work on beginning television projects/ production assigned in a 200 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 010B

 TV/Video Communications Advanced Laboratory II Unit(s): 0.5 Class Hours: 27 Laboratory total.Prerequisite: TV/Video Communications 010A with a minimum grade of $P$
Corequisite: Concurrent enrollment in TV/Video Communications 215 or TV/Video Communications 230A or TV/Video Communications 230B or TV/Video Communications 230C or TV/Video Communications 230D or TV/Video Communications 260.
Sign-in/out supervised work on advanced beginning television projects/production assigned in a 200 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 010C

TV/Video Communications Advanced Laboratory III
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: TV/Video Communications 010 B with a minimum grade of $P$
Corequisite: Concurrent enrollment in TV/Video Communications 215 or TV/Video Communications 230A or TV/Video Communications 230B or TV/Video Communications 230C or TV/Video Communications 230D or TV/Video Communications 260.
Sign-in/out supervised work on intermediate television projects/ production assigned in a 200 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 010D

TV/Video Communications Advanced Laboratory IV
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Prerequisite: TV/Video Communications 010 C with a minimum grade of $P$
Corequisite: Concurrent enrollment in TV/Video Communications 215 or TV/Video Communications 230A or TV/Video Communications 230B or TV/Video Communications 230C or TV/Video Communications 230D or TV/Video Communications 260.
Sign-in/out supervised work on intermediate television projects/ production assigned in a 200 level TV/Video Communications class. Accumulation of 24 hours earns 0.5 unit. Grade: Pass/No Pass Only. Open Entry/Open Exit.

## TV/Video Communications 100

Introduction to Electronic Media: TV, Radio, Film, and the Internet
Unit(s): 3.0 Class Hours: 54 Lecture total.
Survey of historical development, impact, and business practices of TV, radio, film, and the Internet. Emphasizes career opportunities and basic studio operations. CSU
TV/Video Communications 101

## TV and Society: A Visual History

Unit(s): 3.0 Class Hours: 54 Lecture total.
Evolution and impact of TV programming as business and art form in American society. Development of a visual literacy and appreciation of television's various formats (sitcom, Westerns, soaps, dramas, miniseries) through, lecture, video viewings, and guest speakers. CSU
TV/Video Communications 103
History of Film to 1945
Unit(s): 3.0 Class Hours: 54 Lecture total.
A survey course exploring film as an art form and developing appreciation of historical, artistic, and technical advances from 1890s to 1945. CSU/UC

## TV/Video Communications 104

History of Film From 1945 to Present
Unit(s): 3.0 Class Hours: 54 Lecture total.
A lecture/visual aids course exploring film as an art form and developing appreciation of historical, artistic and technical advances. CSU/UC

TV/Video Communications 110 Introduction to Television Production
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Introduction to production of television programs and operation of studio and field equipment. Includes overview of production theory, terminology and procedures, as well as hands-on training in use of cameras, audio, lighting, and control room apparatus. CSU/UC

## TV/Video Communications 112

Introduction to Video Editing and Postproduction
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Fundamental approaches and techniques utilized in single-camera production for television, film, web and multi-media. Hands-on traininc| in operation of portable digital video and audio production equipment, as well as lighting. Prior or concurrent enrollment in Television/Video Communications 110 and Television/Video Communications 112 recommended. CSU
TV/Video Communications 115A (C-ID FTVE 130) Single-Camera Production and Editing
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Fundamental approaches and techniques utilized in single-camera production for television, film, web and multi-media. Hands-on training in operation of portable digital video and audio production equipment, as well as lighting. CSU

## TV/Video Communications 115B

Advanced Single-Camera Production and Editing
Unit(s): 3.0 Class Hours: 54 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 115A with a minimum grade of $C$.
Continued development of knowledge and skills in single-camera production technology and practices. Emphasis on professional production standards and technical advancements in digital and High Definition TV. Individual assignments vary in subsequent semesters.
Prior or concurrent enrollment in Television/Video Communications
110 and Television/Video Communications 112 recommended. CSU
TV/Video Communications 120
Beginning Screenwriting for TV, Film, The Web, Corporate Video and Digital Media
Unit(s): 3.0 Class Hours: 54 Lecture total.
Recommended Preparation: English 101 or English 101H with a minimum grade of $C$.
Designed to acquaint students with fundamentals approaches to writing scripts for television, motion pictures, the web, corporate videos and digital media. Emphasis on the development of outlines, treatments, and scripts for short format programs or segments of feature length shows. CSU

TV/Video Communications 121
Intermediate Scriptwriting for TV, Film, the Web, Corporate Video and Digital Media
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: TV/Video Communications 120 with a minimum grade of C.

Explores professional requirements for scriptwriters and their relationship to the production, direction and development of scripts for TV, film, the Web, corporate videos and digital media. Strengthens fundamental writing skills. CSU

TV/Video Communications 123
Advanced Scriptwriting for TV, Film, The Web, Corporate Video and Digital Media
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: TV/Video Communications 121 with a minimum grade of C.

Explores professional requirements for writing screenplays for TV,
film, and the web plus scripts for corporate videos and digital media.
Advanced individual projects enhance student writing skills and body of work. CSU
TV/Video Communications 125
Cooperative Work Experience-Occupational Effects
Unit(s): 1.0-6.0 Class Hours: 60-450 Laboratory total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the students' major so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. CSU

## TV/Video Communications 130

## Principles of Broadcast News

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Introduction to broadcast journalism for TV and digital platforms with emphasis on writing, editing, and technical production of media newscasts. Emphasizes both field and studio reporting. Prior or concurrent enrollment in Television/Video Communications 110 recommended. CSU

## TV/Video Communications 131

## Beginning Broadcast News Workshop

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Group Instruction for beginners in news writing, reporting, interviewing, and on-camera techniques for appearing on a studentproduced cable newscast. Basic training also will include in-studio production techniques. CSU
TV/Video Communications 132
Intermediate Broadcast News Workshop
Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 130 or TV/Video
Communications 131 with a minimum grade of $C$.
Group instruction for intermediate level students in the writing and preparation of news, entertainment, and sports segments for a weekly TV newscast. Participation in studio production work and on-camera appearance will also be emphasized. CSU

## TV/Video Communications 133

## Advanced Broadcast News Workshop

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 132 with a minimum grade of C. Group instruction for advanced level students in writing and preparation of news, entertainment, and sports segments for a weekly TV newscast. Emphasis placed on advanced reporting, camera, and editing techniques as well as producing and directing the news show. CSU

## TV/Video Communications 140

Cinematography
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Concepts and practice of cinema-graphic, filming, and lighting techniques as applied to single-camera film and video production. CSU/UC

## TV/Video Communications 142

## Acting for the Camera

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Techniques and disciplines of acting as applied to film and television production. Opportunity to practice and perform with emphasis on developing talents and skills required in acting for the screen. (Same as Theatre Arts 113). CSU/UC
TV/Video Communications 150
Producing and Directing for Television
Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
Recommended Preparation: TV/Video Communications 112 and TV/ Video Communications 115A with a minimum grade of C, prior or concurrent enrollment.
Emphasizes production planning and preparation, aesthetics, budgeting, and working with a production team. Practical experience in producing and directing studio and remote productions. CSU/UC
TV/Video Communications 152

## Beginning Audio Production

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total. Introduction to the theory and practice of audio production for radio, stage, television, film and digital recording applications. Students will learn the fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Students gain hands on experience recording, editing, mixing and mastering audio. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software. (Same as Music 152). CSU/UC

## TV/Video Communications 190

 Introduction to ProtoolsUnit(s): 1.5 Class Hours: 18 Lecture, 27 Laboratory total.
Fundamental features and applications of ProTools audio software used in post-production for television, film and music. Orientation to functions, user interface and actual operation of digital audio workstation. Techniques and aesthetics associated with creation of well-mixed soundtracks are addressed. Hands-on practice with digital recording and editing of soundtracks. (Same as Music 190). CSU
TV/Video Communications 193
Motion Graphics with Adobe After Effects
Unit(s): 3.0 Class Hours: 36 Lecture, 72 Laboratory total.
Recommended Preparation: Art 195 and/or TV/Video Communications 112 with a minimum grade of $C$.
This graphics animation course covers the development of original motion graphics. Video editing skills are refined within the animation software to create animated clips for use in multiple media applications. Some experience in non-linear digital video editing is recommended, as well as some graphic design experience. (Same as Same as Art 193). CSU/UC

## TV/Video Communications 215

## Advanced Single-Camera/Digital Cinema Production

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation: Completion of or concurrent enrollment in TV/Video Communications 112 and TV/Video Communications 115A.
Advanced single-camera digital cinematography production and post-production technology, workflow and aesthetics. Emphasis upon industry standards and approaches for television and cinema production with professional High Definition and Ultra High Definition/4K video cameras. Includes HD, DSLR and other largesensor digital cinema cameras, such as RED. CSU

## TV/Video Communications 230A

## Broadcast News Production

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 130 with a minimum grade of C.

Recommended preparation: TV/Video Communications 110 and TV/Video Communications 112 and TV/Video Communications 115A. Emphasizes actual live production of a weekly on-air cable newscast using latest newsgathering methodology and equipment. Prior or concurrent enrollment in Television/Video Communications 110, Television/Video Communications 112 and Television/Video Communications 115A recommended. CSU

## TV/Video Communications 230B

## Broadcast News Production

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 230A with a minimum grade of $C$.
Recommended preparation: TV/Video Communications 110 and TV/ Video Communications 112 and TV/Video Communications 115A. Emphasizes actual live production of a weekly on-air cable newscast using latest newsgathering methodology and equipment. More advanced assignments than Television/Video Communications 230A. Prior or concurrent enrollment in Television/Video Communications 110, Television/Video Communications 112 and Television/Video Communications 115A recommended. CSU

## TV/Video Communications 230C

## Broadcast News Production

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 230B with a minimum grade of $C$.
Recommended preparation: TV/Video Communications 110 and TV/ Video Communications 112 and TV/Video Communications 115A.
Emphasizes actual live production of a weekly on-air cable newscast using latest newsgathering methodology and equipment. More advanced assignments than Television/Video Communications 230B. Prior or concurrent enrollment in Television/Video Communications 110, Television/Video Communications 112 and Television/Video Communications 115A recommended. CSU

TV/Video Communications 230D

## Broadcast News Production

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 230C with a minimum grade of C.
Recommended preparation: TV/Video Communications 110 and TV/ Video Communications 112 and TV/Video Communications 115A. Emphasizes actual live production of a weekly on-air cable newscast using latest newsgathering methodology and equipment. More advanced assignments than Television/Video Communications 230C. Prior or concurrent enrollment in Television/Video Communications 110, Television/Video Communications 112 and Television/Video Communications 115A recommended. CSU

## TV/Video Communications 240

## Agency Film Production

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: TV/Video Communications 115A and TV/Video Communications 140 with a minimum grade of C.
Recommended Preparation: TV/Video Communications 112 with a minimum grade of $C$.
This is a capstone course, where students will build upon skills and concepts developed in previous camera, editing and cinematography courses in order to learn how to produce and direct advertising agency productions. CSU

## TV/Video Communications 255

## Motion Picture Technical Production

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Prerequisite: TV/Video Communications 115A with a minimum grade of C .
Recommended Preparation: TV/Video Communications 112 and TV/ Video Communications 140 with a minimum grade of C.
This course provides hands-on, practical experience in technical production, culminating in a fully produced film screened to the public. The final movie presentation becomes the basis for creating a production reel. CSU/UC

## TV/Video Communications 260

## Lighting Fundamentals

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Theory and practices of lighting including control systems and instruments as well as the techniques for proper installation, operation, maintenance, and safety. (Same as Theatre Arts 133). CSU

## TV/Video Communications 298

## TV/Video Communications Practicum/Internship

Unit(s): 3.0 Class Hours: 9 Lecture, 135 Laboratory total.
Supervised field work in broadcast writing, announcing, journalism, editing or production at professional sites. Skills assessed before placement to match abilities with employer needs. Concurrent enrollment or completion of one TV/Video Communications production class recommended. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## THEATRE ARTS (THEA)

## Theatre Arts 100 (C-ID THTR 111) Introduction to Theatre

## Unit(s): 3.0 Class Hours: 54 Lecture total.

An introduction to the art and concepts of theatre through a study of modern and historical theories of dramatic structure, playwriting, directing, design, and acting. Attendance at live theatre required. CSU/ UC

## Theatre Arts 105 (C-ID THTR 113) Theatre History 1

## Unit(s): 3.0 Class Hours: 54 Lecture total.

The study of the history of theatre from the origins of theatre through the 17th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. CSU/UC

## Theatre Arts 110 (C-ID THTR 151) Acting Fundamentals

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
A study of acting involving the development of acting techniques, styles, and disciplines. Provides theory and practical experience with varied characterizations. Emphasizes individual growth and acquired skills necessary to the acting craft. A combination of Theatre Arts 110, Theatre Arts 111, and Theatre Arts 113 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 111 (C-ID THTR 152) Intermediate Acting

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
Prerequisite: Theatre Arts 110 with a minimum grade of $C$.
Further study in the art of acting for the stage, investigating in-depth character study, role portrayal, special problems, and personal technique. Acting skills developed through use of exercises, monologues, and scenes from contemporary theatre. A combination of Theatre Arts 110, Theatre Arts 111, and Theatre Arts 113 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 113

## Acting for the Camera

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Techniques and disciplines of acting as applied to film and television production. Opportunity to practice and perform with emphasis on developing talents and skills required in acting for the screen. (Same as Television/Video Communications 142). A combination of Theatre Arts 110, Theatre Arts 111, and Theatre Arts 113 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 114

## Acting for the Camera II

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation: Theatre Arts 113 with a minimum grade of C.
An intermediate and immersive on-camera experience in which the student will have opportunities to practice skills and techniques in several styles of camera production: movie/TV narrative drama, comedy, and reality TV. The material from these performances is edited, screened, and discussed. CSU/UC

## Theatre Arts 118

## Fundamentals of Scene Study

Unit(s): 2.0 Class Hours: 36 Lecture, 36 Laboratory total.
A continued study for the beginning actor in the preparation and presentation of scenes from modern comedies, the plays of William Shakespeare, and plays from influential playwrights such as Anton Chekov and Henrik Ibsen. Students prepare scenes with partners for performance and critique. Recommended for acting majors. CSU/UC

## Theatre Arts 120

## Musical Theatre History

Unit(s): 3.0 Class Hours: 54 Lecture total.
This course explores the history of the uniquely American art form that is Musical Theatre. From its early development in the colonial period to the present time. Emphasis will be placed on the chronological examination of various musical theatre productions. Students will learn how the composers, librettists, lyricists, choreographers, directors and designers contributed to the formation and the popularity of musical theatre as it exists today. CSU/UC
Theatre Arts 123

## Introduction to Drama and Acting

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to acting and dramatic literature that includes analysis of plays, dramatic structure, rehearsal techniques and performance techniques. This course explores the history of Method Acting and the complementary and competing theories of its founders. Intended to enhance imagination and intuition and emphasize individual emotional and intellectual growth through the exploration of the cultural significance of drama and acting. CSU/UC
Theatre Arts 130
Lighting Design
Unit(s): 2.0 Class Hours: 27 Lecture, 27 Laboratory total.
Basic techniques of lighting design for entertainment. Emphasis is placed on the design process, technical and artistic choices, and the development of the practical skills required of an entertainment lighting designer. CSU

## Theatre Arts 131 (C-ID THTR 171) Stagecraft

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
An introduction to technical theatre and the creation of scenic elements. Includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and stage management. CSU/UC

## Theatre Arts 132 (C-ID THTR 175) Stage Makeup

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Basic techniques and artistry of stage makeup and its relation to the total production. Covers history, aesthetics and design theory, color theory, materials, and application procedures for varied charcterizations. Practical application of learned skills are applied to departmental productions. CSU/UC

## Theatre Arts 133 (C-ID THTR 173) Lighting Fundamentals

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Theory and practices of lighting including control systems and instruments as well as the techniques for proper installation, operation, maintenance, and safety. (Same as TV/Video Communications 260). CSU/UC

## Theatre Arts 135 (C-ID THTR 192) Technical Production

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Supervised instruction and practical experience in backstage production responsibilities including any of the following: stage management, scenery construction and movement, properties, costume, lighting, sound, and running crews. CSU/UC

## Theatre Arts 136 (C-ID THTR 174) Fundamentals of Costume Design

Unit(s): 3.0 Class Hours: 54 Lecture, 18 Laboratory total.
The study of costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated. (Same as Fashion Design \& Merchandising 136). CSU/UC

## Theatre Arts 137 <br> Costume Design and History

Unit(s): 3.0 Class Hours: 54 Lecture total.
Explores the many aspects of costume design, including the breakdown of a script, artistic rendering of the literature, development of themes and design concepts, research sources, examination of the social and economic mores that govern dress, and the history of dress. Students will analyze, research, and design two plays to present to the class. The course will include film and theatre industry standards in the area of costume design. CSU/UC

## Theatre Arts 138

Costume Periods and Styles
Unit(s): 3.0 Class Hours: 54 Lecture total.
A study of the changes in dress from ancient times to the present. Social and political influences, as well as the historical accuracy of period dress, are considered relative to the practical needs of costuming for stage, film, and television. CSU/UC

## Theatre Arts 140A <br> Theatre Performance

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
An introduction to theatre performance emphasizing acting technique, theatre vocabulary, and creative individual expression. Students learn the process of presenting a role on stage. Prepares the student for Theatre Performance 140B. CSU/UC

## Theatre Arts 140B

## Theatre Performance II

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 140A with a minimum grade of $C$.
Continued study in theatre performance emphasizing acting technique, theatre vocabulary, and creative individual expression. Students perfect the process of presenting a role on stage. Theatre Arts 140 B is a continuation and refinement of the work begun during Theatre Arts 140A. CSU/UC

## Theatre Arts 140C <br> Theatre Performance III

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 140B with a minimum grade of C.
Provides the continuing theatre performance student opportunity to concentrate on more advanced acting methods and development of technique. Emphasizes the development of the individual actor's performance style connecting the voice and body with the emotional life of a character. CSU/UC

## Theatre Arts 140D

## Theatre Performance IV

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total. Prerequisite: Theatre Arts 140C with a minimum grade of C . Continuing study of acting technique including more complicated methodology and advanced script material. Emphasizes the combination of the individual actor's performance style with the demands of the professional theatre arena. CSU/UC

## Theatre Arts 150 (C-ID THTR 191) (C-ID THTR 192) Theatre Production

Unit(s): 2.0 Class Hours: 18 Lecture, 70 Laboratory total.
Prerequisite: Audition/Interview
Practical experience in performance production or technical production culminating in a series of public performances. All actors must audition and be cast prior to enrolling. All technicians must obtain instructor approval prior to enrolling. May be repeated. CSU/UC

## Theatre Arts 150A (C-ID THTR 191)

Rehearsal and Performance in Production
Unit(s): 2.0 Class Hours: 18 Lecture, 70 Laboratory total.
Prerequisite: Audition
Practical experience in performance production culminating in a series of public performances. All actors must audition and be cast prior to enrolling. May be repeated. CSU/UC

## Theatre Arts 150B (C-ID THTR 192)

## Technical Theatre in Production

Unit(s): 2.0 Class Hours: 18 Lecture, 70 Laboratory total.
Prerequisite: Audition
Students will gain practical experience in the application of production responsibilities in any of the following: stage management, scenery construction, properties, costume, lighting, or sound. This course culminates into a series of public performances. All student technicians must obtain instructor approval prior to enrolling. May be repeated. CSU/UC

## Theatre Arts 151 (C-ID THTR 191) Showcase I

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
An introduction to theatre performance emphasizing acting technique, theatre vocabulary, and creative individual expression. Students learn the process of presenting a role on stage. Prepares the student for Showcase II. A combination of Theatre Arts 151, Theatre Arts 171, Theatre Arts 172, and Theatre Arts 173 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 152 (C-ID THTR 191) <br> Tour Ensemble

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. An introduction to theatre performance emphasizing acting techniques as applied to performing a role in multiple venues. CSU/UC

## Theatre Arts 153 <br> Introduction to Directing

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
The study and application of directing theory, process, and technique which will culminate in a student-directed project production for public performance. Included are the fundamentals of script analysis, designer collaboration, character development, staging, actor coaching, and presenting. CSU/UC

## Theatre Arts 154 (C-ID THTR 191 ) Performance Ensemble

Unit(s): 2.0 Class Hours: 18 Lecture, 54 Laboratory total.
Prerequisite: Audition
A study of the standards and expectations for an actor in auditions, casting, rehearsal and performance in a departmental production. All students will be cast in one-act plays for public presentation. May be repeated. A combination of Theatre Arts 154, Theatre Arts 161, Theatre Arts 162, and Theatre Arts 163 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 155 (C-ID THTR 191) Children's Theatre Ensemble

Unit(s): 2.0 Class Hours: 18 Lecture, 70 Laboratory total.
Prerequisite: Audition
Intensive rehearsal and performance experience leading to an extended-run Children's Theatre production utilizing playscripts written for young audiences. May be repeated. CSU/UC

## Theatre Arts 156 <br> Readers' Theatre Workshop

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
A study of acting involving the development of techniques, styles, and theories specific to performing in front of a live audience. Provides the student with extensive practical rehearsal experience with varied characters, leading to workshop production. CSU/UC

## Theatre Arts 161

## Tour Ensemble II

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 152 with a minimum grade of $C$. Continued study in theatre performance emphasizing acting techniques as applied to performing a role in a touring company. Students perfect the process of presenting a role in multiple venues. A combination of Theatre Arts 154, Theatre Arts 161, Theatre Arts 162, and Theatre Arts 163 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 162

## Tour Ensemble III

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 161 with a minimum grade of $C$. Provides the continuing theatre performance student opportunity to concentrate on more advanced acting methods and development of technique in playscripts for a touring ensemble. Emphasizes the development of the individual actor's performance style connecting the voice and body with the emotional life of a character. A combination of Theatre Arts 154, Theatre Arts 161, Theatre Arts 162, and Theatre Arts 163 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 163

## Tour Ensemble IV

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 162 with a minimum grade of $C$.
Continuing study of acting technique including more complicated methodology and advanced script material focusing on touring ensembles. Emphasizes the combination of the individual actor's performance style with the demands of the professional touring arena. A combination of Theatre Arts 154, Theatre Arts 161, Theatre Arts 162, and Theatre Arts 163 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 165

Introduction to Entertainment Lighting
Formerly: Introduction to Intelligent Lighting
Unit(s): 1.5 Class Hours: 27 Lecture total.
Recommended Preparation: Concurrent enrollment in Theatre Arts 165L.
The study of the various entertainment lighting practices. Course will focus on emerging technologies in the entertainment industry and best practices in applications. Basic skills in control, usage, and content preparation. CSU

Theatre Arts 165L
Fundamentals of Programming for Intelligent Lighting Lab
Unit(s): 0.5 Class Hours: 27 Laboratory total.
Recommended Preparation: Concurrent enrollment in Theatre Arts 165.

Develop the programming skills to complete a show set up, control
fixture characteristics, create and record cues, and transfer between programming and show control. Emphasis will be placed on
developing speed and accuracy in these basic skills. CSU

## Theatre Arts 166

Intermediate Programming
Unit(s): 1.0 Class Hours: 18 Lecture total.
Corequisite: Concurrent enrollment in Theatre Arts 166L.
Further development of the control and programming skills used in the entertainment lighting industry. Multiple control consoles will be introduced. CSU

## Theatre Arts 166L

## Intermediate Programming Lab

Unit(s): 1.0 Class Hours: 54 Laboratory total.
Corequisite: Concurrent enrollment in Theatre Arts 166.
Practical application of the terms, concepts, and practices in the control and programming of automated lighting equipment. Emphasis is placed on intermediate and advanced programming techniques/ skills while increasing speed and accuracy. CSU

## Theatre Arts 167

Setup for Intelligent Lighting
Unit(s): 1.0 Class Hours: 9 Lecture, 27 Laboratory total. Study of the practical considerations for using intelligent lighting equipment. Included topics are safety precautions, setup, and operational procedures, control panel functions, basic service, and maintenance techniques. CSU

## Theatre Arts 168A

Computer Applications for Entertainment Technology
Formerly: Computer Applications for Entertainment Lighting Unit(s): 2.5 Class Hours: 36 Lecture, 36 Laboratory total.
Study of varied software applications that assist in the creation, management, visualization, and virtualization of entertainment projects. CSU

## Theatre Arts 169

## Cooperative Work Experience - Entertainment

Unit(s): 1.0-4.0 Class Hours: 60-300 Lecture total.
This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills in a field related to the entertainment industry so as to enable them to become productive employees. This course also provides students with career awareness for jobs. 75 hours of paid work or 60 hours of un-paid work equals one unit of course credit. Student repetition is allowed per Title 5, Section 55253. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Theatre Arts 170

Entertainment Technology Internship
Unit(s): 1.0 Class Hours: 9 Lecture, 36 Laboratory total.
Supervised field work in one or more of areas backstage technologies including lighting, sound, and stagecraft. Skills are assessed before placement to match abilities with job requirements. Grade: Pass/No Pass Only. Open Entry/Open Exit. CSU

## Theatre Arts 171

## Showcase II

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Theatre Arts 151 with a minimum grade of $C$. Continued study in theatre performance emphasizing acting technique, theatre vocabulary, and creative individual expression. Students perfect the process of presenting a role on stage. A combination of Theatre Arts 151, Theatre Arts 171, Theatre Arts 172, and Theatre Arts 173 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 172

Showcase III
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Theatre Arts 171 with a minimum grade of $C$. Provides the continuing theatre performance student opportunity to concentrate on more advanced acting methods and development of technique. Emphasizes the development of the individual actor's performance style connecting the voice and body with the emotional life of a character. A combination of Theatre Arts 151, Theatre Arts 171, Theatre Arts 172, and Theatre Arts 173 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 173

## Showcase IV

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Theatre Arts 172 with a minimum grade of $C$. Continuing study of acting technique including more complicated methodology and advanced script material. Emphasizes the combination of the individual actor's performance style with the demands of the professional theatre arena. A combination of Theatre Arts 151, Theatre Arts 171, Theatre Arts 172, and Theatre Arts 173 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 177

## Principles of Playwrighting

Unit(s): 3.0 Class Hours: 54 Lecture total.
An introduction to the elements of writing a play for the stage emphasizing dramatic structure, dramatic action, relationship between dialogue and action, setting, theme and point of view. Students will be assigned writing exercises that culminate in a one-act play. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, Theatre Arts 180, Theatre Arts 181, Theatre Arts 186, and Theatre Arts 190 may be taken a maximum of four enrollments. CSU

## Theatre Arts 178

## Musical Theatre Techniques

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
This course explores the development of the beginning fundamentals of acting, singing and movement for musical theatre through exercises, auditions, solo and group performances. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, Theatre Arts 180, Theatre Arts 181, Theatre Arts 186, and Theatre Arts 190 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 179

## Musical Theatre Workshop

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Recommended Preparation: Theatre Arts 178 with a minimum grade of C
Further development and exploration of musical theatre skills. Students will become proficient musical theatre artists through theatrical exercises, audition and dance techniques and solo and group performances. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, Theatre Arts 180, Theatre Arts 181, Theatre Arts 186 , and Theatre Arts 190 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 180

## Intermediate Musical Theatre Techniques

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 179 with a minimum grade of $C$
This course explores intermediate level techniques of acting, singing and movement for musical theatre through theatrical exercises, auditions, solo and group performances. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, 1 Theatre Arts 180, Theatre Arts 181, Theatre Arts 186, and Theatre Arts 190 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 181

## Intermediate Musical Theatre Workshop

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Theatre Arts 180 with a minimum grade of $C$ Intermediate level development and exploration of musical theatre skills. Students will become proficient musical theatre artists through theatrical exercises, audition and dance techniques and solo and group performances. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, Theatre Arts 180, Theatre Arts 181, Theatre Arts 186, and Theatre Arts 190 may be taken a maximum of four enrollments. CSU/UC

Theatre Arts 186
Voice for the Actor
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
An academic study and practical application of the efficient and effective use of the speaking voice, particularly in meeting the unique demands of acting for the stage. Focus will be placed on exercises designed to identify and correct breathing problems, diction problems, and to create conscious control of speech function. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, Theatre Arts 180, Theatre Arts 181, Theatre Arts 186, and Theatre Arts 190 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 190

## Improvisation for Stage and Screen

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Exploration of the principles and techniques of improvisational acting designed to increase the actor's creativity, problem solving, and performance skills. This course also develops student awareness of the importance of the cooperative dynamics of theatre, television and film. A combination of Theatre Arts 177, Theatre Arts 178, Theatre Arts 179, Theatre Arts 180, Theatre Arts 181, Theatre Arts 186, and Theatre Arts 190 may be taken a maximum of four enrollments. CSU/UC

## Theatre Arts 198

## Topics

Unit(s): 0.5 Class Hours: 9 Lecture total.
Topics of special interest offered to meet the needs of theatre arts students. Open Entry/Open Exit. CSU

## Theatre Arts 250

## Advanced Theatre Production

Unit(s): 2.0 Class Hours: 18 Lecture, 72 Laboratory total.
Prerequisite: Theatre Arts 150A with a minimum grade of $C$.
Practical experience performing an advanced level role in a series of public performances. May be repeated. CSU/UC

## Theatre Arts 255

## Motion Picture Performance Production

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Prerequisite: Audition
Practical experience in performance production culminating in a fully produced feature film screened to the public. The final movie presentation becomes the basis for developing an actor reel. Students desiring an acting role must audition. CSU/UC

## Theatre Arts 256

Intermediate Motion Picture Performance Production
Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Prerequisite: Theatre Arts 255 with minimum grade of C . Intermediate level practical experience in performance production culminating in a fully produced feature film screened to the public. The final movie presentation becomes the basis for developing an actor reel. Students desiring an acting role must audition. CSU/UC

## Theatre Arts 257 <br> Motion Picture Performance Production III

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Prerequisite: Theatre Arts 256 with a minimum grade of C. Provides the continuing performance student opportunity to concentrate on more advanced acting methods and development of technique. Emphasizes the development of the individual actor's performance style connecting the emotional life of a character to technical delivery on-screen. CSU/UC

## Theatre Arts 258

Motion Picture Performance Production IV
Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Theatre Arts 257 with a minimum grade of $C$.
Continuing study of on-camera acting technique including more complicated methodology and advanced script material. Emphasizes the combination of the individual actor's performance style with the demands of working on a professional set. CSU/UC

## VIETNAMESE (VIET)

## Vietnamese 101

## Elementary Vietnamese I

Unit(s): 5.0 Class Hours: 90 Lecture total.
A college level Vietnamese class focusing on pronunciation and grammar, basic vocabulary, common idioms, listening, speaking, reading, and writing techniques to provide avenues for the expression of ideas orally and in writing. Introduction to Vietnamese culture. Som $\epsilon$ sections designated for native Vietnamese speakers. Vietnamese 101 is equivalent to two years of high school Vietnamese. CSU/UC

## Vietnamese 102

## Elementary Vietnamese II

Unit(s): 5.0 Class Hours: 90 Lecture total.
Prerequisite: Vietnamese 101 with a minimum grade of C. A college level Vietnamese course focusing on further training in pronunciation and grammar, more extensive vocabulary development, conversation, and composition. Supplementary cultural readings.
Vietnamese 102 is equivalent to the third year of high school
Vietnamese. CSU/UC

## Vietnamese 198

## Topics in Vietnamese

Unit(s): 0.5-3.0 Class Hours: 9-54 Lecture total.
A specialized course on topics related to current needs of students. CSU

## WELDING (WELD)

## Welding 108

## Oxyacetylene-Arc Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Technical knowledge and basic skills needed for occupational oxyacetylene and arc welding processes and applications. Students must furnish safety equipment. (Same as Automotive Technology 108 and Diesel 108). CSU

## Welding 125A

## Intermediate Arc Welding Level I

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C.
This is a course designed to improve the student's previously acquired arc welding skills and prepare the student to pass the welding certification test. Emphasis is placed on welding in the vertical and overhead positions and the preparation of the test plates (1" steel), using the shielded metal arc welding process E-7018 (SMAW). CSU

## Welding 125B

## Intermediate Arc Welding Level II

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 and Welding 125A with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This is a course designed to improve the student's prior acquired arc welding skills and prepare the student to pass the welding certification test. Student is introduced to the preparation of the 1" plate. This course will introduce the students to the Licensing Class D1.1. rules and regulations from the Department of Building and Safety with the city of Los Angeles. Emphasis is placed on welding in the vertical and overhead positions and the preparation of the test plates (1" steel), using the shielded metal arc welding process E-7018 (SMAW). CSU

## Welding 129A

## Advanced Arc Welding Level I

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills.
This course is designed to help students enhance previously acquired arc welding skills and prepare them to pass the welding certification test. Provides advanced manipulative skills and technical knowledge needed to pass a 1" plate guided bended test required for structural steel certification. CSU

## Welding 129B

## Advanced Arc Welding Level II

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 129A with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This is a course designed to advance the student's previously acquired arc welding skills and prepare the student to pass the welding certification test. Emphasis is placed on welding in the vertical and overhead positions and the preparation of the test plates ( 1 " steel), using the shielded metal arc welding process (SMAW) E-7018 according to the American Welding Society rules and regulations D1.1 Code Book. CSU

## Welding 129C

## Advanced Arc Welding Level III

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 129B with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This is a course designed to improve and master the student's previously acquired arc welding skills to an advanced level and prepare the student to pass the welding certification test. Emphasis is placed on welding in the vertical and overhead positions and the preparation of the test plates (1" steel), using the shielded metal arc welding process E-7018 according to the American Welding Society rules and regulations. Students will take the D1.1 certification test at this level. CSU

## Welding 129D

Advanced Arc Welding Level IV
Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 129C with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This course provides level one instruction on the principles, equipment, welding techniques, mode of operations, and safety for (FCAW) wire flux cored arc welding used for structural steel. It is also designed to improve the student's formerly acquired arc welding skills and prepare the student to pass the welding certification test D1.1. Emphasis is placed on welding in the vertical and overhead positions and the preparation of the test plates (1" steel), using FCAW 2/32 wire (flux cored arc welding). CSU

## Welding 139A

## Inert Gas Welding Level I

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills.
This course will introduce the student to gas tungsten arc welding (GTAW) and metal inert gas welding (MIG) of aluminum, mild steel and stainless steel. CSU

## Welding 139B

## Inert Gas Welding Level II

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 139A with a minimum grade of C or satisfactory completion of proficiency exam in inert gas welding skills administered by the SAC Welding Instructor.
This course is intended to further the welding skills of the student in gas tungsten arc welding (GTAW) and metal inert gas (MIG) process. Special emphasis is placed on the horizontal position of aluminum, mild steel and stainless steel. CSU

## Welding 139C <br> Inert Gas Welding Level III

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 139B with a minimum grade of C or satisfactory completion of proficiency exam in inert gas welding skills administered by the SAC Welding Instructor.
This is an advanced welding course using the gas tungsten arc welding (GTAW) process. This course is intended to give the students the skills necessary to pass the welding certification test in GTAW and MIG welding processes. The student is required to master the horizontal and vertical-up welding positions. CSU

## Welding 140A

## Welding Certification Training Level I

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills.
This is an advanced course that will provide lecture and hands-on practice in welding in multiple areas of certification using shielded metal arc welding (SMAW) as well as in flux cored arc welding (FCAW). The student will focus on welding in the vertical and overhead position and the preparation of test plates. CSU

## Welding 140B

## Welding Certification Training Level II

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 140A with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This is an advanced course that will provide lecture and hands-on practice in welding in multiple areas of certification using shielded metal arc welding (SMAW) as well as in flux cored arc welding (FCAW) in the vertical and overhead positions. The student will focus on welding with the SMAW, FCAW and pipe in the 1G and 2G positions using E6010 electrode. CSU

## Welding 140C

## Welding Certification Training Level III

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 140B with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This is an advanced course that will provide lecture and hands-on practice in welding in multiple areas of certification using shielded metal arc welding (SMAW) as well as in flux cored arc welding (FCAW) in the vertical and overhead positions. The student will focus on welding with the SMAW, FCAW and pipe in the 5G and 6G positions using E6010 electrode. CSU

## Welding 141A <br> Welding Certification Exam Preparation Level I

Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Welding 108 with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills administered by SAC Welding Instructor.
This practical course is for advanced welding students. Instruction will cover design, prequalified base/filler material, procedure/welder qualifications, fabrication essentials, and testing as specified by American Welding Society (AWS) D1.1. Structural Code specifications leading to Los Angeles City or AWS welding certifications. CSU

## Welding 141B

Welding Certification Exam Preparation Level II
Unit(s): 3.0 Class Hours: 54 Lecture total.
Prerequisite: Welding 141A with a minimum grade of C.
This course is for advanced welding students. Instructor will cover prequalified base/filler material, procedure/welder qualification and testing as specified by American Welding Society (AWS). D1.1 Structural Code specifications leads to Los Angeles City or AWS welding certifications. CSU

## Welding 153A

## Math/Blue Print Reading for Welders

Unit(s): 3.0 Class Hours: 54 Lecture total.
This class is designed to introduce the welding student to math and blue print reading and their applications for welders related to the welding industry. Emphasis will be placed on the practical problems in mathematic (for welders) measuring, instruments, area, volume, fractions, decimals and metric system. This course will allow the student to read and interpret shop and field drawings and prints related to the welding industry. CSU

## Welding 153B

Math/Blue Print Reading for Welders
Unit(s): 3.0 Class Hours: 54 Lecture total.
This is an advanced course designed to allow students to function at a higher math and blue print reading level and their applications for welders related to the welding industry. Emphasis will be placed on the common fractions, decimal fractions, perimeter of squares, areas of triangle, volumes, circumferences of circles and perimeter. The student will be able to read and interpret shop and field drawings, and prints related to the welding industry. CSU

## Welding 154A

## Beginning Pipe Fundamentals

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Prerequisite: Welding 125A with a minimum grade of C.
The pipe welding industry requires a higher skilled welder. This course consists of 112 hours of training in safety, preparation, welding, terminology, blueprints, and codes. Emphasis will be on open root groove welds on plate using the Shielded Metal Arc Welding Process using E6010 and E7018 electrodes. Students will learn pipe terminology and proper practices used in different industries. CSU

## Welding 154B <br> Intermediate Pipe Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total. Prerequisite: Welding 154A with a minimum grade of C.
The pipe welding industry requires a highly skilled welder. This course consists of 112 hours of training in safety, preparation, welding, terminology, blueprints, and codes. Emphasis will be on open root groove welds on pipe using the Shielded Metal Arc Welding Process, using E6010 and E7018 electrodes. Students will learn pipe terminology and proper practices used in different industries. Students will be introduced to Orbital Welding Technology. CSU

## Welding 154C

## Advanced Pipe Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 154B with a minimum grade of C.
The pipe welding industry requires a highly skilled welder. This course consists of 112 hours of training in safety, preparation, welding, terminology, blueprints, and codes. Emphasis will be on open root groove welds on pipe using the Shielded Metal Arc Welding Process using E6010 and E7018 electrodes. Students will learn pipe terminology and proper practices used in different industries. Students will set up and operate the Orbital Welding machine. CSU

## Welding 155A

## Beginning Metal Fabrication

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 125A with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills.
A fabricator in the welding industry requires a highly skilled welder/ fitter. This course consists of 112 hours of training in safety, preparation, welding, terminology, blueprints, and codes. Emphasis will be focusing on proper operation of shop machinery, welding, fit-up, metal shapes, and various techniques of building and assembly. CSU

## Welding 155B

## Intermediate Metal Fabrication

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 155A with a minimum grade of C or satisfactory completion of proficiency exam in arc welding skills.
This course consists of 112 hours of training in safety, preparation, welding, terminology, blueprints, and codes. Emphasis will be focusing on proper operation of shop machinery, welding, fit-up, metal shapes, and various techniques of building and assembly. Such as aerospace, military, or a special tool that could assist keeping tight tolerances required by an engineer. Students will learn fabrication terminology and proper practices used in different industries. This course is designed to adapt and upgrade skills to industry standards and develop fabrication skills to supplement and expand welding skills. CSU

## Welding 156A

Beginning Robotic Welding
Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total. Prerequisite: Welding 108 with a minimum grade of C. The course is a basic programming course that teaches students how to safely manipulate the robot through proper use of the robotic controller and Teach Pendant. This course also introduces the student to the gas metal and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques, and base and filler metal identification. This course is an introduction to the beginning robotic/laser technology. (Same as Manufacturing Technology 156A). CSU

## Welding 156B <br> Intermediate Robotic Welding

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Welding 156A or Manufacturing Technology 156A and Welding 157A or Manufacturing Technology 157A with a minimum grade of $C$.
Corequisite: Welding 157B or Manufacturing Technology 157B.
The robotic welding course teaches students how to safely manipulate the robot through proper use of the robotic controller and Teach Pendant. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification and welding procedures. Students will be able to input welding procedures, jog frames, circular moves, weaving, copy-deletecommands, six point tool center and other activities related to the robotic welding process. (Same as Manufacturing Technology 156B.). CSU

## Welding 156C

## Advanced Robotic Welding

Unit(s): 3.0 Class Hours: 36 Lecture, 54 Laboratory total.
Prerequisite: Welding 156B or Manufacturing Technology 156B with a minimum grade of $C$.
Corequisite: Welding 157C or Manufacturing Technology 157C.
The Advanced Robotic Welding course teaches students how to safely manipulate the robot through proper use of the robot controller and Teach Pendant. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification and welding procedures. Students will be able to create programs in robotic welding safety, TPP Management, USER Frames, coordinated motion,TAST,TAST-RPM, position registers \& offsets, touch \& sensing and activities relating to the robotic welding process. (Same as Manufacturing Technology 156C.). CSU

## Welding 157A

Basic Robotic Programming
Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 108 with a minimum grade of C .
Corequisite: Welding 156A or Manufacturing Technology 156A.
This is a basic programming course that teaches students how to safely manipulate an industrial robot through proper use of a controller. Topics include safe operating practices, linear movements, coordinate systems, Teach Pendant programming, and software/hardware integration. (Same as Manufacturing Technology 157A.). CSU

## Welding 157B

## Intermediate Robotic Programming

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 156A or Manufacturing Technology 156A and Welding 157A or Manufacturing 157A with a minimum grade of C. Corequisite: Welding 156B or Manufacturing Technology 156B.
This course is a programming course that teaches students how to safely manipulate an industrial robot through proper use of a controller. Topics include safe operating practices, circular movements, robot set-up, advanced Teach Pendant programming and functions, and auxiliary hardware. (Same as Manufacturing Technology 157B.). CSU

## Welding 157C

## Advanced Robotic Programming Welding

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 156B or Manufacturing Technology 156B and Welding 157B or Manufacturing Technology 157B with a minimum grade of $C$.
Corequisite: Welding 156C or Manufacturing Technology 156C.
This is an advanced programming course that teaches students how to safely manipulate an industrial robot through proper use of a controller. Topics include safe operating practices, logic commands, and coordinate systems, advanced Teach Pendant programming, network integration, simulations, and software/hardware integration. (Same as Manufacturing Technology 157C). CSU

Welding 160
Introduction to Process Validation and Verification of Laser Welding Process: Level 1
Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
This course is designed to introduce students to laser welding validation and the development of manufacturing capabilities using fiber laser welding equipment. CSU

Welding 161<br>Planning Process Validation and Verification of Laser<br>Welding Process: Level 2

Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 160 with a minimum grade of C
This course is designed to introduce students to laser welding process focused on three main activities: Installation Qualification Plan (IQ), Operational Qualification Plan ( OQ ), and Performance Qualification Plan(PQ) per the MVP. CSU

Welding 162
Executing Process Validation and Verification of Laser Welding Process: Level 3
Unit(s): 3.0 Class Hours: 18 Lecture, 108 Laboratory total.
Prerequisite: Welding 161 with a minimum grade of C
This course is designed to perform validation activities with laser welding processes focused on three main activities: Installation Qualification Report (IQ), Operational Qualification Report (OQ), and Performance Qualification Report (PQ) per the MVP. CSU

## WOMEN'S STUDIES (WMNS)

## Women's Studies 101 <br> Introduction to Women's Studies

Unit(s): 3.0 Class Hours: 54 Lecture total.
A multicultural survey of social trends, issues, opportunities, and topics of special interest to women. Discussion includes sex, sex role stereotyping, family problems, work, law, gender equity, physical and mental health, feminism, rape, and women in arts, sciences, history, and business. CSU/UC

Women's Studies 102
Women in America: Work, Family, Self
Unit(s): 3.0 Class Hours: 54 Lecture total.
An examination of women's roles in America. Emphasis on employment, family structures, and personal development. Topics include: historical patterns, socialization, opportunities, sexism, identity, growth, law, unionization, sexual harassment, media influence, family pressures, child care, guilt, stress. CSU/UC

## SANTA ANA COLLEGE CONTINUING EDUCATION INSTRUCTIONAL CALENDAR 2019-2020

## FALL SEMESTER 2019

August 19
September 2
November 11
November 25-30
December 19
December 20-January 12, 2020
SPRING SEMESTER 2020
January 8-10
January 13
January 20
February 14
February 17
March 31
April 6-11
May 25
May 21
May 22
SUMMER SESSION 2020
May 26
July 3
August 1

INSTRUCTION BEGINS
Labor Day - holiday
Veterans Day - holiday
Thanksgiving - holiday
INSTRUCTION ENDS
Holiday break

Faculty Projects
INSTRUCTION BEGINS
Martin Luther - holiday
Lincoln's Birthday - holiday
President's Day - holiday
Cesar Chavez Day (observed)
Spring recess
Memorial Day - holiday
Commencement - Santa Ana College
INSTRUCTION ENDS

INSTRUCTION BEGINS
Independence Day - holiday INSTRUCTION ENDS

| AUGUST 2019 |  |  |  |  |  |  | MARCH 2020 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | T | W | T1 | $\begin{aligned} & F \\ & 2 \end{aligned}$ | $\begin{aligned} & \mathrm{S} \\ & 3 \end{aligned}$ | S1 | $\begin{aligned} & M \\ & 2 \end{aligned}$ | $\begin{aligned} & \mathrm{T} \\ & 3 \end{aligned}$ | W4 | $\begin{aligned} & \mathrm{T} \\ & 5 \end{aligned}$ | $\begin{aligned} & F \\ & 6 \end{aligned}$ | $\begin{aligned} & S \\ & 7 \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllll}4 & 5 & 6 & 7 & 8 & 9 & 10\end{array} \quad \begin{array}{llllllll}8 & 9 & 10 & 11 & 12 & 13 & 14\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllll}11 & 12 & 13 & 14 & 15 & 16 & 17\end{array} \quad$15 16 17 18 19 20 21 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllllllllllll}18 & 19 & 20 & 21 & 22 & 23 & 24\end{array} \quad$22 23 <br> 24 25 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{lllllll}25 & 26 & 27 & 28 & 29 & 30 & 31\end{array}$ |  |  |  |  |  |  | 29 | 30 | 31 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SEPTEMBER 2019 |  |  |  |  |  |  | APRIL 2020 |  |  |  |  |  |  |
| S | M | T | W | T | F | S | S | M | T | W | T | F | S |
|  | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  | 1 | 2 | 3 | 4 |
| $\begin{array}{lllllll}8 & 9 & 10 & 11 & 12 & 13 & 14\end{array}$ |  |  |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 15 16 17 18 19 20 21 <br> 22 23 24 25 26 27 28 |  |  |  |  |  |  | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| $\begin{array}{lllllll}22 & 23 & 24 & 25 & 26 & 27 & 28\end{array}$ |  |  |  |  |  |  | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 2930 |  |  |  |  |  |  | 26 | 27 | 28 | 29 | 30 |  |  |
| OCTOBER 2019 |  |  |  |  |  |  | MAY 2020 |  |  |  |  |  |  |
| S | M | T | W | T | F | S | S | M | T | W | T | F | S |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  | 1 | 2 |
| 6 | 7 | 8 | 9 | 10 | 11 |  | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 27 | 28 | 29 | 30 |  |  |  | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|  |  |  |  |  |  |  | 31 |  |  |  |  |  |  |
| NOVEMBER 2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S | M | T | W | T | F | S | JUNE 2020 |  |  |  |  |  |  |
|  |  |  |  |  |  | 2 | S | M | T | W | T | F | S |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | 1 | 2 | 3 | 4 | 5 | 6 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
|  |  |  |  |  |  |  | 28 | 29 | 30 |  |  |  |  |
| DECEMBER 2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll} S & M \\ 1 & 2 \end{array}$ |  | T | W | T | F | S | JULY 2020 |  |  |  |  |  |  |
|  |  | 3 | 4 | 5 | 6 | 7 | S | M | T | W | T | F | S |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |  |  |  | 1 | 2 | 3 | 4 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|  | 30 | 31 |  |  |  |  | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|  |  |  |  |  |  |  | 26 | 27 | 28 | 29 | 30 | 31 |  |
| JANUARY 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S | M | T | W | T | F | S | AUGUST 2020 |  |  |  |  |  |  |
|  |  |  |  | 2 | 3 | 4 | S | M |  | W | T | F |  |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |  | M | T | W | T | F | S |
| $12 \quad 13$ |  | 14 | 15 | 16 | 17 | 18 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 192 |  | 21 |  | 23 | 24 | 25 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 26 | 27 | 28 |  | 30 | 31 |  | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|  |  |  |  |  |  |  | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| FEBRUARY 2020 |  |  |  |  |  |  | 30 | 31 |  |  |  |  |  |
| S | M | T | W | T | F | S |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |  |  |  |  |  |
| 9 | 10 | 11 |  |  | 14 | 15 |  |  |  |  |  |  |  |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |  |  |  |  |  |  |  |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |  |  |  |  |  |  |  |

# Santa Ana College School of Continuing Education Office Centennial Education Center 2900 West Edinger Avenue <br> Santa Ana, CA 92704 <br> 714-241-5700 

## MISSION STATEMENT

The Santa Ana College School of Continuing Education is a responsive community leader dedicated to adult student success through innovative educational programs and services. The School of Continuing Education prepares students to transition to college, improve language and workforce skills, increase civic involvement, and promote lifelong learning.
The Centennial Education Center (CEC) office is located at the corner of Fairview and Edinger, Santa Ana, near convenient bus stops. Office Hours: Monday through Thursday, 8:00 am-8:45 pm, Friday, 8:00 am12:45 pm, Saturday, 8:00 am-11:45 am.
The Centennial Child Development Center provides services to Santa Ana College School of Continuing Education students' children between the ages of 2 and 5 based on space availability. Fees are based on a sliding scale and children need to be enrolled on a regular basis.
Centennial Education Center offers a wide range of classes. Because classes are offered on an open entry/open exit basis, students may register at any time throughout the year.
Student Outreach provides admissions information, ensures access to and knowledge of campus resources, and actively promotes student services offered.
English as a Second Language (ESL) classes at CEC provide a vital service to students who have come to the United States from all over the world. Classes cover a wide range of instruction in beginning to advanced English, pronunciation, citizenship, conversation, writing, vocational ESL, and college preparation. Students develop survival skills, learn about customs, and American culture, as well as, acquire language skills necessary for school, employment and success in their daily lives.
The Community Learning Center provides opportunities for adult learners to use language learning computer software to practice English. Civics instruction is provided to enhance awareness of learners' community. One-on-one, small-group, and technology-based instruction are offered based on individual needs. Instructors help learners create individual learning plans and set educational goals.

Instructors in the Pronunciation Center help students build their fluency in pronunciation through a variety methods to include role play, pair and group work, and presentations. Students will learn about sound patterns and sound inventory, stress, intonation, and others. Materials are provided in class.
The Adult Basic Education Program (ABE) is designed to assist students in strengthening their skills in reading, writing, mathematics, English usage and grammar. Fifteen (15) elective credits may be earned by students who pass the three exit exams. Once the ABE classes have been successfully completed and a certificate awarded, the student is eligible to enter the Adult High School Subjects Diploma program (ASE) GED preparation or college credit courses. The ABE program is also appropriate for students who want to become more employable.
The Adult High School Diploma Program is designed to accommodate adults with varied responsibilities, backgrounds, and needs who want to earn a high school diploma. Individualized instruction is provided so that students may take classes that fit their personal schedules, thus enabling them to work and complete credits at their own pace. Courses offered include: English fundamentals, reading and vocabulary skills, mathematics, science, United States history, and American government. Classes in GED preparation, including practice testing, are also offered in English and Spanish at CEC and REC.
Weekend classes are offered at CEC for students who can only attend one day a week. Upon completing their GED studies, students register online at www.ged.com to take their exam(s). The nearest testing site is:

Corporate Training Institute
Rancho Santiago Community College District
2323 N. Broadway, Suite 315
Santa Ana, CA 92706
School of Continuing Education DSPS seeks to meet the needs of adults with disabilities. Accommodations and support services are provided, after students complete a DSPS application, present verification of a disability and complete an intake appointment. The Vocational Training Programs are designed to prepare students with the necessary skills needed to succeed in today's competitive workforce. Training focuses on various skills leading to the attainment of certificates in general office, executive assistant, computer repairs, childcare licensing, nursing aides, orderlies, attendants, and customer service. Students engage in teacher-facilitated instruction as well as independent laboratory instruction where they can learn at their own pace.

## GOALS AND PROGRAM OBJECTIVES

## GOALS

Recognizing that learning is a lifelong process, the School of Continuing Education offers a variety of courses and programs to meet basic educational goals of adult learners. Programs and services offered by the School of Continuing Education are designed to help adults meet and carry out their immediate social, civic, and economic responsibilities. Continuing Education promotes lifelong learning as a vehicle to earn a high school diploma or GED, improve English skills, prepare for higher education, prepare for citizenship, learn new job skills, and become productive, active participants in American society.

## COUNSELING

Provides counseling and guidance services to students.
2. Provides educational assessment services.
3. Provides orientation to a variety of programs and services.
4. Offers career vocational guidance.
5. Offers referrals to community agencies.
6. Provides personal counseling.

## PROGRAM OBJECTIVES

## Adult Basic Education

1. Teaches the basic academic and life skills necessary for success in today's world.
2. Provides students with a strong educational foundation that can be used as a basis for employment preparation, entrance into high school subjects, GED preparation, and college and vocational programs.

## Adult High School Diploma Program

1. Enables students to obtain a high school diploma.
2. Provides coursework that enables students to meet proficiency requirements.
3. Encourages high school students to pursue higher education goals.

## GED Test Preparation

1. Assists students in preparing for the GED examination.

## Child Care Licensing Program

1. Provides child care licensing programs so students can obtain employment or open their own child care home business.

## Citizenship Preparation

1. Prepares students for the United States citizenship interview and examination process.
2. Teaches students about the rights and benefits of becoming U.S. citizens.

## Developmentally Disabled Adults

1. Provides opportunities for the realization of individual potentials in the areas of education, work, and social interaction.

## English as a Second Language

1. Develops competency in the English language for non-native speakers at school, work, home, and in the community.
2. Improves fluency levels for success in vocational, high school, and college credit programs.
3. Develops an understanding of American culture, values, and civic responsibility.
4. Provides students with a strong academic foundation and improves language skills that can be used as a basis for lifelong learning and continuation into adult basic education, high school subjects, GED preparation, college credit and/or vocational programs. Ultimately, these skills should assist students in obtaining better employment opportunities.

## Parent Education

1. Provides a variety of learning opportunities and instruction for prospective parents regarding the intellectual, physical, and emotional components of the birth process.
2. Provides theory, methods, and practical applications for rearing children.
3. Encourages parents to acquire additional child guidance and decision-making skills that are congruent with their values, children's developmental and educational needs, and society's demands.

## Vocational Education

1. Provides short-term vocational training for entry-level positions.
2. Provides courses that are updated through input from business industry advisory councils and the mandates of occupational licensing agencies.
3. Provides vocational assessment, technology, training, and employability skills to prepare job seekers for the workforce.

## INSTRUCTIONAL PROGRAMS

Traditional, individualized and self-paced classroom instruction is offered in academic, vocational, and basic skills areas. Many classrooms at the larger sites utilize state of the art technology in instruction. Open Entry/Open Exit format allows flexibility in planning. Day and evening classes are offered throughout the community, and some classes are offered only on Fridays and Saturdays.

## Adult Basic Education

Provides adult learners the opportunity to build a strong foundation in reading, writing, language, English usage, grammar, mathematics, and communication skills, and to develop practical skills in the areas of technology training and employment preparation.

## Adult Secondary Education

- Adult High School Diploma Program

Provides all courses necessary to obtain a high school diploma through both traditional and individualized instruction methods.

- GED Preparation

Prepares adults to pass the GED high school equivalency exam.

## CAREER EDUCATION

## Vocational Training Programs

Provides employment preparation focusing on general workforce preparation skills and specific vocational training including independent laboratory instruction and technology training.

## English as a Second Language

Instruction in English from beginning to advanced levels is offered at various locations throughout the district for non-English and limited English speaking adults. ESL Support classes in pronunciation, conversation, vocational ESL, ESL Civics/Citizenship, and writing are also offered.

- ESL Civics/Citizenship Provides basic knowledge of local, state, and federal government in preparation for the United States citizenship examination including language development within the context of history and government.
- ESL Community Learning Center

Provides opportunities for adult learners to use language-learning computer software to practice English. Civics instruction is provided to enhance awareness of learners' community. One-on-one, smallgroup, and technology-based instruction are offered based on individual needs. Instructors help learners create individual learning plans and set educational goals.

## Health and Safety Education

Consists of courses specifically designed to offer lifelong education to promote the health, safety and well-being of individuals, families and communities.

## Parent Education Program

Prepares students for their important role as a key factor in child health, development and success, from the prenatal stage through college preparation. Parent education courses emphasize intellectual, physical, and emotional aspects of parenting.
Students with Substantial Disabilities
Provides courses to assist developmentally disabled adults with basic academic skills and independent living skills.

## STUDENT SERVICES

## Counseling, Career Planning and Guidance

Provides career, academic, personal and vocational counseling to students in the School of Continuing Education. Counselors provide students with

- educational planning
- interpretation of assessments
- orientation to programs and services.

Child Development
Provides child development programs so students can pursue their education

## Disabled Student Programs and Services

Provides services and accommodations for students with disabilities who apply for service.

## Student Development Program

Provides activities for students which include student government experience, leadership training, conferences, and various student opportunities to improve their leadership skills.

## Summer Sessions

Both day and evening classes are offered in the summer at various locations.

## Assessment

Comprehensive Adult Student Assessment System (CASAS) standardized testing is administered in all ABE, Citizenship, ESL and HSS classrooms. Students are expected to take a pre-test at the beginning of the program and post-test at the end. CASAS tests ensure compliance with the Workforce Investment Act under which these programs are funded.

## Veterans Service

Counseling and guidance for veterans is provided at SAC campus.

## Veterans Resource Center

| Monday, Tuesday, Wednesday | 8 a.m. -6 p.m. |
| :--- | :--- |
| Thursday | 8 a.m. -7 p.m. |
| Friday | 9 a.m. -12 p.m. |

714-564-6050
Monday, Tuesday, Wednesday 8 a.m. -6 p.m.

Friday

## ADMISSION AND FEES

## Who May Attend

Students who have graduated from high school or are over 18 years of age are eligible to enroll in continuing education classes. Students under 18 years of age who have not graduated from high school may be admitted by special approval of their high school district of attendance and approval of a continuing education administrator.

## Where to Register

For the convenience of the student, registration for continuing education classes may be completed at the following locations:

## Santa Ana Area

Santa Ana College School of Continuing Education
Centennial Education Center
2900 West Edinger Avenue, Room A-101, Santa Ana, CA 92704
714-241-5700
Santa Ana College
1530 West 17th Street, Room B-8, Santa Ana, CA 92706
714-564-6173
Remington Education Center
1325 E. 4th Street, Santa Ana, CA 92701
714-241-5850

## Online application

Students can apply online at:
sac.edu/webadvisor

## Parking Fee

Students enrolling in classes that meet at Santa Ana College's main campus are expected to pay a parking fee for campus parking or park in one of the designated coin operated lots located on the south side of the campus. While the parking fee is payable at the Student Business Office on the college campuses, it is much quicker for student to purchase their parking permits through the new online parking permit system. When permits are purchased online, a temporary permit will be emailed to you for immediate use. There are links to this site at enrollment and on the college websites. The parking regulations for campus can be found on the Safety and Security web site at this link: sac.edu/StudentServices/Security/Pages/Parking-Information.aspx. There is important information regarding safely parking on campus on these pages, please take time to take a look.
No parking fee is required at Centennial Education Center or at other continuing education sites in the district.

## Textbooks and Supplies

Textbooks for continuing education classes are available at:

## Santa Ana College School of Continuing Education

Bookstore - Centennial Education Center
2900 West Edinger Avenue
Santa Ana, CA 92704

## Bookstore Hours are:

Monday, Tuesday, Wednesday 9 a.m. -7 p.m.
Thursday
Friday and Saturday
9 a.m. -6 p.m.
Closed

## Schedule of Classes

A schedule of classes prepared each semester includes general information, courses offered, hours, rooms, and instructor names. Schedules are available before registration each semester in each of the major continuing education sites and Rancho Santiago Community College District campuses. Registration is ongoing for those classes which have been designated open entry/open exit.

## Open Enrollment

Unless specifically exempted by statute, every course wherever offered and maintained by the district is fully open to enrollment and participation by any person who has qualified as a continuing education student and meets the approved prerequisites for that course.

## Student Identification Card

Each student may obtain a picture student identification card upon request. This card must be presented when using the Santa Ana College library and entitles the student to a reduced admission fee to college functions. Student identification cards may be obtained at:
Santa Ana College,
1530 W. 17th Street, Santa Ana, CA 92706,
714-564-6965
Centennial Education Center,
2900 W. Edinger, Santa Ana, CA 92704
Remington Education Center,
1325 E. 4th Street, Santa Ana, CA 92701

## Class Discontinuance Policy

Any class which does not have a total of at least 20 students enrolled by the beginning of instruction may be discontinued. Any class which does not maintain satisfactory attendance may be discontinued.

## ADULT HIGH SCHOOL DIPLOMA PROGRAM

## General Information

Learning should be a lifelong process if an individual is to have a full and rewarding life. Often, not having a high school diploma becomes a stumbling block for adults who would like to continue their education. Completing the high school diploma allows the individual to achieve greater goals. Educators in the School of Continuing Education know how difficult it is to return to education when the demands of employment, family and daily living take so much energy and time. With the busy adult in mind, the adult high school diploma program is designed to be flexible enough to fit the schedule of each individual. Rancho Santiago Community College District offers a comprehensive high school diploma program for adults who wish to continue their formal education.
Santa Ana College has maintained a High School Program since 1973. In 2009, the California Code of Regulations adopted minimum coursework and standards required by community colleges to award high school diplomas. Santa Ana College requested and received approval of its application for the new Adult High School Diploma Program in the summer of 2009 from the California Community College's Chancellor's Office.
Diplomas are issued by the Rancho Santiago Community College District to students who complete the required course of study and demonstrate proficiency in basic skills. Graduation ceremonies are traditionally held each May or June for several hundred adults of all ages. Students may complete the diploma program at any time during the year and receive verification of completion of requirements at that time. Courses designed to meet high school graduation requirements are offered in both the traditional classroom setting or in open entry/ open exit individualized learning programs. Elective credits can be earned in continuing education classes offered in a wide variety of locations throughout the community as listed in the schedule of classes published each semester.

## Counseling and Guidance

Counselors meet with students and design programs of study on an individual basis so that students desiring a high school diploma can achieve their individual educational goals. For students transferring from other high school or adult programs, counselors send for and evaluate previous transcripts to determine which courses meet the general education requirements and/or elective requirements. Counselors advise students of lifelong learning opportunities and assist students with postsecondary vocational and educational planning for degree or certificate programs at Santa Ana College School of Continuing Education.
These services are offered by a staff of professional counselors who are well informed as to the community resources available for students needing academic, vocational, personal, or financial assistance.

## Registration

The Adult High School Diploma Program is available at Centennial Education Center and Santa Ana College. Students may obtain a schedule of classes and enroll at any time during the fall, spring, and summer semesters.

## High School Graduation Requirements

To qualify for a high school diploma, the candidate must meet the following requirements:

## Course of Study

The high school diploma requires a total of 160 credits taken from the following:

Subject Area Credits
English Communication
(a maximum of 10 credits of reading; must include at least one composition course)

| Mathematics | 20.0 |
| :--- | ---: |
| Natural Sciences <br> (must include both a biological and a physical science <br> course) | 20.0 |
| Social and Behavioral Sciences <br> (must include U.S. History, World Geography, World <br> History, American Government, Economics and a Social <br> Science elective) | 30.0 |
| Humanities | 10.0 |
| Electives | TOTAL |

There may be additional requirements due to Title 5 changes for the 2018-2019 school year.

## Petitions

A petition for graduation must be completed and submitted prior to the date students expect to complete diploma requirements.

## Proficiency Requirements

Proficiency must be demonstrated in basic skills areas of reading, mathematics, and composition, according to the categories listed below:

1. Reading. All Rancho Santiago Community College District adult high school graduates will be required to demonstrate an eighth grade reading ability as measured by an approved district test or by passing the Reading Proficiency Development course final
2. Mathematics. Students will be required to pass an approved district mathematics examination, or the Algebra 1A course finals.
3. English Composition. Students will be required to pass an approved district composition test or the Composition II course final.

## Residency Requirement

To qualify for a high school diploma, a student must complete at least 20 coursework credits within the Rancho Santiago Community College District.
There are multiple sources of credit leading to the high school diploma. Sources are as follows:

1. Previous secondary schools
2. Trade or business schools
3. Armed Forces schools and/or programs
4. College credit courses
5. Correspondence courses
6. Adult school credit courses
7. Work experience credit
8. Consumer Skills Task Credit
9. Testing
10. Regional Occupational Program courses
11. Other approved sources of credit

## ADULT HIGH SCHOOL DIPLOMA PROGRAM (Continued)

## Policies Governing Sources of Credit

## A. Previous Secondary Schools

All credits earned in the 9th, 10th, 11th, and 12th grades recorded on an official transcript will be accepted except physical education credits and credits which are a duplication of course work for which credit was previously granted.

## B. Trade or Business Schools

Courses taken in trade or business schools will be evaluated for possible high school credit equivalency. Courses in this category must be approved by the Office of Private Postsecondary Education. It is the responsibility of the student to provide to the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

## C. Armed Forces Schools and/or Programs

Credit may be granted for completion of training programs (armed services) and other valid educational experiences provided they have been certified by the United States Armed Forces Institute or by a statement on the service record, and provided they parallel 1) courses usually taught in secondary schools, and 2) vocational training courses with counterparts in civilian life.
The recommendations for credit for such programs and experiences are contained in three volumes published by the American Council on Education: The 1978 edition of the Guide To The Evaluation of Educational Experiences In The Armed Services, Vol. I-Air Force; Vol. II.-Army; Vol. III-Coast Guard, Marine, and Navy.

This section is to be interpreted as including:

1. Officer and enlisted service school courses;
2. Off-duty classes offered by the armed forces and cooperating local institutions;
3. Correspondence courses offered by the United States Armed Forces Institute, the Marine Corps Institute, the Coast Guard Institute, and cooperating colleges and universities;
4. United States Armed Forces Institute courses and subject examinations. (Authorization for this procedure is contained in Title V , Section 99, part C, of the California Administrative Code.)

## D. College Credit Courses

College units to be used for high school credits may be evaluated in a ratio of 3 college units to 10 high school semester periods of credit. The college should be notified in writing when college credits are utilized to meet high school requirements.
College credit equivalency recommended by the American Council on Education guides will be evaluated for high school credit on the same basis as other college credit courses.

## E. Correspondence Courses

Courses taken by correspondence will be evaluated for possible high school credit equivalency. Courses in this category must be approved by the Office of Private Postsecondary Education.
It is the responsibility of the student to provide to the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

## F. Adult School Credit Courses

Courses taken at adult schools will be evaluated for possible high school credit equivalency. Courses in this category must be approved by the California State Department of Education.
No credit will be allowed for physical education courses nor for courses from other adult schools if such courses are designated in the Rancho Santiago Community College District as "no high school credit." It is the responsibility of the student to provide to the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

## G. Work Experience Credit

Students may obtain credit for certain types of full-time work experience or for work experience that can be related to high
school subject matter.
In order to obtain credit for work experience, students must provide written verification from those employers with whom they have worked for at least one year.
The Continuing Education administrators or counselors will evaluate the amount of work experience credit and the area of application. Evaluation will not be made for more credits than is necessary to meet graduation requirements and which the letters of verification justify. Combined work experience credit and consumer skills task credit may not exceed 40 credits.
Verification of work experience should be obtained by the student requesting from each employer, on official letterhead stationery, the following information:

1. Dates of employment.
2. Job description.
3. Nature of duties performed, indicating progress to more complex operations justifying a division into beginning and advanced skills.
4. Statements regarding successful performance.
5. Reason for termination of employment, if applicable.
6. The letter of self-employed students must be accompanied by a copy of the student's business license or W-2 form.
7. Upon receipt of verification of all work experience which the student wishes to be considered for credit, evaluation will be made on the following basis:
a. Up to 10 credits will be given for the first year of successful work experience.
b. Up to 10 additional credits to a maximum of 40 will be granted for each additional full year of employment if the student has made successful progress each year on the job.
c. After the initial 10 credits for the first year, student may earn 5 credits for a period of six months employment, provided there is evidence of successful progress.

## H. Consumer Skills Tasks Credits

Students may obtain elective credits for completion of various consumer skills tasks. Students should see their counselor concerning requirements for completion of the consumer skills tasks. Combined consumer skills tasks credit and work experience credit may not exceed 40 credits.

## I. Assessment

The district may award a maximum of 80 high school credits on the basis of district approved testing.

1. Mathematics Achievement Test (ITED)

Credit may be earned in mathematics by obtaining a satisfactory score on the math section of the lowa Tests of Education Development Form X5. No other subtests are accepted for credit purposes. Ten semester credits will be awarded for a raw score of 14, provided these credits are not a duplication of previously earned math credits. (These 10 credits may be used to satisfy Math Fundamentals I and Il requirements.) Fifteen semester credits will be awarded for a raw score of 20 , provided these credits are not a duplication of previously earned math credits. (These 15 credits may be used to satisfy Math Fundamentals I and II requirements, and 5 elective credits.)
2. Subject Matter Credit by Examination

Credit by examination may be earned only for courses that are currently listed in the Rancho Santiago Community College District catalog and/or specifically designated by the division curriculum committee as courses that are eligible for credit by examination. Information for receiving this credit may be obtained from a counselor in Continuing Education.

## J. Regional Occupational Program Courses

Credit will be determined upon receipt of an official secondary or community college transcript which indicates credit and grades as appropriate.

Guidelines for issuance of ROP credit when not on a unified school district transcript:

1. RSCCD will accept an official Grade Reporting Sheet from Central County Regional Occupational Program in lieu of a unified school district transcript provided it has a grade and a number of total hours.
2. The amount of credit issued is to be based on 16 clock hours per credit unit.
3. The maximum of 20 units toward electives will be accepted in this manner.
4. Students coming from outside the CCROP will have to validate their credits only through an official school district transcript.

## K. High School Diploma Elective Credits

1. Career Education

High School elective credit for selected Career Education/ basic computer courses offered through the Career Education Department can be awarded.
2. English as a Second Language (ESL) Five elective High School Subjects credits are awarded for selected ESL courses in the ESL program.
3. Adult Basic Education (ABE)

Up to 15 HSS elective credits are granted when student successfully completes ABE Reading, ABE Math, and ABE Writing.
L. Articulation Agreements

An agreement between Santa Ana College (credit) and Santa Ana College School of Continuing Education (noncredit) whereby the credit side will accept the work of a noncredit student provided that the student fulfills the guidelines in the articulation agreement for the course.

1. Career Education Department
a. VBUS 124 Keyboarding I
b. VBUS 125 Keyboarding II
c. PRNT 557 Early Childhood Education: Principles and Practices
See your counselor for further information.

## STUDENT SERVICES AND SPECIAL NEEDS

## Assessment

Diagnostic placement tests are available at selected continuing education facilities for possible placement in the many available programs open to the students, such as English as a Second Language, Adult Basic Education, Learning Skills Program, and High School Subjects and GED.

## Counseling and Guidance

Each School of Continuing Education student is provided with the unique opportunity to benefit from an individualized counseling and guidance program designed to help students improve the quality of their lives.
Students seek counseling for many reasons, including planning of educational programs, obtaining of information about employment and job skills, resolving personal and family problems, examining aptitudes, interests, and achievement, finding new careers and vocational directions, and learning to cope with cultural differences and life in a new country. Students enrolling in courses leading toward a high school diploma must see a counselor upon registering each term. Counselors are available on a walk-in basis at selected facilities. For more information about counselors' schedules or to arrange an appointment, please call 714-241-5720 (Centennial Education Center), 714-564-6176 (Santa Ana College Adult Education Center) and 714-241-5820 (Remington Education Center).
The Student Transition Program (STP) was developed to help facilitate the process and bridge the transition from noncredit to credit classes at Santa Ana College. The program offers:

- classroom presentations
- application workshops
- financial aid workshops
- early registration to SAC


## Child Development

Child development program centers are available at the Centennial Education Center, Santa Ana College, CDC East Campus.
Arrangements may be made by calling 714-241-5739.

## Developmentally Disabled Adult Program

Rancho Santiago Community College District is committed to providing all adult members of the community an opportunity to realize individual potentials. The college also identifies and responds to members with special needs.
Continuing Education is sensitive and responsive to the needs of a vital segment of our community-the developmentally disabled adult. Instructors are assigned to special day centers and resource specialist centers and, in cooperation with staff, design individual education programs at selected locations.
Programs offered include Communication with the Deaf, basic education, independent living skills and employment preparation for the developmentally disabled adult.

## Scholarships

Several scholarships are made available to Continuing Education high school graduates. Selection of scholarship recipients will be based upon recommendation of teachers and counselors, financial need, academic excellence, attendance, and minimum enrollment standards.

## Santa Ana College Foundation Continuing Education

Leadership and Achievement Scholarship
The Santa Ana College Foundation sponsors a scholarship program which recognizes both academic achievement and leadership among students earning the high school diploma from the Santa Ana College School of Continuing Education.
The scholarship awards will be based on academic excellence and demonstrated leadership capabilities. The selection committee will consider the applicants' overall qualifications.
Students must enroll for a minimum of six credits.

## Minimum Eligibility Requirements:

1. Students who will graduate in the spring semester from Santa Ana College School of Continuing Education High School Program must complete three proficiencies and need no more than 20 credits to meet the graduation credit requirements at the time of scholarship filing date.
2. Complete a minimum of 20 credits in classes within the Rancho Santiago Community College District.
3. A 3.5 GPA or better for all units completed at Rancho Santiago Community College District. (Other high school grades will be considered for qualification; however, the 3.5 minimum GPA will only be computed on grades received in Rancho Santiago Community College District.)

## A. Attendance

A student may be dropped from the roster and required to re-enroll upon returning if the following absences occur:

1. Day Classes: two weeks, or five days in succession.
2. Evening Classes: four class meetings.
3. High School Subjects/Programmed Instruction: two weeks.

Note: Some courses may have different requirements of attendance. Please refer to program guidelines.

## B. Grading Standards/Procedures

| A | Superior | 4 grade points per NC unit |
| :--- | :--- | :--- |
| B | Above Average | 3 grade points per NC unit |
| C | Average | 2 grade points per NC unit |
| D | Less Than Satisfactory | 1 grade point per NC unit |
| F | Fail | 0 grade points (but counted in GPA) |
| P | Pass | 0 grade points |
| W | Withdrawal | 0 grade points |
| CIP | In Progress | 0 grade points |
| SP | Satisfactory Progress |  |
| NP | No Measurable Progress |  |
| COM Completed |  |  |

## C. Procedures for Student Complaints Regarding Grades

1. Education Code 76224 states:
"When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor for the course; and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetence, shall be final."
2. Procedure
a. Student shall meet with instructor to discuss grade.
b. If the issue is not resolved, and the student believes that the grade is based on mistake, fraud, bad faith or incompetency (EC 76224), an appeal in writing may be made to the Dean-Continuing Education.
Forms of written appeal may be found in the office of the Area Dean of Instruction and Student Services.
c. The student may be requested to set up an appointment with the Dean-Continuing Education to discuss the written complaint.
d. The Dean-Continuing Education will review the allegations and may consult with the instructor.
e. The Dean-Continuing Education will review the issue and will notify the student and instructor in writing of the decision.
f. The decision of the Dean-Continuing Education is final.

## D. Complaint Procedures for Students

Students may file a complaint when they believe they have been deprived of a right granted to students by the Board of Trustees in any of the policies or regulations of the Rancho Santiago Community College District.
The purpose of these complaint procedures is to resolve differences as fairly and expeditiously as possible while preserving the rights of students and staff members.

1. Definitions

Days: number of days refers to the days when the District offices are open.
Committee: Continuing Education Student Complaint Committee.
2. Procedure
a. Students shall first confer with the staff member who took action or made the ruling to which they object no later than ten days following the event which prompted the complaint.
b. The Area Dean of Instruction and Student Services or designee will assist the student in arranging an appointment with the staff member.
If the difference is not satisfactorily resolved, the student shall confer with the staff member's supervisor.
The Area Dean of Instruction and Student Services or designee will assist the student and staff member's supervisor.
c. If the complaint is unresolved, the student may file a written statement setting forth the nature of the complaint on the prescribed form with the Area Dean of Instruction and Student Services no later than ten days after conferring with the staff member's supervisor.
d. The complaint form shall be completed in full and shall include a full description of the complaint, times, dates and pertinent facts, and the remedy sought by the student.
A Student Complaint-Staff Response form will be sent to both the staff member and supervisor for completion.
e. The Area Dean of Instruction and Student Services shall forward the completed forms to the Continuing Education Student Complaint Committee chairperson for review and recommendation.
The committee shall have the power to make an appropriate investigation of the complaint and shall state the findings and make a recommendation.
f. If the complaint is sustained by the committee, it will recommend appropriate action for relief of the complaint and communicate this in writing to the staff member to whom the complaint was directed. If the staff member accepts the recommended action, and if the student who filed the complaint is satisfied with the action, the complaint shall be considered resolved and closed.
g. If the findings of the committee do not sustain the complaint, the committee shall communicate this finding in writing to the student who filed the complaint. If the student accepts this finding, the complaint shall be considered resolved and closed.
h. If no resolution of the complaint is obtained under (f.) or (g.) above, the Area Dean of Instruction and Student Services shall forward the complaint together with findings of the committee to the Chancellor for review and decision.
i. If this decision does not resolve the complaint in the opinion of the student, the Chancellor shall present the case to the Board of Trustees with the findings and recommendations. If the Board finds that the complaint is invalid, the Chancellor's recommendation shall stand in final resolution. If the Board finds that the complaint is valid, it shall instruct the Chancellor as to how the complaint shall be resolved, and the Chancellor shall implement the Board's decision.

## E. High School Diploma Students

1. Grade Reports: In-class progress is reported to the student in a number of ways. Tests are often given to show individual student progress. In high school credit classes, a progress form is issued to each student as credit is completed, and copies are given to the counselors and the appropriate Continuing Education office for recording.
2. Cumulative Records: The district will maintain cumulative records on each current high school diploma student. These records may contain pertinent information necessary to aid students in educational planning. Placement tests follow-up, interest inventories, and other data contained in the cumulative record will be available for review by the student upon request.
a. Student Record Confidentiality: Under the guidelines of the Family Educational Rights and Privacy Act of 1974, student records are confidential, and privacy is to be scrupulously maintained.
b. Right to Review and Challenge Records: Under the provisions of the U.S. Department of Health, Education and Welfare, students have the right to inspect and review any of the following files:

- admissions/records
- data processing
- financial aid
- placement
- veterans

After review and exploration, students may challenge any information relating to them if they believe information to be inaccurate, misleading, or otherwise in violation of their rights of privacy or other rights. Forms for challenge are available in the Area Dean of Instruction and Student Services office.
3. Residency
a. Definition: Course work taken in any part of the Rancho Santiago Community College District Continuing Education Program.
b. Requirements: Any student must fulfill a twenty semester unit period of residency within the above-stated definition in order to qualify for potential granting of the adult high school diploma from the Rancho Santiago Community College District.
4. Charge For Transcripts: The first two transcripts will be issued without charge. A charge will be assessed for each additional transcript after the first two.

## F. High School Petition Students

Secondary school students who wish to take course work in Rancho Santiago
Community College District Continuing Education and have it transferred to another school must present a completed Petition for Registration in order to be considered for admission. Failure to comply fully with all conditions listed on the form may result in the immediate revocation of the petition and dismissal from Continuing Education classes.

1. Grading and Transfer of Credits: Students must satisfactorily complete all course requirements including exams, projects, papers and attendances before credit or grades can be issued. Students are responsible for planning schedules and progress so as to earn credits in time to meet graduation deadlines in other school districts.
2. Books and Supplies: Students must provide textbooks and supplies required for the classes in which enrolled.
3. Conduct: Student conduct must be productive, responsible and courteous at all times. Unacceptable behavior may result in the immediate revocation of this petition and dismissal from class. Unacceptable behavior includes, but is not limited to, excessive talking; noncompliance with rules; failure to follow instructor directions; falsification of records; cheating or assisting others to cheat; destruction or theft of school property; disruption of classes; violence; or being under the influence of drugs or alcohol.

## G. High School Students Taking College Credit Classes for High School Diploma Credit

1. This program represents a cooperative venture between Rancho Santiago Community College District, neighboring high schools and the School of Continuing Education.
2. Students who are over eighteen years of age and have not graduated from high school may take Rancho Santiago Community College District courses for high school credit. Students will be admitted to those programs that have space available upon recommendation of the Area Dean-Continuing Education or designee.
3. Students under the age of eighteen who are high school students may receive high school or college credit for courses, but must also attend a minimum day at the high school. Students will be admitted to those programs that have space available upon recommendation of the high school principal or designee.
4. Repeating a course already passed will result in a credit-only grade-not a letter grade.
5. If a student elects to receive high school credit for work taken at the college, the decision must be made prior to registration. College credit for that work may not be received at a later time.
6. Enrollment in, and completion of, course work in the Rancho Santiago Community College District credit division can also satisfy the residency requirement of the Continuing Education High School Diploma Program.
H. Special Rules, Regulations and Student Obligations Because of special program characteristics, the noncredit programs must adhere to special rules, regulations, and student obligation beyond the Standard Guidelines for Student Conduct adopted by the Rancho Santiago Community College District. Students enrolled in any of the following programs are obligated to perform within those special program guidelines in order to maintain class attendance: Apprenticeship; Service-Employment-Redevelopment (SER); and any other community-based organization or governmental agency with which the Rancho Santiago Community College District cooperates in a program offering.

## I. Family Education Rights and Privacy

As required under the provisions of the Family Education Rights and Privacy Act of 1974, the Rancho Santiago Community College District will make public without student consent only certain directory information. This information consists of the following: a student's name; city of residence; a major field; participation in officially recognized activities and sports; weight, height, and age if a member of an athletic team; dates of attendance; degree and awards received; and the most recent previous educational institution or agency attended by the student.
A student may request the Admissions and Records Office to withhold this information. Such request must be in writing and submitted each semester.

## J. Right to Review and Challenge Records

Students have the right to inspect and review any of the following files which relate directly to them: 1) admissions/records; 2) data processing; 3) financial aid; 4) placement; 5) veterans; and 6) division/ department, if such files are maintained as official files rather than individual files. Request forms are available in the office of the Area Dean of Instruction and Student Services.
After review and explanation, students may challenge any information relating to them if they believe the information to be inaccurate, misleading, or otherwise in violation of their rights of privacy or other rights. Any student wishing to exercise this right of challenge shall inform the Area Dean of Instruction and Student Services, or the Dean-Admissions and Records.
If students wish, copies of materials contained in the files subject to their review will be provided at a cost of $\$ 1$ for the first copy of any document and .10 for each additional copy.
A log or record of persons or organizations requesting information or receiving information on the student will be maintained in the area where the records are stored.
District staff or other professionals who have a legitimate educational interest such as counseling and carrying out the normal operations of the educational program have access to student records.
Any student has the right to file complaint with the U.S. Department of Health, Education and Welfare concerning alleged failure of the institution to comply with provisions above or Section 438 of the General Provision.

## K. Use of Public School Facilities for Adult Classes

1. Alcoholic Beverages and Controlled Substances: Both by policies instituted by local Boards of Education (Garden Grove Unified School District, Orange Unified School District, Rancho Santiago Community College District and Santa Ana Unified School District) and California State Law specifically prohibit possession of alcoholic beverages and controlled substances on school premises at any time, by any person, regardless of age. Regulations also prohibit use of alcoholic beverages at school events, whether on or off the campus, or the appearance at school events while under the influence of alcoholic beverages and/or controlled substances. The penalty for violation of these regulations is immediate suspension from school, followed by expulsion, if imposed by the Board of Trustees. Additional penalties may be imposed by law enforcement agencies.
2. Smoking: Provisions of the Uniform Fire Code, Article 29, Section 29.06, Smoking Activity on School Property, state:
"It shall be unlawful for any person or persons to engage in any smoking activity or to possess any flaming or glowing object or cause to be lighted any substance in any classroom or on school property at any time except in areas authorized by the local Board of Education."
The only areas authorized for smoking are outside the school buildings. There is to be No Smoking by anyone in any of the classrooms at any time. Proper containers are provided in the smoking areas for disposal of cigarettes.
3. Food and Beverages: Food and beverages are not to be brought into the classrooms at any time. Proper containers are provided for disposal of trash in designated areas.

## NONCREDIT INSTRUCTIONAL PROGRAMS AND COURSES

Continuing Education courses are listed by subject on the following pages. Course numbers are listed at the beginning of each course title.
Open Entry/Open Exit courses are noted in the course descriptions. Students may enroll at any time in these courses and begin class immediately. Students progress at their own rate and may exit from the class at any time upon satisfactory completion of the required work.
In other courses, class hours refer to the number of hours that the
class is scheduled to meet per week during a term. All credits listed are high school credits. In traditional courses, students earn credits by satisfactorily completing the course. In open entry/open exit courses, students earn credits by meeting individual competency-based objectives.
Some noncredit programs offer a sequence of courses leading to a certificate. The class schedule should be consulted for current offerings.

## DIPLOMA/CAREER DEVELOPMENT \& COLLEGE PREPARATION CERTIFICATES

|  | Page |
| :--- | :---: |
| ADULT SECONDARY EDUCATION PROGRAM: |  |
| Adult High School Diploma Program | 344 |
| Secondary Education (GED Test Preparation) Certificate <br> of Completion | 344 |
| Transition to College Certificate of Competency | 344 |
| ADULT BASIC EDUCATION PROGRAM: | 344 |
| Adult Basic Education Certificate of Competency <br> Adult Basic Education/Adult Secondary Education <br> Reading Proficiency Certificate of Competency | 344 |
| Adult Basic Education/Adult Secondary Education <br> Writing Proficiency Certificate of Competency | 345 |
| Adult Basic Education/Adult Secondary Education Math <br> Proficiency Certificate of Competency | 345 |
| CAREER EDUCATION PROGRAM (SHORT-TERM <br> VOCATIONAL): | 345 |
| Childcare Workers Certificate of Completion <br> Computer Maintenance And Repair Workers Certificate <br> of Completion | 345 |
| Customer Service Representative Certificate of <br> Completion | 346 |
| Executive Secretary/Administrative Assistant Certificate <br> of Completion | 346 |
| General Office Clerk Certificate of Completion | 346 |
| Paraprofessional Mental Health Worker Certificate of <br> Completion <br> Vocational Construction Technology Certificate <br> of Completion | 346 |

## ADULT SECONDARY EDUCATION (ASE)

Students who complete the SAC SCE Adult Secondary Education High School Subjects or GED Programs will demonstrate the ability to apply essential grammar, reading, writing, math, and social/ natural science concepts when transferring to college, entering the workforce, or for personal success.

Student Learning Outcome(s):
Students who complete the SAC SCE Adult Secondary Education High School Subjects or GED Programs will demonstrate the ability to apply essential grammar, reading, writing, math, and social/ natural science concepts when transferring to college, entering the workforce, or for personal success.

## ADULT HIGH SCHOOL DIPLOMA PROGRAM (31594)

The sequence of courses in the High School Subjects and Adult Basic Education programs is designed to provide a strong foundation of basic skills ranging from elementary levels through secondary subjects, with the purpose of preparing students to earn a high school diploma, obtain employment, pursue vocational training and better job opportunities, and to be prepared to continue into college credit level programs.

Core Courses: Hours:
HSS English (HSENG), HSS Reading (HSREAD)
HSS Math (HSMTH) 20

| HSS Natural Sciences (HSSCI) | 20 |
| :--- | :--- |


| HSS Social Sciences (HSSOC) | 30 |
| :--- | :--- |


| HSS Arts (HSART) | 10 |
| :--- | :--- |

Electives
40
Total
160

## Electives:

Adult Basic Education 009, 018, 023, 024, 025, 044, 046; Home
Economics 520; Health \& Safety 877; HSS General 010, 032, 144, 229, 770; Study Skills 221, 222; English 040, 065, 066, 067, 068, 096, 098; Reading 089, 093, 094; Math 140, 154, 155, 158, 159, 163, 164, 165, 166, $167,167,172,173$; Science $170,171,180,185,186,188,189,190,191$, 192, 193, 196, 197, 198; Social Science 215, 223,224,225, 228, 231, 232; Arts 500, 601, 828, 837; Leadership 090, 092, 093, 094; Other 740, 742, 743, 744, 749, 875.

## SECONDARY EDUCATION (GED TEST PREPARATION) CERTIFICATE OF COMPETENCY (24264)

Courses in Adult Basic Education lead to the GED Test Preparation class, which prepares students for the reading, writing, and math skills necessary for the achievement of the official GED Certificate. The GED Certificate is a nationally recognized certificate which is equivalent to a high school diploma and prepares students for other higher education.
To obtain this certificate, take two courses.
Core Courses:
HSGED 031 GED Test Preparation
Choose 1:
ABE 023 Adult Basic Education Reading
ABE 024 Adult Basic Education Writing
ABE 025 Adult Basic Education Math

## TRANSITION TO COLLEGE CERTIFICATE OF COMPETENCY (35217)

The Transition to College certificate consists of courses to help students successfully prepare to progress in a career path or undertake degree applicable or non-degree-applicable credit courses in addition to preparing student with an orientation to college course.

To obtain this certificate, take two courses.
Core Courses:
HSS 770 Orientation to College
Choose 1:
HSENG 084 Composition 2
HSREAD 089 Reading Proficiency Development
HSMTH 164 Algebra 1B

## ADULT BASIC EDUCATION (ABE)

Students who complete the SAC SCE Adult Basic Education (ABE)
Program will demonstrate the ability to apply essential reading, writing, and math concepts in either English or Spanish when transferring to High School Subjects, GED, entering the workforce, or for personal success.
Student Learning Outcome(s):
Students who complete the SAC SCE Adult Basic Education (ABE) Program will demonstrate the ability to apply essential reading, writing, and math concepts in either English or Spanish when transferring to High School Subjects, GED, entering the workforce, or for personal success.

## ADULT BASIC EDUCATION CERTIFICATE OF COMPETENCY (33189)

This certificate provides instruction for students to develop basic reading, writing, and math skills necessary to succeed in high school courses, GED preparation, and college courses. This certificate will provide valuable data on student success as ABE students transfer through programs. This certificate supports the college mission by providing a pathway to support improved language skills and lifelong intellectual pursuits.

To obtain this certificate, take three courses.
Core Courses:

| ABE 023 | Adult Basic Education Reading |
| :--- | :--- |
| ABE 024 | Adult Basic Education Writing |
| ABE 025 | Adult Basic Education Math |

## ADULT BASIC EDUCATION/ADULT SECONDARY EDUCATION READING PROFICIENCY CERTIFICATE OF COMPETENCY (33452)

This combination of courses is designed to prepare students for higher level reading skills used in high school courses, GED preparation, and college courses.
To obtain this certificate, take two courses.

## Core Courses:

ABE 023 Adult Basic Education Reading
Choose 1:
HSRDG 089 Reading Proficiency Development
HSRDG 093 Building Reading Skills 1
HSRDG 094 Building Reading Skills 2

## ADULT BASIC EDUCATION/ADULT SECONDARY EDUCATION WRITING PROFICIENCY CERTIFICATE OF COMPETENCY (33187)

This combination of courses is designed to prepare students for higher level writing skills used in high school courses, GED preparation, and college courses.
To obtain this certificate, take two courses.

## Core Courses:

| ABE 024 | Adult Basic Education Writing |
| :--- | :--- |
| HSENG 083 | Composition 1 |

## ADULT BASIC EDUCATION/ADULT SECONDARY EDUCATION MATH PROFICIENCY CERTIFICATE OF COMPETENCY (33188)

This combination of courses is designed to prepare students for higher level math skills used in high school courses, GED preparation, and college courses.

To obtain this certificate, take two courses.
Core Courses:

| ABE 025 | Adult Basic Education Math |
| :--- | :--- |
| HSMTH 159 | Math Fundamentals 2 |

## CAREER EDUCATION

Students who complete the SAC SCE Career and Technical Education Program will demonstrate the professionalism, technical, computer, and soft skills needed to obtain a new job or to improve their skills in a current job.

## CHILDCARE WORKERS CERTIFICATE OF COMPLETION (24362)

This series of open entry/open exit courses provides students with knowledge about the care and development of infants, toddlers, and pre-school children for family childcare providers. Students will learn about health information required for licensing and skills necessary for successful operation of a childcare business. In Employability Skills students learn soft skills for those who would prefer to be employed by a childcare business.

Complete ALL of the following courses.

| PRNT 558 | Early Childhood Care and Development for Family <br> Child Care Providers |
| :--- | :--- |
| PRNT 562 | Health Education for Family Day Care Providers |
| VBUS 400 | Employability Skills <br> - or - |
| ESL 520 | VESL: English for Work 2 |
| VBUS 559 | Business Practices in Family Day Care |
| VBUS 590 | Introduction on How to Start a Small Business |

## COMPUTER MAINTENANCE AND REPAIR WORKERS CERTIFICATE OF COMPLETION (24384)

This series of courses provides students with skills in maintenance, repair, upgrading, and networking of personal computers. The open-entry/open-exit instructional format emphasizes functional operations of hardware and software components, hands-on experience with upgrading and repair of computers, setting up home and small office networks, and troubleshooting most technical problems. Students will receive five High School elective credits upon completion of each course.

Complete ALL of the following courses.

| VBUS 450 | Hardware and Software A+ Preparation, Review, <br> Practice |
| :--- | :--- |
| VBUS 574 | Computer Basics: Hardware and Software |
| VBUS 576 | Computer Basics: Systems and Networking Essentials <br> - or - |

ESL $520 \quad$ VESL: English for Work 2

## CUSTOMER SERVICE REPRESENTATIVE CERTIFICATE OF COMPLETION (24364)

This series of courses prepares students for customer service positions in a wide variety of business fields. The program provides an open entry/open exit instructional format that allows students to attain skill development to interface directly with customers as the company representative in identifying customer needs, providing appropriate service, and in resolving special problems that may arise. Focus is on interpersonal and customer services in the workplace, as well as on upgrading technological competence. Students will be prepared to work as commercial or residential service representatives in major department stores, collection agencies, credit bureaus, airlines, travel agencies, medical insurance agencies, public utilities, and telephone answering services.

Complete ALL of the following courses.

| VBUS 124 | Introduction to Keyboarding I |
| :--- | :--- |
| VBUS 243 | Introduction to Customer Service Skills |
| VBUS 258 | Navigating the Internet |
| VBUS 259 | Orientation to Computers |
| VBUS 260 | Introduction to Word Processing Using MS Word |
| VBUS 400 | Employability Skills |
|  | - or - |
| ESL 520 | VESL: English for Work 2 |

## EXECUTIVE SECRETARY/ADMINISTRATIVE ASSISTANT CERTIFICATE OF COMPLETION (24390)

This series of courses prepares students for in-depth training in executive secretary/administrative assistant positions. The open-entry/ open-exit, competency-based format promotes success in a high employment occupational field. This certificate program develops skills in research, report and correspondence preparation, advanced computer software applications, database management, interactive presentations, customer service and telephone techniques, and other advanced office procedures.

Complete ALL of the following courses.

| VBUS 125 | Introduction to Keyboarding II |
| :--- | :--- |
| VBUS 244 | Introduction to Databases Using Microsoft Access |
| VBUS 245 | Introduction to Desktop Publishing Using <br> Microsoft Publisher |
| VBUS 304 | Introduction to Electronic Presentations Using PowerPoint |
| VBUS 400 | Employability Skills |
|  | - or - |
| ESL 520 | VESL: English for Work 2 |

## general office CLERK CERTIFICATE OF COMPLETION (24365)

This series of courses prepares students for entry-level general office clerk positions in a business environment. This program provides an open-entry/open-exit instructional format that allows students to attain knowledge of basic level office concepts, procedures, and technology commonly used in an office setting. Students learn introduction to keyboarding, computer software applications, general office skills, customer service and telephone techniques, and soft skills. This certificate provides the foundation for preparing students in entry level jobs and careers in the business environment.

Complete ALL of the following courses.

| VBUS 118 | Introduction to Windows |
| :--- | :--- |
| VBUS 124 | Introduction to Keyboarding I |
| VBUS 258 | Navigating the Internet |
| VBUS 260 | Introduction to Word Processing Using MS Word |
| VBUS 262 | Introduction to Spreadsheets Using MS Excel |
| VBUS 400 | Employability Skills |
|  | - or - |
| ESL 520 | VESL: English for Work 2 |

## PARAPROFESSIONAL MENTAL HEALTH WORKER CERTIFICATE OF COMPLETION (24358)

This series of courses provides students with the basic skills to gain employment as a Paraprofessional Mental Health Worker. Students acquire knowledge about the treatment of psychological and behavioral health disorders and the philosophy of delivery of mental health services to improve entry into this field. The certificate program in an open-entry/open-exit environment develops competency for vocational success that allows students to attain skill development in basic delivery of services, documentation and reporting, introduction to human development, principles of case management, working with families, and employability.
Complete ALL of the following courses.
VBUS 400 Employability Skills

| VHLTH 895 | Paraprofessional Mental Health Worker I |
| :--- | :--- |
| VHLTH 896 | Paraprofessional Mental Health Worker II |
| VHLTH 897 | Paraprofessional Mental Health Worker III |
| VOCATIONAL CONSTRUCTION TECHNOLOGY |  |
| CERTIFICATE OF COMPLETION (32681) |  |

This series of courses will provide students with the skills to move towards employment as an apprentice in various areas which may include: General and commercial contracting and/or property maintenance. In addition to getting hands-on instruction in construction, students will receive classroom instruction in math, Occupational Safety and Health Administration (OSHA) safety standards, and employability skills. Students will receive 5 High School elective credits upon completion of each course.

Complete ALL of the following courses.

| VCNST 610 | Vocational Construction Technology Module I |
| :--- | :--- |
| VCNST 620 | Vocational Construction Technology Module II |
| VBUS 400 | Employability Skills |

## ENGLISH AS A SECOND LANGUAGE (ESL)

Upon completion of the SAC SCE ESL program, students will demonstrate increased proficiency in the listening, speaking, reading, writing, and critical thinking skills necessary to further their education, enter the workforce, and actively participate in the community.

## Student Learning Outcome(s):

Upon completion of the SAC SCE ESL program, students will demonstrate increased proficiency in the listening, speaking, reading, writing, and critical thinking skills necessary to further their education, enter the workforce, and actively participate in the community.

## ACADEMIC ESL CERTIFICATES

## ACADEMIC ESL BEGINNING CERTIFICATE OF COMPETENCY (30785)

This combination of courses is designed to help students prepare to successfully transition to Career Education, Adult Basic Education (ABE) courses, GED Test Preparation or High School Equivalency Test Preparation courses, High School Subjects courses, and college courses.

To obtain this certificate, take two courses.
Choose 1:

| ESL 703 | Academic English as a Second Language Beginning 3 |
| :--- | :--- |
| ESL 704 | Academic Beginning A |

Choose 1:
ESL 705 Academic Beginning B
ESL 711 Academic English as a Second Language Intermediate 1

## ACADEMIC ESL INTERMEDIATE CERTIFICATE OF COMPETENCY (30788)

This combination of courses is designed to help students prepare to successfully transition to Career Education, Adult Basic Education (ABE) courses, GED Test Preparation or High School Equivalency Test Preparation courses, High School Subjects courses, and college courses.
To obtain this certificate, take two courses.
Choose 1:
ESL 706 Academic Intermediate A
ESL 712 Academic English as a Second Language Intermediate 2
Choose 1:
ESL 707 Academic Intermediate B
ESL 713 Academic English as a Second Language Intermediate 3

## ACADEMIC ESL CAPSTONE CERTIFICATE OF COMPETENCY (37199)

This capstone certificate is designed to demonstrate the students' accumulated development and advanced knowledge to successfully transition to Career Technical Education (CTE), Adult Basic Education (ABE) courses, GED Test Preparation or High School Equivalency Test Preparation courses, High School Subjects courses, and college courses.
To obtain this certificate, take two courses. Choose 1:
ESL 706 Academic Intermediate A

| ESL 707 | Academic Intermediate B |
| :--- | :--- |
| ESL 712 | Academic English as a Second Language Intermediate 2 |

ESL 713 Academic English as a Second Language Intermediate 3
Choose 1:

| ABE 023 | Adult Basic Education Reading |
| :--- | :--- |
| ABE 024 | Adult Basic Education Writing |
| ESL 491 | Advanced Writing and Grammar Review |
| ESL 720 | ESL Transition to College Class |
| HSGED 031 | GED Test Preparation |
| HSRDG 089 Reading Proficiency Development |  |
| HSRDG 093 | Building Reading Skills 1 |
| HSS 031 | High School Equivalency Test Preparation |
| LRN 750 | Intensive Writing and Grammar |
| VBUS 400 | Employability Skills |

## ESL TRANSITION TO ADULT SECONDARY EDUCATION

 (ASE) CERTIFICATE OF COMPETENCY (37200)This ESL transition certificate is designed to demonstrate the students' accumulated development and advanced knowledge to successfully transition to Adult Secondary Education (ASE) courses.
To obtain this certificate, two courses are required: Take:

ESL 491 Advanced Writing and Grammar Review
Choose 1:
HSRDG 089 Reading Proficiency Development
HSRDG 093 Building Reading Skills 1
VBUS 258 Navigating the Internet
VBUS 260 Introduction to Word Processing Using MS Word

## ESL CORE CERTIFICATES

## ESL CORE LITERACY CERTIFICATE OF COMPETENCY (37093)

This combination of courses is designed to help students develop adequate literacy skills to succeed in the core ESL courses that follow. In this series of courses, students will learn to function at a basic literacy level in reading, writing, listening, and speaking in both English and in their native language.
To obtain this certificate, take two courses.
Choose 1:
ESL 300 Literacy
ESL 399 ESL Literacy
Choose 1:
ABE 111 Spanish Literacy for Adults
ABE 112 Beginning Spanish Literacy
ABE 113 Intermediate Spanish Literacy
ABE 114 Advanced Spanish Literacy
ESL CORE BEGINNING CERTIFICATE OF COMPETENCY (36618)

This combination of courses is designed to help students begin to communicate in some of the everyday life situations they will encounter at home, at work, at school, and in the community.
To obtain this certificate, take three courses.

## Choose 2:

ESL 300 Literacy
ESL 301 Beginning Low
ESL 399 ESL Literacy
ESL 401 ESL/Family Literacy Beginning ESL 1
ESL 405 ESL/Family Literacy Beginning ESL 2
ESL 410 Beginning ESL 1
ESL 420 Beginning ESL 2
ESL 701 Academic English as a Second Language Beginning 1
ESL 702 Academic English as a Second Language Beginning 2
Choose 1:
ESL 302 Beginning High
ESL 407 ESL/Family Literacy Beginning 3
ESL 430 Beginning ESL 3
ESL CORE INTERMEDIATE CERTIFICATE OF COMPETENCY
(36828)

This combination of intermediate-level courses is designed to help students communicate in many of the everyday life situations they will encounter at home, at work, at school, and in the community.
To obtain this certificate, take two courses.

## Choose 1:

ESL 303 Intermediate Low
ESL 408 ESL/Family Literacy Intermediate 1
ESL 460 Intermediate ESL 1
ESL 704 Academic Beginning A
Choose 1:
ESL 304 Intermediate High
ESL 409 ESL/Family Literacy Intermediate 2
ESL 470 Intermediate ESL 2
ESL 480 Intermediate ESL 3
ESL 706 Academic Intermediate A
ESL 707 Academic Intermediate B

## ESL CORE ADVANCED CERTIFICATE OF COMPETENCY (36829)

This combination of two advanced-level courses is designed to help students communicate in most of the everyday life situations they will encounter at home, at school, at work and in the community. The courses emphasize reading and writing.
To obtain this certificate, take two courses.

| ESL 305 | Advanced Low |
| :---: | :---: |
| ESL 306 | Advanced High |
| ESL 706 | Academic Intermediate A |
| ESL 707 | Academic Intermediate B |
| ESL CORE | CAPSTONE |
| To obtain th Choose 3: | is certificate, take four courses. |
| ESL 304 | Intermediate High |
| ESL 305 | Advanced Low |
| ESL 306 | Advanced High |
| ESL 460 | Intermediate ESL 1 |
| ESL 470 | Intermediate ESL 2 |
| ESL 480 | Intermediate ESL 3 |
| ESL 705 | Academic Beginning $B$ |
| ESL 706 | Academic Intermediate A |
| ESL 707 | Academic Intermediate B |
| Choose 1: |  |
| ABE 023 | Adult Basic Education Reading |
| ABE 024 | Adult Basic Education Writing |
| ESL 491 | Advanced Writing and Grammar Review |
| ESL 720 | ESL Transition to College Class |
| HSGED 031 | GED Test Preparation |
| HSRDG 093 | Building Reading Skills 1 |
| HSRDG 089 | Reading Proficiency Development |
| HSS 031 | High School Equivalency Test Preparation |
| LRN 750 | Intensive Writing and Grammar |
| VBUS 400 | Employability Skills |
|  | SL SUPPORT COURSE CERTIFICATES |

## ESL ENHANCED WRITING CAPSTONE CERTIFICATE OF COMPETENCY (36835)

This combination of courses is designed to help students quickly improve their writing abilities in English by focusing on writing and grammar.
To obtain this certificate, take three courses.

| ESL 394 | ESL Writing A |
| :--- | :--- |
| ESL 395 | ESL Writing B |
| ESL 488 | Basic Writing |
| ESL 489 | Intermediate Writing |
| ESL 490 | Advanced Writing and Grammar |

## ESL ENHANCED SPEAKING CAPSTONE CERTIFICATE OF COMPETENCY (37094)

This combination of courses is designed to help students quickly improve their speaking abilities in English by focusing on pronunciation and conversation.
To obtain this certificate, take two courses.
Choose 1:

| ESL 570 | Conversation 1 |
| :--- | :--- |
| ESL 580 | Conversation 2 |

Choose 1:
ESL 130 Topics in English as a Second Language
ESL 398 ESL Community Learning Center
ESL 530 American English Pronunciation
ESL ENHANCED CIVICS CERTIFICATE OF COMPETENCY (37095)

This combination of courses is designed to help students learn more about civics involvement opportunities, prepare for U.S. Citizenship, and participate in the community.
To obtain this certificate, take two courses.
Choose 2:

| ESL 120 | ESL Civics |
| :--- | :--- |
| ESL 130 | Topics in English as a Second Language |
| ESL 392 | Writing and Computers: Developing a School Publication |
| ESL 398 | ESL Community Learning Center |
|  | VOCATIONAL ESL CERTIFICATES |
| VOCATIONAL ESL CERTIFICATE OF COMPETENCY (30782) |  |

This combination of courses is designed to help students communicate successfully in an English speaking workplace.
To obtain this certificate, take two courses.
ESL $510 \quad$ VESL: English for Work 1

ESL $520 \quad$ VESL: English for Work 2

## VOCATIONAL ESL ENHANCED CERTIFICATE OF COMPETENCY (37238)

This combination of courses is designed to help students communicate successfully in an English-speaking workplace and includes the development of writing and/or computer skills.
To obtain this certificate, take two courses.
Choose 1:

| ESL 510 | VESL: English for Work 1 |
| :--- | :--- |
| ESL 520 | VESL: English for Work 2 |

Choose 1:

| ESL 130 | Topics in English as a Second Language |
| :--- | :--- |
| ESL 394 | ESL Writing A |
| ESL 398 | ESL Community Learning Center |
| ESL 488 | Basic Writing |

## ADULT BASIC EDUCATION (ABE)

## Adult Basic Education 018

Leadership Basics, Part 2
Credit(s): $0 \quad$ Class Hours: 72
Students will increase their mastery of basic skills through intensive, interactive, student-centered activities designed to give hands-on training and experience in aspects of directing and facilitating a conference. This is the second of a two-part leadership course in which students apply leadership techniques in the workplace, home, school, and the community. Five high school elective credits may be given for completing either Adult Basic Education 018 or High School Subjects 092. Open Entry/Open Exit.

## Adult Basic Education 023

## Adult Basic Education Reading

Credit(s): $0 \quad$ Class Hours: 72
Instructs students in basic reading skills. Prepares students to take High School Subjects courses, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. Five High School elective credits may be granted for successful completion of this class. Open Entry/Open Exit.

## Adult Basic Education 024

## Adult Basic Education Writing

Credit(s): $0 \quad$ Class Hours: 72
Instructs students in basic writing skills. Prepares students to take High School Subjects courses, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. Five High School elective credits may be granted for successful completion of this class. Open Entry/Open Exit.

## Adult Basic Education 025

## Adult Basic Education Math

## Credit(s): $0 \quad$ Class Hours: 72

Instructs students in basic math skills. Prepares students to take High School Subjects courses, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. Five High School elective credits may be granted for successful completion of this class. Open Entry/Open Exit.

## Adult Basic Education 027

Academic Vocabulary for Language Arts
Credit(s): $0 \quad$ Class Hours: 15
Instructs and familiarizes entry-level students in academic vocabulary for language arts. Prepares students to take high school subjects in language arts, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. One high school elective credit may be granted for successful completion of this class. Open Entry/ Open Exit.

## Adult Basic Education 028

## Academic Vocabulary for Math

Credit(s): $0 \quad$ Class Hours: 15
Instructs and familiarizes entry-level students in academic vocabulary for math courses. Prepares students to take high school subjects in math, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. One high school elective credit may be granted for successful completion of this class. Open Entry/ Open Exit.

## Adult Basic Education 029 <br> Academic Vocabulary for Science <br> Credit(s): $0 \quad$ Class Hours: 15

Instructs and familiarizes entry-level students in academic vocabulary for science courses. Prepares students to take high school subjects in science, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. One high school elective credit may be granted for successful completion of this class. Open Entry/ Open Exit.

## Adult Basic Education 030 <br> Academic Vocabulary for Social Studies <br> Credit(s): $0 \quad$ Class Hours: 15

Instructs and familiarizes entry-level students in academic vocabulary for courses in social studies. Prepares students to take high school subjects in social studies, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/or placement by counselor assessment. One high school elective credit may be granted for successful completion of this class. Open Entry/Open Exit.

## Adult Basic Education 031 <br> Academic Vocabulary for Technology <br> Credit(s): $0 \quad$ Class Hours: 15

Instructs and familiarizes entry-level students in academic vocabulary for technology courses. Prepares students to take high school subjects using technology, job training, GED Preparation, or college credit classes. Recommended for Intermediate ESL 2 students or above and/ or placement by counselor assessment. One high school elective credit may be granted for successful completion of this class. Open Entry/ Open Exit.

## Adult Basic Education 044 Leadership Basics Part 1

Credit(s): $0 \quad$ Class Hours: 72
Provides the first of a two-part leadership course in which students apply leadership techniques in the workplace, home, school, and the community. Students will increase their mastery of basic skills through intensive, interactive, student-centered activities. The course requires participation in the four areas of language acquisition: reading, writing, listening, and speaking. Recommended for Adult Basic Education and Education as a Second Language Intermediate 1, 2, or 3 or above students. Open Entry/Open Exit.

## Adult Basic Education 046

Attitudes for Success
Credit(s): $0 \quad$ Class Hours: 72
Provides students with classroom discussion and information about attitudes and behaviors that influence success in their personal, educational and career development.

## Adult Basic Education 111 <br> Spanish Literacy for Adults

Credit(s): $0 \quad$ Class Hours: 480
Assists native Spanish-speaking students in acquiring literacy in Spanish in order to facilitate the transition to beginning Education as a Second Language,Adult Basic Education and high school equivalency courses. Focuses on basic reading and writing skills, including phonics decoding and encoding skills, as well as classroom, parenting and community coping skills. Recommended for non-literate native speakers of Spanish. Taught in Spanish. Open Entry/Open Exit.

## Adult Basic Education 112

## Beginning Spanish Literacy

Credit（s）： $0 \quad$ Class Hours： 160
Assists students in acquiring literacy skills in Spanish to facilitate their transition to Intermediate Spanish Literacy，Education as a Second Language，Adult Basic Education，high school diploma，and high school equivalency courses．Focuses on phonetic decoding and encoding skills，basic reading and writing skills，as well as classroom， parenting and community coping skills．Taught in Spanish．Open entry／ open exit．Open Entry／Open Exit．

## Adult Basic Education 113 <br> Intermediate Spanish Literacy <br> Credit（s）： $0 \quad$ Class Hours： 160

Assists students in acquiring literacy in Spanish to facilitate the transition to Advanced Spanish Literacy，Education as a Second Language and Adult Basic Education equivalency courses．Focuses on basic reading and writing skills，including phonics decoding and encoding skills，as well as classroom，parenting and community coping skills．Taught in Spanish．Open entry／open exit．Open Entry／Open Exit．

## Adult Basic Education 114 <br> Advanced Spanish Literacy

Credit（s）： $0 \quad$ Class Hours： 160
Assists students in acquiring literacy in Spanish in order to facilitate the transition to Education as a Second Language，Adult Basic
Education，high school diploma，and high school equivalency courses．
Focuses on higher level reading and writing skills，including history and mathematics．Taught in Spanish．Open entry／open exit．Open Entry／Open Exit．

## Adult Basic Education 137 <br> Topics in Adult Basic Education

Credit（s）：0－5 Class Hours：3－216
A specialized course on topics related to current needs of Adult Basic Education students．Open Entry／Open Exit．

## CITIZENSHIP（CTZN）

## Citizenship 020

Citizenship
Credit（s）： $0 \quad$ Class Hours： 72
Provides basic knowledge and preparation for the United States citizenship process and naturalization test including language usage within the context of American history，government，and civics．Open Entry／Open Exit．

## COUNSELING（CNSL）

Counseling 303

## Educational and Career Assessment

Credit（s）： $0 \quad$ Class Hours： 3
Assists students with appropriate educational placement and／or an overview of student services，career and academic guidance information that is available in Continuing Education as a result of individual and group testing．Open Entry／Open Exit．

## Counseling 305

Orientation to College
Credit（s）： $0 \quad$ Class Hours： 8
Introduces college services and programs．Identifies and explores programs and services designed to assist students entering college credit courses． 1.5 credits may be awarded．（Same as HSS770）．Open Entry／Open Exit．

## ENGLISH AS A SECOND LANGUAGE（ESL）

## English As a Second Language 120 <br> ESL Civics

Credit（s）： $0 \quad$ Class Hours： 144
Provides development in listening，speaking，reading，and writing English within the context of history and government in preparation for the United States Citizenship examination．Recommended for students in Beginning Education as a Second Language 3 and above． Open Entry／Open Exit．

## English As a Second Language 130 <br> Topics in English As a Second Language

Credit（s）： $0 \quad$ Class Hours：4－216
A specialized course on topics related to current needs of English as a Second Language students．Open Entry／Open Exit．

## English As a Second Language 300

## Literacy

Credit（s）： $0 \quad$ Class Hours： 216
The first of seven integrated Education as a Second Language core courses．This is an ESL class for students who are not yet literate in English．Emphasizes communicative competence and basic functional language skills to meet immediate communication needs，including verbal and nonverbal strategies．Develops the ability of second language learners to recognize and read letters and numbers，copy and produce the alphabet，numerals，and simple personal information． Open Entry／Open Exit．

## English As a Second Language 301

## Beginning Low

Credit（s）： $0 \quad$ Class Hours： 216
The second of seven integrated Education as a Second Language core courses．For students with some literacy in English．Emphasizes language skills in everyday situations and immediate needs of adult English learners，focusing on listening comprehension and beginning oral production of simple conversations，reading of practiced words and phrases，and completing simple writing tasks in the context of school，work and community．Open Entry／Open Exit．

## English As a Second Language 302 Beginning High

## Credit（s）： $0 \quad$ Class Hours： 216

The third of seven integrated Education as a Second Language core courses．Emphasizes comprehending and participating in simple conversations，communicating survival needs，and reading and performing written tasks in the context of college and career readiness and civic participation．Open Entry／Open Exit．

## English As a Second Language 303 <br> Intermediate Low

Credit（s）： $0 \quad$ Class Hours： 216
The fourth of seven integrated Education as a Second Language core courses．Emphasizes comprehending and participating in conversations，communicating needs and opinions，reading from academic and informational text，and performing written tasks． Exposes students to authentic spoken and written content，to prepare students for college，the workplace，and civic participation．Open Entry／Open Exit．

English As a Second Language 304

## Intermediate High

Credit(s): $0 \quad$ Class Hours: 216
The fifth of seven integrated Education as a Second Language core courses. Emphasizes expanding oral language, critical and creative thinking skills in English, and reading comprehension of authentic academic and informational text. Written tasks focus on academic and workforce preparation, as well as increased community and civic participation. Five high school elective credits may be granted. Open Entry/Open Exit.

## English As a Second Language 305

## Advanced Low

Credit(s): $0 \quad$ Class Hours: 216
The sixth of seven integrated Education as a Second Language core courses. Emphasizes higher-level language skills, reading passages with increased understanding and analysis, and improving academic and informational writing skills. Prepares students for academic and workforce success and increased civic participation. Five high school elective credits may be granted. Open-entry/open-exit. Open Entry/ Open Exit.

## English As a Second Language 306

## Advanced High

Credit(s): $0 \quad$ Class Hours: 216
The seventh of seven integrated Education as a Second Language core courses. Prepares students for academic and workforce success and civic participation. Emphasizes high-level language skills,
conversations that convey complex thought patterns, and reading and writing strategies. This course uses authentic academic, informational and technical reading materials that expand the use of creative and critical thinking skills. Five high school elective credits may be granted. Open Entry/Open Exit.

## English As a Second Language 392

## Writing and Computers: Developing a School Publication

## Credit(s): $0 \quad$ Class Hours: 72

Offers writing strategies for students in developing a student publication. Computers and the Internet are used to develop and research for publication. Students will work in teams on different sections of the publication. Recommended for students in Beginning Education as a Second Language 3 or above. Open Entry/Open Exit.

## English As a Second Language 394 <br> ESL Writing A

Credit(s): 0
Class Hours: 72
Introduces non-native English speakers to basic sentence structure and all steps of the writing process including activities to write cohesive simple paragraphs. This course is designed for students who test at Beginning Education as a Second Language 3 and higher levels on the ESL Placement or the ESL pre- and post-tests. Students may be asked to submit a writing sample. Open Entry/Open Exit.

## English As a Second Language 395 <br> ESL Writing B

Credit(s): $0 \quad$ Class Hours: 72
Introduces the use of more advanced sentence structures and extensive practice with the writing process to improve composition skills. This course is designed for students who test at Beginning ESL 3 and higher levels on the ESL Placement or the ESL pre- and post-tests. Students may be asked to submit a writing sample. Open Entry/Open Exit.

## English As a Second Language 398 <br> ESL Community Learning Center

Credit(s): $0 \quad$ Class Hours: 72
This course provides English language learners of all levels the opportunity to improve their language skills, while increasing knowledge of civics, citizenship, and computer literacy, through individualized and small group instruction. Computer software and web-based instructional programs are used to instruct, support, and enhance student learning. Open Entry/Open Exit.

## English As a Second Language 399 <br> ESL Literacy

Credit(s): $0 \quad$ Class Hours: 216
Develops the ability of second language learners to recognize and read letters and numbers, copy/produce the alphabet, numerals, and simple personal information. for second language learners. This is the first course in the Continuing Education Education as a Second Language continuum. Open Entry/Open Exit.

English As a Second Language 401
ESL/Family Literacy Beginning ESL 1
Credit(s): $0 \quad$ Class Hours: 216
Emphasizes listening comprehension and beginning oral production of simple conversations, reading of practiced words and phrases, and prewriting tasks. Utilizes various language-based activities to enhance family language learning with adults and children reading together. Develops parenting skills using language appropriate for this level. This course includes the Education as a Second Language Beginning 1 curriculum. Open Entry/Open Exit.

## English As a Second Language 405 <br> ESL/Family Literacy Beginning ESL 2 <br> Credit(s): $0 \quad$ Class Hours: 216

Emphasizes comprehending simple conversations, communicating survival needs, reading phrases and simple sentences, and performing communicative written tasks. Utilizes various language-based activities to enhance family language learning with adults and children reading together. Develops parenting skills using language appropriate for this level. This course includes the Education as a Second Language Beginning 2 curriculum. Open Entry/Open Exit.

## English As a Second Language 407

## ESL/Family Literacy Beginning 3

Credit(s): $0 \quad$ Class Hours: 216
Emphasizes comprehending, participating in, and sustaining simple conversations, reading short passages with understanding, and producing short written passages. Utilizes various language-based activities to enhance family language learning with adults and children reading together. Develops parenting skills using language appropriate for this level. This course includes the Education as a Second Language Beginning 3 curriculum. Open Entry/Open Exit.

## English As a Second Language 408 <br> ESL/Family Literacy Intermediate 1

Credit(s): $0 \quad$ Class Hours: 216
Emphasizes creative oral language activities, initial critical thinking skills in reading comprehension, and written tasks which begin to focus on academic skills. This course includes the Education as a Second Language Intermediate 1 curriculum with an additional family literacy focus and component. Utilizes various language-based activities to enhance family language learning. Develops parenting skills using language appropriate for this level. Five high school elective credits may be granted if student passes the ESL posttest for this class with 75\% or better. Open Entry/Open Exit.

## English As a Second Language 409

## ESL／Family Literacy Intermediate 2

Credit（s）： $0 \quad$ Class Hours： 216
Emphasizes understanding higher level language activities，reading passages with increased understanding，and increasing focus on creative and academic writing tasks．This course includes the Education as a Second Language Intermediate 2 curriculum with an additional family literacy focus and component．Utilizes various language－based activities to enhance family language learning．Five high school elective credits may be granted if student passes the ESL posttest for this class with 75\％or better．Open Entry／Open Exit．

## English As a Second Language 410 <br> Beginning ESL 1 <br> Credit（s）： $0 \quad$ Class Hours： 216

Emphasizes listening comprehension and beginning oral production of simple conversations，reading of practiced words and phrases，and prewriting tasks．This is the second course in the Continuing Education Education as a Second Language continuum．Open Entry／Open Exit．

## English As a Second Language 420 <br> Beginning ESL 2 <br> Credit（s）： $0 \quad$ Class Hours： 216

Emphasizes comprehending simple conversations，communicating survival needs，reading phrases and simple sentences，and performing communicative written tasks．This is the third course in the Continuing Education ESL continuum．Open Entry／Open Exit．

## English As a Second Language 430 <br> Beginning ESL 3

Credit（s）： $0 \quad$ Class Hours： 216
Emphasizes comprehending，participating in and sustaining simple conversations，reading short passages with understanding，and producing short written passages．This is the fourth course in the Continuing Education ESL continuum．Open Entry／Open Exit．

## English As a Second Language 460 Intermediate ESL 1

Credit（s）： $0 \quad$ Class Hours： 216
Emphasizes creative oral language activities，initial critical thinking skills in reading comprehension，and written tasks which begin to focus on academic skills．This is the fifth course in the Continuing Education ESL continuum．Five high school elective credits may be granted if student passes the ESL posttest for this class with 75\％or better．Open Entry／Open Exit．

## English As a Second Language 470 <br> Intermediate ESL 2

Credit（s）： $0 \quad$ Class Hours： 216
Emphasizes understanding higher level language activities，reading passages with increased understanding，and increasing focus on creative and academic writing tasks．This is the sixth course in the Continuing Education ESL continuum．Five high school elective credits may be granted if student passes the ESL posttest for this class with 75\％or better．Open Entry／Open Exit．

## English As a Second Language 480 <br> Intermediate ESL 3

Credit（s）： $0 \quad$ Class Hours： 216
Emphasizes higher level language activities，conversations which convey complex thought patterns，authentic material which expands the use of critical thinking skills，and realistic and creative／academic writing．This is the seventh course in the Continuing Education continuum．Five high school elective credits may be granted if student passes the posttest for this class with 70\％or better．Open Entry／Open Exit．

## English As a Second Language 488 ESL Basic Writing

Credit（s）： $0 \quad$ Class Hours： 72
Introduce non－native English speakers to basic sentence structure and the writing process，focusing on writing cohesive simple paragraphs． This course is designed for basic writers．Students will produce a writing sample．Open Entry／Open Exit．

## English As a Second Language 489

ESL Intermediate Writing
Credit（s）： $0 \quad$ Class Hours： 72
Recommended Preparation：ESL 488，Basic Writing or equivalent Introduces non－native English speakers with intermediate writing skills to advanced sentence structures and writing strategies，focusing on strong paragraphs with logical development in a variety of organizational styles．Students will produce a writing sample．Open Entry／Open Exit．

English As a Second Language 490
Advanced Writing \＆Grammar
Credit（s）： $0 \quad$ Class Hours： 72
This course will strengthen writing and grammar skills with a focus on advanced grammar and sentence combining strategies．Paragraph writing is emphasized．Recommended completion of Intermediate ESL 3 or equivalent．Five high school elective credits may be granted．Open Entry／Open Exit．

## English As a Second Language 491 <br> Advanced Writing \＆Grammar Review

Credit（s）： $0 \quad$ Class Hours： 72
Provides intensive review and practice of writing strategies and basic grammar．Concentrates on paragraph writing along with verb tenses， adjective，noun and adverb clauses．Recommended completion of Intermediate ESL 3 or equivalent．Five high school elective credits may be granted if student passes the posttest for this class with 70\％or better．Open Entry／Open Exit．

## English As a Second Language 510 <br> VESL：English for Work 1

Credit（s）： $0 \quad$ Class Hours： 216
Prepares beginning level non－native English－speaking students to enter the workforce for general or specific occupations．Focuses on workplace communication，work－related vocabulary skills， job applications and postings，workplace safety and issues，and vocational readings with emphasis on verbal communication through basic language skills instruction．Open Entry／Open Exit．

## English As a Second Language 520 <br> VESL：English for Work 2

Credit（s）： $0 \quad$ Class Hours： 216
Prepares intermediate and advanced level non－native English speaking students to enter the workforce or a CTE／vocational program． Focuses on communicating in the workplace，job safety，work－related vocabulary skills，workplace culture／issues，career pathways and vocational readings with emphasis on verbal communication through intermediate／advanced language skills instruction．Recommended for students in Intermediate 1 or higher．Open Entry／Open Exit．

## English As a Second Language 530

American English Pronunciation
Credit（s）： $0 \quad$ Class Hours： 216
Develops English language fluency，and productive and receptive skills as they relate to sound discrimination，sound inventory，stress， intonation，linking，prominence，and rhythm．The course aims to help students understand English and be understood while functioning within employment，survival and academic contexts．This course is recommended for Beginning ESL 3 students and above．Open Entry／Open Exit．

English As a Second Language 570

## Conversation 1

Credit(s): $0 \quad$ Class Hours: 72
Introduces conversational strategies in listening, language use, and non-verbal communication. Presents oral skills necessary in initiating maintaining and closing conversations. Emphasis on oral skills that assist in social interactions and expand listening and speaking skills. This course is recommended for Beginning ESL 3 and Intermediate ESL 1 students. Open Entry/Open Exit.

## English As a Second Language 580

Conversation 2
Credit(s): $0 \quad$ Class Hours: 72
Introduces advanced conversational strategies in listening, language use, and nonverbal communication. Presents oral expressions necessary to enhance conversation and listening skills. Emphasizes differences between formal and colloquial language, based on American attitudes and culture. Recommended for Intermediate ESL 2 and Intermediate ESL 3 students. Open Entry/Open Exit.

English As a Second Language 703
Academic ESL Beginning 3
Credit(s): $0 \quad$ Class Hours: 216
First academic ESL course emphasizing basic grammatical structures of English, reading skills, and sentence level writing. This course integrates listening, speaking, reading, and writing skills in preparation for academic success. Open Entry/Open Exit.

English As a Second Language 704
Academic Beginning A
Credit(s): $0 \quad$ Class Hours: 216
First course of the academic ESL track program developing academic skills through reading short multi-sentence paragraphs supported by visual clues, writing simple sentences on one topic, grammar, listening, and speaking skills with short informational passages. Open Entry/ Open Exit.

English As a Second Language 705

## Academic Beginning B

Credit(s): $0 \quad$ Class Hours: 216
Second course of the academic ESL track program developing academic skills through reading multi-paragraph authentic and adapted texts, writing short loosely organized paragraphs from a prompt, grammar, listening, and speaking skills with short informational and narrative passages. Five high school elective credits may be granted if student passes the course. Open Entry/Open Exit.

## English As a Second Language 706

Academic Intermediate A
Credit(s): $0 \quad$ Class Hours: 216
Third course of the academic ESL Track program developing academic skills through reading one-page multi-paragraph authentic or adapted text, writing well-developed paragraphs, grammar, listening, and speaking skills with short informational and narrative passages. Five high school elective credits may be granted if student passes the course successfully. Open Entry/Open Exit.

## English As a Second Language 707

## Academic Intermediate B

Credit(s): $0 \quad$ Class Hours: 216
Fourth course of the academic ESL Track program developing academic skills through reading two-page authentic texts, writing expository essays, grammar, speaking, and listening skills with short lectures or speeches on familiar and academic topics. Five high school elective credits may be granted if student passes the course successfully. Open Entry/Open Exit.

## English As a Second Language 711 <br> Academic ESL Intermediate 1

Credit(s): $0 \quad$ Class Hours: 216
Second academic ESL course emphasizing the grammatical structures of English, reading skills, and basic paragraph writing. This course integrates listening, speaking, reading, and writing skills. Begin to use critical thinking skills in reading comprehension. Five high school elective credits may be granted if student passes the ESL posttest with 75\% or better. Open Entry/Open Exit.

English As a Second Language 712
Academic ESL Intermediate 2
Credit(s): $0 \quad$ Class Hours: 216
Third academic ESL course emphasizing more complex grammatical structures of English, reading skills, and more complex paragraphs. This course integrates listening, speaking, reading, and writing skills. Five high school elective credits may be granted if student passes the ESL posttest with 75\% or better. Open Entry/Open Exit.

## English As a Second Language 713

## Academic ESL Intermediate 3

Credit(s): $0 \quad$ Class Hours: 216

Fourth academic ESL course emphasizing complex grammatical structures of English, reading skills, and more complex paragraph writing. This course integrates listening, speaking, reading, and writing skills. Five high school elective credits may be granted if student passes the ESL posttest with 70\% or better. Open Entry/Open Exit.

## English As a Second Language 720 <br> ESL Transition to College Class

Credit(s): $0 \quad$ Class Hours: 72
This noncredit course prepares students for transition to Santa Ana College by developing language skills, critical reasoning and thinking, academic study skills and student success strategies. Completion of Intermediate ESL 3 or equivalent is recommended. Five high school elective credits may be granted for successful completion of the class. Open Entry/Open Exit.

## HIGH SCHOOL SUBJECTS - MATH (HSMTH)

## High School Subjects - Math 140 <br> California High School Exit Exam Math Preparation

Credit(s): 5.0 Class Hours: 72
Provides students with an overview of the California State Standards that are tested on the California High School Exit Exam and affords students the opportunity to gain the knowledge and skills necessary to pass the mathematics portion of the exam.

High School Subjects - Math 151
Principles of Mathematics
Credit(s): $5.0 \quad$ Class Hours: 72
This course consists of addition, subtraction, multiplication, division of whole numbers, fractions, and decimals. Other topics include percentages, geometry, unit conversions, and signed numbers. Open Entry/Open Exit.

## High School Subjects - Math 152

Pre-Algebra
Credit(s): $5.0 \quad$ Class Hours: 72
Introduction to variables, algebraic expressions, solving equations, inequalities, graphs, number and operation sense, estimation skills, and the ability to judge reasonableness of results will be strengthened in the context of practical applications and problem solving. Recommended for students who have completed Principles of Mathematics or equivalent. Open Entry/Open Exit.

## High School Subjects - Math 154

## Pre-Algebra A

Credit(s): $5.0 \quad$ Class Hours: 72
Covers language, symbolism, and fundamental operations skills required to prepare students for success in Algebra 1. Number and operation sense, estimation skills, and the ability to judge reasonableness of results will be strengthened in the context of practical applications and problem solving.(Recommended for students who have completed Math Fundamentals 2 or equivalent.). Open Entry/Open Exit.

## High School Subjects - Math 155

Pre-Algebra B
Credit(s): $5.0 \quad$ Class Hours: 72
Covers language, symbolism, and fundamental operations skills required to prepare students for success in Algebra 1 and Geometry. Data analysis, spatial thinking, and the ability to judge reasonableness of results will be strengthened in the context of practical applications and problem solving. Recommended for students who have completed Pre-Algebra A or equivalent. Open Entry/Open Exit.

High School Subjects - Math 158
Math Fundamentals 1
Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in the four arithmetic operations of addition, subtraction, multiplication, and division of whole numbers and fractions and decimals. Provides learning activities including manipulative lessons which allow development and mastery of necessary skills. Open Entry/Open Exit.

High School Subjects - Math 159

## Math Fundamentals 2

Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in the areas of decimals, percents, measurements, formulas, equations, ratios, and proportions. Provides learning activities which allow for remediation of difficulties and mastery of necessary skills. Recommended for students who have completed Math Fundamentals 1 or equivalent. Open Entry/Open Exit.

High School Subjects - Math 163

## Algebra 1A

Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in sets, numbers, formulas, monomials, exponents, square root, the laws of the signs, binomials, and simultaneous equations. Recommended for students who have completed Math Fundamentals 2 or equivalent. Open Entry/Open Exit.

## High School Subjects - Math 164

## Algebra 1B

Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in algebra concepts, math vocabulary, and algebraic operations. This course is intended to be a bridge from basic arithmetic to elementary algebra. Open Entry/Open Exit.

High School Subjects - Math 165
Algebra 2A
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study in: equations and inequalities; linear equations and functions; systems of linear equations and inequalities; matrices and determinants; quadratic functions; polynomials and polynomial functions; and powers, roots and radicals. Recommended for students who have completed ten credits in geometry or equivalent. Open Entry/Open Exit.

## High School Subjects - Math 166

Algebra 2B
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that includes: exponential and logarithmic functions; rational equations and functions; quadratic relations and conic sections; sequences and series; probability and statistics; trigonometric ratios and functions; and trigonometric graphs. Recommended for students who have completed Algebra 2A or equivalent. Open Entry/Open Exit.

## High School Subjects - Math 167 <br> Geometry A

Credit(s): $5.0 \quad$ Class Hours: 72
This course covers topics in basic geometry, reasoning and proofs, perpendicular and parallel lines, congruent triangles, properties of triangles, and quadrilaterals. Recommended for students who have completed ten credits of algebra. Open Entry/Open Exit.

## High School Subjects - Math 168

Geometry B
Credit(s): $5.0 \quad$ Class Hours: 72
This course covers topics in transformations, similarity, right triangles, trigonometry, circles, areas of polygons and circles, surface area and volume. Recommended for students who have completed Geometry A or equivalent. Open Entry/Open Exit.

High School Subjects - Math 172
Basic Consumer Math 1A
Credit(s): $5.0 \quad$ Class Hours: 72
Provides a comprehensive review of arithmetic skills that apply to personal and vocational opportunities. Topics covered include whole numbers operations, customary and metric units, fractions, decimals, and percents. Skills are then applied to use in earning money, buying food, shopping for clothes, managing a household, buying and maintaining a car, and working with food.

## High School Subjects - Math 173

Basic Consumer Math 1B
Credit(s): $5.0 \quad$ Class Hours: 72
Students will use practical computational skills to solve common problems in a consumer's life including home improvements, traveling costs, budgeting household expenses, banking and investing, paying real estate and sales taxes, and preparing for careers. Open Entry/ Open Exit.

## HIGH SCHOOL SUBJECTS - ARTS (HSART)

## High School Subjects - Arts 601 <br> Music Theory 1

Credit(s): $5.0 \quad$ Class Hours: 72
Provides a beginning level music course that introduces students to the vocabulary and basic principles of music. The primary emphasis will be on rhythm, pitch, and notation. Emphasis will also be given to beginning piano study.

High School Subjects - Arts 828 Understanding America Through Art
Credit(s): $5.0 \quad$ Class Hours: 72
Provides an overview of American civilization through arts and crafts from the colonial period through the 20th century, including periods and artistry in their historical context. Open Entry/Open Exit.

## High School Subjects - Arts 837

## The Film As Art

Credit(s): $5.0 \quad$ Class Hours: 72
Traces the history of film from the recording of a single event through the silent film era to current classic films, and identifies the ways films reflect the values of American culture. Culminates in the use of classic and contemporary literature as a basis for modern film. Open Entry/ Open Exit.

## HIGH SCHOOL SUBJECTS - ENGLISH (HSENG)

## High School Subjects - English 040

California High School Exit Exam Language Arts
Preparation
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with an overview of the California State Standards that are tested on the California High School Exit Exam and affords students the opportunity to gain the knowledge and skills necessary to pass the Language Arts portion of the exam. Open Entry/Open Exit.

## High School Subjects - English 065

English Fundamentals 1
Credit(s): $5.0 \quad$ Class Hours: 72
Introduces students to basic concepts and skills of building vocabulary, grammar, parts of speech, writing sentences, and paragraphs. Open Entry/Open Exit.
High School Subjects - English 066
English Fundamentals 2
Credit(s): $5.0 \quad$ Class Hours: 72
Reinforces and expands the basic concepts of sentence structure, vocabulary, grammar, parts of speech, and writing skills. Open Entry/ Open Exit.

High School Subjects - English 067
English Fundamentals 3
Credit(s): $5.0 \quad$ Class Hours: 72
Provides an intermediate English course that expands upon
vocabulary, parts of speech, and grammar to accelerate writing skills. Open Entry/Open Exit.

High School Subjects - English 068
English Fundamentals 4
Credit(s): $5.0 \quad$ Class Hours: 72
Provides an advanced course in English vocabulary, grammar, parts of speech, writing skills, and general proficiency in the English language, both written and spoken. Open Entry/Open Exit.
High School Subjects - English 070
The Short Story
Credit(s): $5.0 \quad$ Class Hours: 72
Introduces the student to the short story as a literary form so that the student will learn how the individual elements work together to present a theme of effect. The student will study the development of the short story and will read selected short stories from various periods. Course cannot be challenged. Open Entry/Open Exit.

High School Subjects - English 076

## The Novel

Credit(s): $5.0 \quad$ Class Hours: 72
Introduces the student to the novel as a literary form and how the individual elements work together to present a theme. The student will select 2 novels from an annotated reading list for independent study, completing Dialectical Journal entries. Open Entry/Open Exit.

## High School Subjects - English 083

## Composition 1

Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction and practice in the communication of ideas in written form. Emphasis on mastery of sentence and paragraph skills, including organization in terms of unity, support, and coherence in an effective, well-supported, one page composition. Open Entry/Open Exit.

## High School Subjects - English 084 Composition 2

Credit(s): 5.0 Class Hours: 72
Prepares the student to write well-conceived and well-executed two page essays. Meets the composition proficiency requirement. (Recommended for students who have completed Composition 1 or equivalent.). Open Entry/Open Exit.
High School Subjects - English 085

## Composition 3

Credit(s): $5.0 \quad$ Class Hours: 72
Prepares college bound students with advanced writing assignments that require in-depth research culminating in the production of two argumentative essays and a 1500 word final argumentative research paper. (Recommended for students who have completed Composition 2 or equivalent.). Open Entry/Open Exit.

High School Subjects - English 096
Building Vocabulary 1
Credit(s): $5.0 \quad$ Class Hours: 72
A basic vocabulary course that provides practice in using context clues to develop vocabulary, and includes practice in synonyms, antonyms, matching words with meaning, adding words to readings, and sentence writing. Open Entry/Open Exit.

High School Subjects - English 097
BuildingVocabulary 2
Credit(s): $5.0 \quad$ Class Hours: 72
An intermediate vocabulary course that provides practice in using context clues to develop vocabulary and includes practice in synonyms, antonyms, matching words with meaning, adding words to readings, analogies, and sentence writing. Develops vocabulary skills needed to master state standardized tests. Open Entry/Open Exit.

## High School Subjects - English 098

Building Vocabulary 3
Credit(s): $5.0 \quad$ Class Hours: 72
An advanced vocabulary course that provides practice in using context clues to develop vocabulary, and includes practice in synonyms, antonyms, matching words with meaning, adding words to readings, analogies, and sentence writing. Builds reading comprehension skills and creates a strong vocabulary foundation that enables students to be better readers, writers, thinkers, and test takers. Open Entry/Open Exit.

## High School Subjects - English 701

English 1
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English
Language Arts for students in the first semester of the ninth grade year.
High School Subjects - English 702
English 2
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English Language Arts for students in the second semester of the ninth grade year.

High School Subjects - English 703
English 3
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English Language Arts for students in the first semester of the tenth grade year.

High School Subjects - English 704

## English 4

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English
Language Arts for students in the second semester of the tenth grade year.

High School Subjects - English 705

## English 5

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English Language Arts for students in the first semester of the eleventh grade year.

High School Subjects - English 706

## English 6

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English Language Arts for students in the second semester of the eleventh grade year.

High School Subjects - English 707

## English 7

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English Language Arts for students in the first semester of the twelfth grade year.

High School Subjects - English 708

## English 8

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a course of study that focuses on the California State Standards and the Common Core Standards in English Language Arts for students in the second semester of the twelfth grade year.

## HIGH SCHOOL SUBJECTS - OTHER (HSOTH)

High School Subjects - Other 740

## Spanish 1

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a beginning course in Spanish, emphasizing oral communication, vocabulary building, fundamental pronunciation, and grammar. Includes practice in reading and simple conversation and gives an introduction to Spanish-speaking people and their culture.

## High School Subjects - Other 742

Spanish 2
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with additional skills, concepts, grammar and vocabulary appropriate for a first year course in learning to speak and write Spanish.

High School Subjects - Other 743
Spanish 3
Credit(s): $5.0 \quad$ Class Hours: 72
Provides a language integrated course designed to provide native Spanish speaking students with academic language proficiencies. Offers listening, speaking, reading, writing, and critical thinking, and vocabulary development. Writing as a process and literature will be emphasized.

## High School Subjects - Other 744

## Spanish 4

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with additional skills, concepts, grammar and vocabulary appropriate for a second year course in learning to speak Spanish. (Recommended for those students who have completed Spanish 3 or equivalent.)

## HIGH SCHOOL SUBJECTS - READING (HSRDG)

High School Subjects - Reading 089

## Reading Proficiency Development

Credit(s): $5.0 \quad$ Class Hours: 72
Enables students to become proficient in practical, content and reference skills as well as to improve general comprehension and vocabulary skills. This course is in preparation for the reading proficiency examination. Open Entry/Open Exit.

High School Subjects - Reading 093
Building Reading Skills 1
Credit(s): $5.0 \quad$ Class Hours: 72
Provides an opportunity for skill development in word recognition, comprehension, study and content reading skills necessary for success in the High School Subjects program. Computer-aided instruction is included. Open Entry/Open Exit.

High School Subjects - Reading 094
Building Reading Skills 2
Credit(s): $5.0 \quad$ Class Hours: 72
Provides an opportunity for skill development in word recognition, general and inferential comprehension, critical thinking, and content reading skills necessary for success in the High School Subjects program. Computer-aided instruction is included. Open Entry/Open Exit.

## HIGH SCHOOL SUBJECTS - SOCIAL SCIENCES (HSSOC)

High School Subjects - Social Sciences 215

## Introduction to Economics

Credit(s): $5.0 \quad$ Class Hours: 72
Introduces the basic concepts of economics. Explores the basic questions of every economic system. Examines money, the role of consumers, workers, businesses, and governments. Open Entry/Open Exit.

High School Subjects - Social Sciences 218
U.S. History 1: Colonization to Industrialization

Credit(s): $5.0 \quad$ Class Hours: 72
Surveys events, movements, and personalities in the United States history from the colonial period through reconstruction, westward expansion, and industrialization. Includes immigration, the plight of Native and African Americans, reform movements, and geographical influences in the history of the United States. Open Entry/Open Exit.

High School Subjects - Social Sciences 219
U.S. History 2: The Shaping of Modern America

Credit(s): $5.0 \quad$ Class Hours: 72
Examines United States history from the beginning of industrialization to present. Emphasizes the emergence of America on the international, economic, geographical, social and political scene. Open Entry/Open Exit.

High School Subjects - Social Sciences 221
Psychology
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with knowledge of the basic principles of psychoanalysis, behaviorism, the interpersonal model, humanism, existentialism and phenomenology as well as other concepts applied to the self. Open Entry/Open Exit.

High School Subjects - Social Sciences 222
Government 1: U.S. Federal Government and Politics

## Credit(s): $5.0 \quad$ Class Hours: 72

This course in United States government and politics covers the Constitution and foundations of government, political behavior and participation, institutions of national government, civil liberties and civil rights and public policy and comparative government. Open Entry/ Open Exit.
High School Subjects - Social Sciences 223
Government 2: State and Local Government
Credit(s): $5.0 \quad$ Class Hours: 72
Examines the diversity of California's geography, economy, and population as well as knowledge of California's history and constitutional development. Explores voters' roles in state and local politics. Open Entry/Open Exit.
High School Subjects - Social Sciences 224
World Geography 1A
Credit(s): $5.0 \quad$ Class Hours: 72
Provides a basic foundation for understanding physical geography and the cultural and economic variables in the relationship with the earth and its history. Introduces Northern America, Latin America, Europe, and Russia. Includes geography skills such as map reading, interpretation of graphs and diagrams, and map identification. Open Entry/Open Exit.

## High School Subjects - Social Sciences 225 <br> World Geography 1B

Credit(s): $5.0 \quad$ Class Hours: 72
Provides an overview of certain areas of the world in terms of their physical, cultural, historical and economic geography. Introduces North Africa, the Middle East, Africa south of the Sahara, the Asian Region, and the Pacific World. Includes geography skills such as map reading, interpreting graphs, and analyzing data from a chart. Open Entry/ Open Exit.

## High School Subjects - Social Sciences 228

## World History

Credit(s): $5.0 \quad$ Class Hours: 72
Offers the student a chronological understanding of world history in a sequence of events from the time before hominids became fully human, to the introduction to the new millennium. Addresses culture and geography in the context of world history. Open Entry/Open Exit.
High School Subjects - Social Sciences 231
Modern World History 1
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a study of the major events that shaped the modern world, from the eighteenth century through the First World War. Students will trace the rise of democratic ideas and develop an understanding of the historical roots of current world issues.

High School Subjects - Social Sciences 232
Modern World History 2
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a study of the major events that shaped the modern world, from the end of the First World War to the present. Students will develop an understanding of current world issues and relate them to their historical, geographic,political, economic and cultural contexts. Students consider multiple accounts of events in order to understand international relations from a variety of perspectives.

## HIGH SCHOOL SUBJECTS - NATURAL SCIENCES (HSSCI)

## High School Subjects - Natural Sciences 170 <br> Biology 1A <br> Credit(s): $5.0 \quad$ Class Hours: 72

This is an introductory course that provides a brief survey of major areas of biology including cell biology, genetics, and evolution. Open Entry/Open Exit.

## High School Subjects -Natural Sciences 171

Biology 1B
Credit(s): $5.0 \quad$ Class Hours: 72
This introductory course studies the diversity of non-living and living organisms such as viruses, bacteria, protists, fungi, plants and animals. Open Entry/Open Exit.

## High School Subjects -Natural Sciences 185

Earth Science 2
Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in the principles and concepts of earth science. The earth's processes and place in the universe will be examined.
Open Entry/Open Exit.

## High School Subjects -Natural Sciences 186

Life Science 2
Credit(s): $5.0 \quad$ Class Hours: 72
Surveys the principles and concepts of life science: the study of organisms and their environment. Animals, human life, heredity and ecology will be examined. Open Entry/Open Exit.

## High School Subjects -Natural Sciences 188

## Earth Science 1

Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in the principles and concepts of earth science.
The earth's matter and features will be examined. Open Entry/Open Exit.

## High School Subjects -Natural Sciences 189

## Life Science 1

Credit(s): $5.0 \quad$ Class Hours: 72
Surveys the principles and concepts of life science: the study of organisms and their environment. Cells, animals, plants, protists, human life, heredity and ecology will be examined. Open Entry/Open Exit.

[^1]High School Subjects -Natural Sciences 191
Physical Science 2
Credit(s): $5.0 \quad$ Class Hours: 72
An introductory course designed to allow students to explore the basic concepts of physical science. Basic elements of physics will be covered. Open Entry/Open Exit.

High School Subjects -Natural Sciences 192
Basic Science 1
Credit(s): $5.0 \quad$ Class Hours: 72
This course offers students an introduction to the sciences. Science is explained in a way that is understandable to beginning students. Students taking this course will learn how science is all around us and can be found to affect our everyday life. In this course, students will learn about the different types of sciences: life, physical, earth and space. Open Entry/Open Exit.

High School Subjects -Natural Sciences 193

## Basic Science 2

Credit(s): $5.0 \quad$ Class Hours: 72
Surveys principles and concepts of life and ecological science. Examines life structure and classification, cellular processes, heredity, evolution, body systems, plants, ecology, and conserving resources. Open Entry/Open Exit.

High School Subjects -Natural Sciences 196 Health Science
Credit(s): $5.0 \quad$ Class Hours: 72
Provides a basic foundation in personal health, nutrition, body functions, first aid and community health. Open Entry/Open Exit.

High School Subjects -Natural Sciences 197
Human Anatomy \& Physiology I
Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a first semester course concentrating on anatomical terminology, body directions, and the following systems: tissues, integumentary (skin), skeletal, nervous, and special senses. Diverse learning activities are used in the classroom to develop a variety of skills.

## High School Subjects -Natural Sciences 198 <br> Human Anatomy and Physiology II

Credit(s): $5.0 \quad$ Class Hours: 72
Provides students with a second semester course concentrating on anatomical terminology, body directions, and the following systems: muscular, cardio-vascular, lymphatic, respiratory, digestive, urinary, and reproductive. Diverse learning activities are used in the classroom to develop a variety of skills.

## HEALTH AND SAFETY (SAFE)

## Health and Safety 875

## First Aid

Credit(s): $0 \quad$ Class Hours: 15
Provides students with general knowledge of basic first aid and CPR procedures. Open Entry/Open Exit.

Health and Safety 877
Health Issues \& Concepts
Credit(s): $0 \quad$ Class Hours: 72
Provides a basic foundation in the issues and concepts of mental health, family and social health, the stages in the life cycle, medicine and drugs, and diseases and disorder. May earn five high school elective credits if student completes all the required assignments with a minimum passing grade of $75 \%$. Open Entry/Open Exit.

## HIGH SCHOOL SUBJECTS (HSS)

High School Subjects 010
Learning Skills \& Strategies
Credit(s): $5.0 \quad$ Class Hours: 72
Provides individualized instruction to improve learning strategies and basic reading, writing, and mathematics skills. Prepares adults who have verified learning disabilities to successfully meet educational and vocational goals. Recommended for students who meet eligibility requirements for D.S.P.S. services.

High School Subjects 031
High School Equivalency Test Preparation
Credit(s): $0 \quad$ Class Hours: 360
Provides pre- and post-testing and individualized prescriptive instruction in preparation for a High School equivalency exam. Covers test-taking strategies and the essentials of reading, writing, mathematics, science, and social studies. Open Entry/Open Exit.

## High School Subjects 032

## HS Subjects Individualized Instruction

Credit(s): $0 \quad$ Class Hours: 72
Individualized delivery for the Adult High School Diploma Program. Designed for the adult who wants a high school diploma. Self-paced with offerings in the areas of English communication, mathematics, science, social studies, fine arts/foreign language, life skills, and electives. Recommended 8th grade equivalency on TABE. Open Entry/ Open Exit.

High School Subjects 090
Leadership Basics, Part 1
Credit(s): 5.0 Class Hours: 72
Introduces useful leadership skills. Students will increase their mastery of basic skills through intensive, interactive, student-centered activities designed to give hands-on training and experience in aspects of directing and facilitating a conference. This is the first of a two-part leadership course in which students apply leadership techniques in the workplace, home, school, and the community. Five high school elective credits may be given for completing either Adult Basic Education 044 or High School Subjects 090 if the student achieves the attendance and proficiency requirements to pass the class. Open Entry/Open Exit.

High School Subjects 092
Leadership Basics, Part 2
Credit(s): 5.0 Class Hours: 72
Students will increase their mastery of basic skills through intensive, interactive, student-centered activities designed to give hands-on training and experience in aspects of directing and facilitating a conference. This is the second of a two-part leadership course in which students apply leadership techniques in the workplace, home, school, and the community. Five high school elective credits may be given for completing either Adult Basic Education 018 or High School Subjects 092 if the student achieves the attendance and proficiency requirements to pass the class. Open Entry/Open Exit.

High School Subjects 095
Basic Skills Supervised Tutoring
Credit(s): 1.0-72.0 Class Hours: Arranged
Supervised individual and small group tutoring to assist students in the basic skills of reading, writing, and mathematics for students enrolled at Santa Ana College School of Continuing Education and/or Santa Ana College course(s)for which tutoring is requested. Referral by counselor or instructor based on assessed academic need. Open Entry/Open Exit.

High School Subjects 221

## Study Skills 1

Credit(s): $5.0 \quad$ Class Hours: 72
Develops student's study and test preparation skills. Introductory instruction in basic study skills, organizational skills, goal setting, note taking, report writing, time management, test preparation, learning styles, effective communication skills. Provides learning opportunities for students to develop and master effective study skills for successful academic career achievement.

High School Subjects 222
Study Skills 2
Credit(s): $5.0 \quad$ Class Hours: 72
Develops the student's study and test preparation skills. Second semester instruction in basic study skills, organizational skills,
goal setting, note taking, report writing, time management, test preparation, learning styles, effective communication, and stress management skills. Provides learning opportunities for students to develop and master effective study skills for successful academic and career achievement.

High School Subjects 229
Skills for Success
Credit(s): $5.0 \quad$ Class Hours: 72
Assists students in developing skills that promote academic success. Students will learn study and organizational skills, goal setting, critical thinking skills, and written/oral communication. Compensatory strategies and technology will be emphasized.

## High School Subjects 770

Orientation to College
Credit(s): $1.5 \quad$ Class Hours: 8
Introduces college services and programs. Identifies and explores programs and services designed to assist students entering college credit courses.

## HOME ECONOMICS (HOMEC)

## Home Economics 520 <br> HSS Consumer Education

Credit(s): 0.5-7.5 Class Hours: 24-360
Prepares students in the rigors of understanding consumerism in the free world market area today. Topics include banking, credit, financial planning, insurance, money management, employment, real estate and housing, taxes, and other consumer interests. Open Entry/Open Exit.

## LEARNING SUPPORT (LRN)

Learning Support 084
Composition 2
Credit(s): $5.0 \quad$ Class Hours: 72
Prepares the student to write well-conceived and well-executed five paragraph essays, expository paragraph writing emphasizing various methods including argumentation, reading analysis, and research. Practice in refining sentence skills and grammar. A minimum grade of $B(80 \%)$ in Learning 84 will serve as a prerequisite to English 101 without a Placement Exam. Meets the composition proficiency requirement. Open Entry/Open Exit.

## Learning Support 095

## Learning Support

Credit(s): $0 \quad$ Class Hours: 1-72
Supervised individual and small group tutoring to assist students in reading, writing, mathematics, science, business and software applications for students enrolled at Santa Ana College School of Continuing Education and or Santa Ana College course(s) for which tutoring is requested. Referral by counselor or instructor based on assessed academic need. Open Entry/Open Exit.

## Learning Support 164

Introductory Algebra
Credit(s): $5.0 \quad$ Class Hours: 72
Provides instruction in basic algebra concepts, math vocabulary, and algebraic operations. This course is intended to be a bridge from basic arithmetic to elementary algebra. Open Entry/Open Exit.

## Learning Support 750 <br> Intensive Writing and Grammar <br> Credit(s):5 Class Hours: 72

Provides intensive review and practice of writing strategies and advanced grammar. Concentrates on the writing process and development of various essay types along with verb tenses, adjective, noun, and adverb clauses. Recommended completion of English As A Second Language 707, High School English 067 and High School English 068 or equivalent with a minimum passing grade. Open Entry/ Open Exit.

## OLDER ADULTS (OAP)

## Older Adults 457 <br> Music Arts for Older Adults <br> Credit(s): $0 \quad$ Class Hours: 72

Provides a positive framework for developing and enhancing music appreciation, vocal and instrumental skill. Emphasis will be on activities designed to encourage creative expression. Open Entry/Open Exit.

Older Adults 518
Creative Cooking for Older Adults
Credit(s): $0 \quad$ Class Hours: 72
Designed to enhance awareness of current cooking techniques. Demonstrations and lectures include information on basic nutrition and consumer awareness. A variety of cooking appliances and methods are utilized. Open Entry/Open Exit.

Older Adults 802
Seminar for Older Adults
Credit(s): $0 \quad$ Class Hours: 72
Provides information and a discussion forum related to the examination of concerns common to older adults. Discovers specific needs and interests and examines current news events as interpreted through historical background and current political/regional developments and changes. Open Entry/Open Exit.

## Older Adults 823

## Manipulative Skills for Older Adults

Credit(s): $0 \quad$ Class Hours: 72
Concentrates on maintenance and improvement of motor skills through utilization of a variety of art media and techniques. Provides opportunities for analysis and decision making skills while exercising basic manipulative skills.

## Older Adults 894

## Physical Fitness for Older Adults

Credit(s): $0 \quad$ Class Hours: 72
Teaches movement exercises designed to improve or maintain flexibility, strength, endurance and cardiovascular and respiratory functions. Emphasizes motor movements, hand-eye coordination, body space awareness, balance training, reaction time, joint protection, and relaxation techniques. Open Entry/Open Exit.

## PARENT EDUCATION (PRNT)

## Parent Education 527

Increasing Parent Awareness of U.S. Schools
Credit(s): $0 \quad$ Class Hours: 132
Provides the opportunity for parents and others to learn the importance of providing appropriate early childhood experiences and preparing children for a successful kindergarten experience. Topics include school readiness, how to transform children's everyday world into an exciting learning environment, and how to stay positively involved in children's education. Open Entry/Open Exit.

Parent Education 528
Increasing Parent Awareness of U.S. Schools
Credit(s): $0 \quad$ Class Hours: 132
Develops awareness of school systems in the United States. Introduces content standards and expectancies for different grade levels. Includes teaching and learning processes, strategies to support school children at home, pre-collegiate preparation of children, and college options. Open Entry/Open Exit.

## Parent Education 557 <br> Early Childhood Education: Principles And Practices

Credit(s): $0 \quad$ Class Hours: 96
Bilingual (Spanish/English) course designed to introduce Spanish speaking students who are considering a career as teachers or aides to the scope of early childhood education. This class meets state licensing requirements for aides and limited-English caregivers in Early Childhood Education programs. May award five elective credits. Open entry/open exit (same as Human Development 070).

## Parent Education 558 <br> Early Childhood Care and Development For Family Child Care Providers

Credit(s): $0 \quad$ Class Hours: 56
Provides knowledge about the care and development of young children for family child care providers seeking state licensing. Open Entry/Open Exit.

## Parent Education 562

Health Education for Family Child Care Providers
Credit(s): $0 \quad$ Class Hours: 24
Provides family child care providers with health and safety information related to licensing. Open Entry/Open Exit.

## SECONDARY SUBJECTS GED (HSGED)

## Secondary Subjects GED 031 <br> GED Test Preparation

Credit(s): $0 \quad$ Class Hours: 360
Provides pre- and post-testing and individualized prescriptive instruction in preparation for the GED test. Covers test-taking strategies and the fundamentals of social studies, mathematics, science, writing, and reading. Open Entry/Open Exit.

## SUBSTANTIAL DISABILITIES (SSD)

## Substantial Disabilities 350

Signing Exact English for Parents of Deaf Children
Credit(s): $0 \quad$ Class Hours: 50-60
Designed as an introductory course to teach Signing Exact English and the manual alphabet. Open Entry/Open Exit.

## Substantial Disabilities 400 <br> Developmentally Disabled Adults Job Coach Training

Credit(s): $0 \quad$ Class Hours: 180-244
Students will develop knowledge of and acquire the necessary skills to assist developmentally disabled clients in their daily lives. Open Entry/ Open Exit. Open Entry/Open Exit.

## Substantial Disabilities 495 <br> Personal Development \& Grooming for Developmentally Disabled Adults

Credit(s): $0 \quad$ Class Hours: 65-95
Provide adults with developmental disabilities tools to learn and practice positive interpersonal skills, appropriate social interaction and daily personal grooming habits. Open Entry/Open Exit.

## Substantial Disabilities 788 <br> Independent Living Skills for Adults With Developmental Disabilities

Credit(s): $0 \quad$ Class Hours: 180
Assists adults with developmental disabilities to attain a higher functional level for independent living in these areas: health and nutrition, personal appearance, communication, manners, money management, safety and consumer awareness, transportation, social interaction and practical reading, writing and math skills related to home and community settings. Open Entry/Open Exit.

## VOCATIONAL - BUSINESS (VBUS)

Vocational - Business 118
Introduction to Windows
Credit(s): $0 \quad$ Class Hours: 60
Recommended Preparation: Vocational - Business 259 with a minimum grade of P Orientation to Computers
Provides students with a complete introduction to Microsoft's new operating system and basic computer concepts to ensure students develop the skills they need to effectively use a computer. The beginning of the course focuses on skills and tools that students will use every day, aiding productivity in school and at work. These features include starting and properly shutting down the computer, logging in, using a mouse, navigating the desktop, program controls, working with menus, using the taskbar, basic word processing, switching between apps, working with apps, using email, and email safety. As students advance in the course, file management and organization is reviewed where students save files and create folders both on the local PC and in the cloud. Microsoft's web browser, focusing on effective web searches, how to protect against internet threats, Outlook Online, Word Online, OneDrive, and how to manage setting and preferences within Windows are covered as well. Four high school elective credits may be awarded if a student completes and passes all the required assignments and final exam. Open Entry/Open Exit.

Vocational - Business 123

## Introduction to Computer Software Applications

Credit(s): $0 \quad$ Class Hours: 72
Provides introductory instruction on industry-standard computer applications such as MS Word, MS Excel, MS PowerPoint, MS Internet Explorer, MS Publisher, Adobe Photoshop, Adobe Illustrator, Adobe Flash, and others as well as skills such as keyboarding. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of 75\%. Open Entry/Open Exit.

## Vocational - Business 124 <br> Introduction to Keyboarding I

Credit(s): $0 \quad$ Class Hours: 32
Recommended Preparation: Vocational - Business 259 with a minimum grade of $P$ Orientation to Computers
Provides introductory instruction for keyboarding by touch and skill building drills to achieve speed and accuracy. Emphasis is placed on proper posture, typing on a computer without looking at the keyboard, and using proper finger and hand placement. Two high school elective credits may be awarded if a student completes all the required assignments and passes the final exam. Open Entry/Open Exit.

## Vocational - Business 125

Introduction to Keyboarding II
Credit(s): $0 \quad$ Class Hours: 45
Recommended Preparation: Vocational - Business 124 with a minimum grade of $P$
Provides additional practice in keyboarding by touch through the production of business and academic documents and tables. All students learn Microsoft Word as they advance through the course. Extensive accuracy and speed development is offered. Three high school elective credits may be awarded if a student completes all the requirement assignments and passes the final exam. Open Entry/Open Exit.

## Vocational - Business 243 <br> Introduction to Customer Service Skills

Credit(s): $0 \quad$ Class Hours: 72
Provides basic training in customer service techniques, appropriate telephone etiquette, self-management, interpersonal relations, and the attitude and initiative needed to succeed in the workplace. Beginning ESL 3 level or above recommended. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of $75 \%$. Open Entry/Open Exit.

## Vocational - Business 244 <br> Introduction to Databases Using Microsoft Access

Credit(s): $0 \quad$ Class Hours: 60
Recommended Vocational - Business 118 with a minimum grade of $P$ Introduction to Windows, Vocational - Business 262 with a minimum grade of P Introduction to Spreadsheets Using MS Excel
This course is an introduction to Microsoft Access - a database management system. Students will learn how to: design and use databases by creating tables, queries, forms and reports; create relationships between tables; and sort and filter data. Businesses use relational databases to manage their data. This course prepares students to understand and use Microsoft Access and databases in general, thereby assisting them in workforce preparation. Four high school elective credits may be awarded if a student completes and passes all the required assignments and final exam. Open Entry/Open Exit.

## Vocational - Business 245 <br> Introduction to Desktop Publishing Using Microsoft

## Publisher

Credit(s): $0 \quad$ Class Hours: 60
Recommended Preparation: Vocational - Business 118 with a minimum grade of $P$ Introduction to Windows, Vocational - Business 260 with a minimum grade of P Introduction to Word Processing Using MS Word
This course introduces students to Microsoft Publisher which is a desktop software application. Students obtain the skills to create and produce publications such as flyers, newsletters, brochures, greeting cards, certificates, newsletters, invitations, and other printed publications. Four high school elective credits may be awarded if a student completes all the required assignments and passes the final exam. Open Entry/Open Exit.

## Vocational - Business 258 <br> Navigating the Internet

Credit(s): $0 \quad$ Class Hours: 36
Recommended Preparation: Vocational - Business 259 with a minimum grade of P Orientation to Computers
Provides students with a basic introduction to accessing and using the internet. Topics include basic internet terms and concepts, browsing the Web, searching the Web, and communicating online. Two high school elective credits may be awarded if a student completes and passes all the required assignments and final exam. Open Entry/Open Exit.

Vocational - Business 259
Orientation to Computers
Credit(s): $0 \quad$ Class Hours: 72
This course is designed to familiarize students with the fundamentals in computer hardware and software. It also introduces the Windows operating system, Microsoft Word application, email, and internet. Four high school elective credits may be awarded if student completes all the required assignments and passes the final exam. Open Entry/ Open Exit.

## Vocational - Business 260 <br> Introduction to Word Processing Using MS Word

Credit(s): $0 \quad$ Class Hours:60
Recommended Preparation: Vocational - Business 259 with a minimum grade of $P$
This course provides instruction in concepts and techniques of Microsoft Word. Students will learn procedures of creating, editing, and formatting office/business documents of varying complexities. They will create business letters and tables, use mail merge, illustrate documents with graphics, and more. Four high school elective credits may be awarded if a student completes and passes all the required assignments and final exam. Open Entry/Open Exit.

## Vocational - Business 262 <br> Introduction to Spreadsheets Using MS Excel

Credit(s): $0 \quad$ Class Hours: 60
Recommended Preparation: Vocational - Business 118 with a minimum grade of $P$ Introduction to Windows
Provides students with instruction to spreadsheet concepts and software using Microsoft Office Excel. Students will learn how to create a worksheet, use formulas and functions, insert charts and tables, and more. Four high school elective credits may be awarded if a student completes all the required assignments and passes the final exam. Open Entry/Open Exit.

## Vocational - Business 270 <br> Introduction to Microsoft Outlook

Credit(s): $0 \quad$ Class Hours: 72
Students will learn the basics to manage and organize emails, calendars and contact information. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of $75 \%$. Open Entry/Open Exit.
Vocational - Business 280
Accounting Terminology
Credit(s): $0 \quad$ Class Hours: 36
This is a beginning accounting course designed for students with little or no accounting background. It introduces and provides an understanding of accounting terminology to prepare students for accounting occupations and accounting coursework. Open Entry/Open Exit.

## Vocational - Business 290

## Business Terminology

Unit(s): $0 \quad$ Class Hours: 48
An introductory course to commonly used business terms with the intent of helping students develop a viable business vocabulary and how they can be effectively used in the workplace and for career advancement. Open Entry/Open Exit.

Vocational - Business 301
Business Skills
Credit(s): $0 \quad$ Class Hours: 288
Includes keyboarding, filing, ten-key, spelling, written communications, Internet communications, accounting procedures and other related new business technology applications. Recommended for ESL
Beginning 3 level or equivalent. Open Entry/Open Exit.
Vocational - Business 302
Introduction to Web Page Development Using HTML
Credit(s): $0 \quad$ Class Hours: 60
Provides introductory instruction to web page development. Topics include web page design elements: HTML; graphic images, movie and sound formats; and testing pages on cross platforms. Designed for students who have completed a basic computer course or equivalent. Open Entry/Open Exit.

Vocational - Business 303
Introduction to Electronic Imaging Using Adobe Photoshop
Credit(s): $0 \quad$ Class Hours: 60
Provides introductory instruction to electronic imaging using Adobe Photoshop software. Topics include beginning Photoshop features, scanner basics, image and file formats, color, importing/exporting of files, and printing. Designed for students who have completed a basic computer operations course or equivalent. Open Entry/Open Exit.

## Vocational - Business 304 <br> Introduction to Electronic Presentations Using Powerpoint

 Credit(s): $0 \quad$ Class Hours: 60Recommended Preparation: Vocational - Business 118 with a minimum grade of $P$ Introduction to Windows
Provides students with instruction on how to use PowerPoint features (e.g., templates, layouts, pictures, graphics, animation, multimedia assets) to create engaging presentations. Students will also discuss best practices for using PowerPoint as a visual aid for any presentation. Four high school elective credits may be awarded if a student completes all the required assignments and passes the final exam. Open Entry/Open Exit.

## Vocational - Business 340 <br> Career Exploration

Credit(s): $0 \quad$ Class Hours: 5
This is a course designed to assist students in understanding opportunities available to them in different career and educational areas. Students will also learn about and be exposed to existing career technical education (CTE) pathways and how to successfully transition into a credit CTE program of study. Students will explore available occupations, careers, educational or training programs using a variety of available sources, such as interviews with business or college representatives, job shadowing, tours, guest speakers, and career and educational fairs/events. Open Entry/Open Exit.

## Vocational - Business 400 <br> Employability Skills

Credit(s): $0 \quad$ Class Hours: 48
Prepares students with the knowledge, work habits, and character traits that are necessary to succeed in the rapidly changing workplace and global economy of the 21st century. Students learn the 21st century soft skills that are critical for the demands of today's work environment. In addition, it teaches workforce preparation such as resume development, cover letter, interview techniques, job search strategies, networking, and elevator speech. Three high school elective credits may be awarded if a student completes all the required assignments and final project. Open Entry/Open Exit.

## Vocational - Business 450 <br> Hardware \& Software A+ Preparation, Review, and Practice

Credit(s): $0 \quad$ Class Hours: 72
Course provides instruction in computer hardware and software preparation, review, and practice for taking the A+ certification test. Training includes review and practice of upgrading, troubleshooting, and repair of computers; setting up home and small office networks; installation and familiarization of various Operating Systems; Applications, and Utilities. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of 75\%. Open Entry/Open Exit.

## Vocational - Business 500

Digital Literacy for Academic and Professional Success Tier 1
Unit(s): $0 \quad$ Class Hours: 36
The first integrated digital literacy course that prepares students for academic and workplace success by providing instruction on the fundamental technology skills needed to be digitally literate. Topics covered include: computer and smart phone functionality; introduction to the internet; the internet to find information; mobile applications for language learning; email creation and usage; online forms; video and audio sharing sites for language learning; social media for information; word processing applications; and introduction to online educational applications. Students may be awarded 2.5 high school elective credits if they complete and pass all course assignments and requirements. Open Entry/Open Exit.

## Vocational - Business 501 <br> Digital Literacy for Academic and Professional Success -

 Tier 2Unit(s): $0 \quad$ Class Hours: 36
The second integrated digital literacy course that prepares students for academic and workplace success by providing instruction on the primary technology skills needed to enhance digital literacy. Topics covered include: review of topics covered in Digital Literacy for Academic and Professional Success - Tier I; the internet to search and evaluate information; mobile applications for learning and productivity; email etiquette for social and professional exchanges; online applications for synchronous communication; social media for civic and professional engagement; use word processing programs for academic and career readiness; online educational applications for collaboration; and overview of learning management systems (e.g., Canvas). Students may be awarded 2.5 high school elective credits if they complete and pass all course assignments and requirements. Open Entry/Open Exit.

## Vocational - Business 502

Digital Literacy for Academic and Professional Success -
Tier 3
Unit(s): $0 \quad$ Class Hours: 36
The third integrated digital literacy course that prepares students for academic and workplace success by providing in depth instruction on a range of technology skills needed to further enhance digital literacy. Topics covered include: review of topics covered in Digital Literacy for Academic and Professional Success - Tier I and II; internet safety and one's digital footprint; plagiarism in the Digital Age; use word processing programs for academic and career readiness; email and text communication - social and professional standards; introduction to online conferencing; introduction to blogging and wikis; expansion and application of online educational programs; and learning management systems - navigation and participation. Students may be awarded 2.5 high school elective credits if they complete and pass all course assignments and requirements. Open Entry/Open Exit.
Vocational - Business 559
Business Practices in Family Child Care
Credit(s): $0 \quad$ Class Hours: 36
Provides potential family child care providers with information and skills necessary for successful operation of a family child care business. Open Entry/Open Exit.

## Vocational - Business 574 <br> Computer Basics: Hardware \& Software <br> Credit(s): $0 \quad$ Class Hours: 192

Provides instruction in maintenance, repair, and upgrading of personal computers. Emphasizes functional operations of hardware and software components. Includes hands-on experience with upgrading and repair of computers. Upon completion of course requirements a student may be awarded 5 high school elective credits. Open Entry/ Open Exit.

Vocational - Business 576
Computer Basics: Systems and Networking Essentials Credit(s): $0 \quad$ Class Hours: 90
Course provides baseline level of knowledge for networking certifications, including MCSA, MCSE, CNA and CCNA designations.
The focus is also on networking operating systems including Microsoft Windows and Linux. This class is for students with knowledge of computer repair and troubleshooting. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of $75 \%$. Open Entry/Open Exit.

## Vocational - Business 590

## Introduction to How to Start a Small Business

Credit(s): $0 \quad$ Class Hours: 72
Provides an introductory series of classes focusing on specific topics addressing the needs of individuals desiring to start a small business. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of $75 \%$. Open Entry/Open Exit.

Vocational - Business 668
Introduction to Automotive Vehicle Maintenance
Credit(s): $0 \quad$ Class Hours: 72
Provides an introduction to the modern automobile and normal maintenance service procedures. Safety, tools and vehicle systems will be emphasized. This class will stress a practical approach to vehicle maintenance. May award five high school elective credits if student completes all the required assignments with a minimum passing grade of 75\%. Open Entry/Open Exit.

## VOCATIONAL - CONSTRUCTION (VCNST)

## Vocational - Construction 610 Voc Construction Tech Module I

Credit(s): $0 \quad$ Class Hours: 88
Provides basic introduction to construction technology including Occupational Safety and Health Administration (OSHA)standards, first aid, and the proper use of hand and power tools. Introduces basic theory and tools for use in concrete and electrical work. May earn five high school credits if student completes all the required assignments with a minimum passing grade of $75 \%$.

## Vocational - Construction 620 <br> Vocational Construction Technology Module II <br> Credit(s): $0 \quad$ Class Hours: 192

Provides basic instruction with practical experience in building foundations, framing, and installing drywall, including completion of project(s). Recommended for those who have completed Vocational Construction Technology Module I, or those who have the instructor's approval by standard assessment. May earn five high school credits if student completes all the required assignments with a minimum passing grade of $75 \%$.

## VOCATIONAL - FOOD (VFOOD)

## Vocational - Food 005 <br> Servsafe Food Handler

Unit(s): $0 \quad$ Class Hours: 36
This course prepares students for employment in commercial and institutional food kitchens. It includes employee terminology, responsibilities, and training when preparing, handling, and serving food to the public. The course covers six key areas: basic food safety; good personal hygiene; controlling time and temperature; preventing cross-contamination; cleaning and sanitizing; and detailed food industry safety guidelines. It prepares students for the ServSafe Food Handler Certification. Two high school elective credits may be awarded if a student passes the course with a minimum grade of 70\%. Open Entry/Open Exit.

## VOCATIONAL - HEALTH (VHLTH)

## Vocational - Health 101 <br> Overview of the Nursing Assistant Training Program

Credit(s): $0 \quad$ Class Hours: 10
This course is designed to provide an introduction to the clinical and theoretical requirements for the Certified Nursing Assistant (CNA) Training Program. Open Entry/Open Exit.

## Vocational - Health 102

Certified Nursing Assistant (CNA) Training
Credit(s): $0 \quad$ Class Hours: 184
Prerequisite: Vocational-Health 101 with a minimum grade of $P$. Overview of the Nursing Assistant Training Program.
Designed for students who want to become Certified Nursing Assistants (CNA). This course includes theory and clinical segments designed to prepare them to complete the CNA certification and potentially seek employment as entry-level healthcare assistants. Upon completion, the student will be prepared to take the California certification exam. Students must complete all lecture hours and clinical training hours to be eligible to take the certification exam. Ten high school elective credits may be awarded if a student passes the course with a minimum grade of $70 \%$. Open Entry/Open Exit.


#### Abstract

Vocational - Health 109

\section*{Introduction to Caregiving}

Unit(s): $0 \quad$ Class Hours: 24 This course is designed to prepare students to assists the elderly, convalescents, or persons with disabilities with daily living activities at the person's home or in a care facility. Duties performed at a place of residence may include up keeping the house (e.g., making beds, doing laundry, washing dishes) and preparing meals. Topics covered include methods of advising families, the elderly, convalescents, and persons with disabilities regarding such topics as nutrition, cleanliness, and household activities. One high school elective credit may be awarded if a student passes the course with a minimum grade of $70 \%$. Open Entry/Open Exit.


## Vocational - Health 110 <br> Caregiver Training

Unit(s): $0 \quad$ Class Hours: 34
Prerequisite: Vocational Health 109, Introduction to Caregiving, with a minimum grade of $P$
This course is designed to provide students with hands-on experience as caregivers. Students will apply caregiver skills in a simulated caregiving environment. Two high school elective credits may be awarded if a student passes the course with a minimum grade of 70\%. Open Entry/Open Exit.

Vocational - Health 704
Introduction to Biotechnology
Unit(s): $0 \quad$ Class Hours: 50
This course is a general examination of biology as it relates to the field of biotechnology. Topics include the fundamental chemical processes common in prokaryotic and eukaryotic biology, chemistry of bio-molecules (proteins, enzymes, nucleic acids and lipids), cellular and molecular biology, basic immunology, and classical and molecular genetics with an emphasis on gene expression and genetic engineering.
Vocational - Health 799
Introduction to Pharmacy Technology
Credit(s): $0 \quad$ Class Hours: 32
Overview of the SAC Pharmacy Technician training program. Definition of the roles and preview of the opportunities open to pharmacy technicians in various practice settings. Presentation of the pharmaceutical dosage forms, the drug development process, and drug classification systems. Introduction to prescription labeling and to the law and ethics of pharmacy practice (Same as Pharmacy Technology 048). Open Entry/Open Exit.

## Vocational - Health 895

Paraprofessional Mental Health Worker I
Credit(s): $0 \quad$ Class Hours: 96
Provides basic skills for general employment as paraprofessional mental health workers. Helps students gain employment, find housing, use community resources, and become financially competent. Promotes an independent life-style. May earn five high school elective credits if student completes all required assignments with a minimum passing grade of 75\%. Recommended for Intermediate 2 and above. Open Entry/Open Exit.

## Vocational - Health 896

## Paraprofessional Mental Health Worker II

Credit(s): $0 \quad$ Class Hours: 128
Provides students with basic case management skills for employment as paraprofessional mental health workers. Recommended completion of Paraprofessional Mental Health Worker I. Recommended English proficiency level Intermediate 2 and above. May earn five high school elective credits if student completes all the required assignments with a minimum passing grade of $75 \%$. Open Entry/Open Exit.

## Vocational - Health 897

## Paraprofessional Mental Health Worker III

Credit(s): $0 \quad$ Class Hours: 128
Provides students with basic facilitation and counseling skills for employment as paraprofessional mental health workers. Focuses on group and peer counseling. Recommended completion of Paraprofessional Mental Health Worker I. Recommended English proficiency Intermediate 2 and above. May earn five high school elective credits if student completes all the required assignments with a minimum passing grade of 75\%. Open Entry/Open Exit.

## VOCATIONAL - HOSPITALITY (VHOSP)

Vocational - Hospitality 201<br>Career Focus - Hospitality Services<br>Unit(s): $0 \quad$ Class Hours: 60

This course provides students with an overview of the diverse career opportunities in food and lodging services. Students will develop a personal educational preparation and career plan. Topics include food service operations, management basics, and the hotel and lodging industry. The course also covers aspects of hospitality management, such as business structures and operations, human resources, and workplace safety. Four high school elective credits may be awarded if a student passes the course with a minimum grade of $70 \%$. Open Entry/Open Exit.

## SANTA ANA COLLEGE ADMINISTRATORS

## Becerra, Rosio (2018)

Director, Special Programs
Academic Talent Search
M.A., CSU Dominguez Hills

Chavez, Lorena (2018)
Director, Special Programs
Santa Ana College/School of Continuing Education
B.A., Loyola Maymount University
M.A., California State University, Long Beach

De La Rosa, Jennifer (2018)
Associate Dean, Student Development
A.A., Coastline Community College
B.S., Azusa Pacific University
M.S.W., University of Southern California

Dela Cruz, Maria (2016)
Dean, Counseling
B.A., Pepperdine University
M.A., California State University, Long Beach

Ph.D., University of Southern California
Dower, Kellori (2019)
Dean, Fine and Performing Arts
B.A., San Diego Christian College
M.Ed., National University

Ed.D., Northcentral University
Eidgahy, Saeid Y. (2019)
Dean, Science, Mathematics and Health Sciences
B.S., Bowling Green State University
M.Ed., Bowling Green State University

Ph.D., Bowling Green State University

## Estrada, Brenda (2016)

Director of Special Programs, Veterans Resource Center
Ed.D., California State University, Long Beach
Gaspar, Mario (2018)
Director, Physical Plant and Facility
B.S., Psychology, University of Phoenix
M.B.A., University of Phoenix

Grant, Madeline A. (2001)
Dean, Business Division
B.A., University of San Diego
M.B.A., Claremont Graduate School

Hoffman, Simon B. (2005)
Vice President, Administrative Services
B.S., California State University, Long Beach

MBA, University of Phoenix
Ed.D., California State University, Fullerton
Hubbard, Vaniethia (2018)
Vice President, Student Services
B.A., California State University, Fullerton
M.S.W., Clark Atlanta University

Ed.D., California State University, Fullerton

Kennedy, James (2007)
Vice President, School of Continuing Education, Santa Ana College
B.A., Sonoma State University
M.B.A., University of Phoenix

Ed.D., California State University, Fullerton
Kosko, Christine (2011)
Dean, Instruction and Student Services, Santa Ana College/School of Continuing Eduction
B.S., University of Phoenix
M.A., National University

Kruizenga, Alicia (2017)
Dean, Student Affairs
A.A., Cypress College
B.A., California State University, Fullerton
M.A., Brandman University

Lamb, Jeffey N (2018)
Vice President, Academic Affairs
B.A., California State University, Long Beach
M.A., California State University, San Diego

Ph.D., University of California, Los Angeles
Leon, Christine (2013)
Associate Dean, EOPS/CARE and CalWORKs
B.A., M.S.W., University of California, Los Angeles

Liang, Mark (2006)
Dean, Enrollment Services
B.A., California State University, Fullerton
J.D., Trinity International University, School of Law

Mahany, Donald (2008)
Associate Dean, Fire Technology
B.A., University of Redlands
M.S., California State University, Long Beach

## R. Douglas Manning (2017)

Dean, Kinesiology and Athletics
B.S., Education, Florida State University
M.S., Sport Management, Florida State University

Ph.D., Sport Administration, University of New Mexico
Manson, Robert (2006)
Associate Dean, Financial Aid
M.B.A., Chapman University

Miller, Rebecca (1990)
Associate Dean, Health Sciences
B.S.N., California State University, Long Beach
M.S.N., California State University, Dominguez Hills

Oforlea, Veronica (2016)
Associate Dean, Disabled Students Program \& Services (DSPS)
B.A., California State University, San Bernardino
M.S., Western University of Health Sciences, Pomona

Ed.D., California State University, Stanislaus

SANTA ANA COLLEGE ADMINISTRATORS (Continued)
Ortiz, Fernando D. (1996)
Dean, Academic Affairs
A.A., Santa Ana College
B.A., California State University, Fullerton
M.A., Ph.D., University of California, Riverside

Paramore, Stephanie (2019)
Dean, Instruction and Student Services
Santa Ana College/School of Continuing Education
B.A., University of California, Santa Barbara
M.A., San Diego State University

Rose, Linda D. (2016)
President, Santa Ana College
A.A., West Los Angeles College
B.A., M.A., California State University, Dominguez Hills

Ed.D., University of California, Los Angeles
Sergeyeva, Larisa (2019)
Dean, Human Services and Technology
B.S., Hope International University
M.A., Hope International University

Ed.D., Argosy University
Sotelo, Sergio R. (2000)
Dean of Instruction and Student Services,
Santa Ana College/School of Continuing Education
A.A., Santa Ana College
B.A., California State University, Fullerton
M.S., San Diego State University

Ph.D., University of California, Los Angeles

## Soto, Armando (2019)

Associate Dean of Counseling
A.A., Liberal Arts, Southwestern College
B.A., English, UC Berkeley
M.A., Education-Multicultural Counseling, San Diego State University

Ed.D., Educational Leadership, University of Southern California
Virgoe, Brad (2018)
Director, Criminal Justice Academies
B.S. University of Redlands
M.A. California State University Dominguez Hills

Winchell, Timothy (2018)
Associate Dean, Criminal Justice Academies
Graduate - Northwestern School of Police Staff and Command
MPA, University of Washington
Ph.D., Portland State University

## SANTA ANA COLLEGE FACULTY

## Abbey, Troy (2001)

Professor, Kinesiology
B.A., California State University, Long Beach
M.A., Azusa Pacific University

Alduenda, Leann (2015)
Associate Professor, Dance
B.A., University of California, Riverside
M.F.A., University of California, Irvine

Andrade, Philippe (2007)
Associate Professor, Political Science
B.A., California State University, Long Beach

Ph.D., Claremont Graduate University
Aguilar Beltran, Maria (2008)
Coordinator, Professor, Assessment Center
B.A., Cal Poly Pomona
M.S.W., California State University, Long Beach
L.D., Certificate, California State University, Sacramento

Axtell, Christina (2014)
Associate Professor, English
A.A., Santiago Canyon College
B.A., University of California, Los Angeles
M.A., California State University, Fullerton

Barnard, Rebecca (2012)
Coordinator, Health and Wellness Center
B.S.N., Point Loma Nazarene University
M.S.N., Azusa Pacific University

## Barrios, Andrew (2018)

Assistant Professor, Biology
B.S., California State University, Fullerton
M.S., California State University, Fullerton

## Bass, Stacey (2006)

Professor, Nursing
B.S.N., Loma Linda University
M.S.N., California State University, Long Beach
D.N.P., Western University of Health Sciences

## Bassett, Dana (2001)

Professor, English
B.A., M.A., California State University, Fullerton

Bautista, Steve (2001)
Counseling
B.A., M.S., California State University, Fullerton

Baquero, Jaymie (2014)
Assistant Professor, Kinesiology
M.A., California State University, Long Beach

Beltran, Jennie (2014)
Associate Professor, Biology
B.S., M.S., University of California, Irvine

Bennett, Gary (1998)
Professor, English
B.A., M.A., California State University, Fullerton

Ph.D., University of Nevada at Las Vegas
Bennett, Sarah (2016)
Assistant Professor, Communications and Media Studies B.A., M.A., University of Southern California

Benson, Kyla (2013)
Associate Professor, Fashion Design Merchandising
B.S., University of California, Davis
M.A., Trident University International

Beyersdorf, Matthew A. (2006)
Professor, English
A.A., Saddleback College
B.A., M.A., Chapman University
J.D., Chapman University School of Law

Member of the California State Bar
Bittner, Mathew (2019)
Assistant Professor, Automotive Technology
A.S., Cypress College

Bootman, Ashly (2015)
Associate Professor, English
B.A., University of California, Riverside
M.A., California State University, Fullerton

Bradley, Kyle (2014)
Associate Professor, Mathematics
B.A., M.A., California State University, Fullerton

Brandon, Kelly (1989)
Professor, English
B.A., University of California, Los Angeles
M.A., University of California, Santa Barbara

Breig, David B. (2002)
Professor, Kinesiology
A.A., Cerritos College
B.A., Seattle Pacific University
C.C.T.C., California State University, Dominguez Hills
M.S., California State University, Fullerton

Briones, Michael (2016)
Assistant Professor, Music
B.M., California State University, Long Beach
M.M., Azusa Pacific University

Brown, Angela T. (2001)
Counseling
A.A., Citrus College
B.S., University of California, Riverside
M.A., California State University, San Bernardino

Buechler, Michael (2014)
Associate Professor,Manufacturing Technology
A.S., Fullerton College

Bui, Annette (2017)
Assistant Professor, Counseling
A.A., Santa Ana College
B.A., California State University, Fullerton
M.A., California State University, Dominguez Hills

Campbell, Alondo C. (2013)
Associate Professor, Sociology
A.A., Golden West College
B.A., California State University, Long Beach
M.A., California State University, Fullerton

Ph.D., Purdue University

## Campos-Robledo, Joanna (2013)

Counselor
B.S., California State University, Fullerton
M.A., Claremont Graduate University
M.S., University of La Verne

Cannon, Chris (2011)
Associate Professor, Theatre Arts
B.A., Southeastern University
M.F.A., University of Virginia

Canzona, Paula (1998)
Counseling
B.S., University of Redlands
M.A., California State University, Dominguez Hills

## Carriger, Lisa (2017)

Assistant Professor, RN, MSN
A.D.N., Saddleback College
B.S.N., University of Texas Arlington
M.S.N., University of Texas Arlington

Castellanos, Mary (1979)
Counseling
B.A., California State University, San Diego
M.S., California State University, Fullerton.

Ph.D., United States International University
Cass, Ann (2019)
Counseling
B.A., Cal State University, Long Beach
M.S., National University

Castillo, Ricardo (2011)
Professor, Psychology
B.A., California State University, Bakersfield
M.A., California State University, Fullerton

Chamberlain, Amberly (2017)
Assistant Professor, Theatre Department
A.A., Fullerton College
B.A., California State University, Fullerton

Associate Professor, Art
B.A., Rice University
M.F.A., Rochester Institute of Technology

Clark, Stephanie (2014)
Associate Professor, Art
B.A., Rice University
M.F.A., Rochester Institute of Technology

## Coffman, Jodi (2000)

Counseling
B.A., University of California, Santa Barbara
M.A., California State University, San Diego
M.Ed., Ed.D., University of San Diego

Collins, Monica (2006)
Professor, American Sign Language Program,
B.S., Illinois State University
M.S., Western Oregon State

Colunga, Molly (2002)
Professor, Reading
B.A., M.S., California State University, Fullerton
M.A.,Pennsylvania State University

## Corp, Richard (2015)

Assistant Professor, Mathematics
B.S., Cal Poly Pomona
M.S., California State University, Fullerton

Courter, William (1996)
Professor, Geography
A.A., Long Beach City College
B.A., California State University, Long Beach
M.A., California State University, Northridge

Coyne, Claire M. (2006)
Professor, Earth Science/Geology
B.S., University of Maryland, College Park
M.S., University of Southern California

Cummings, Reyna (2016)
Assistant Professor, Communication Studies
B.A., Saint Mary's College
M.A., California State University Los Angeles

Deluna, Daniel (2014)
Associate Professor, History
A.A., Saddleback College
B.A., University of California, Los Angeles
M.A., California State University, Northridge

Dermody, Michael (2016)
Assistant Professor, Television/Video Communications
B.S., California State University, Sacramento
M.S., Ithaca College
M.F. A., National University

Diamond, Zachary (2019)
Assistant Professor, Welding Technology
Los Angeles Structural Welding Certified
Divers Academy International Certified
Dibb, Patrick (2015)
Assistant Professor, EMT
A.A., Santa Ana College
B.S., University of California, Irvine

Diller, Jeffrey (2014)
Associate Professor, English
A.A., Riverside City College
B.A., M.A., California State University, Fullerton

Dombroske, Leona (2018)
Assistant Professor, Pharmacy Technology
Pharm.D., University of California School of Pharmacy
Doolittle, Glenn A. Jr. (1996)
Professor, Global Business and Entrepreneurship
B.A., University of Texas
J.D., University of Georgia

Dufala, Christopher (2016)
Assistant Professor, Studio Arts
B.F.A., Rowan University
M.F.A., California State University, San Jose

Dumon, Dori (2017)
Assistant Professor, Business Applications \& Technology
A.A., Santa Ana College

Dwyer, Dalva (2001)
Professor, ESL
B.A., UNIVAP, Brazil
M.A., California State University, Fullerton

## SANTA ANA COLLEGE FACULTY (Continued)

## Emley, Catherine (1998)

Professor, Medical Assisting
A.A., B.S.N., Mount St. Mary's College, Los Angeles
M.N., Psychiatric Mental Health Nursing

University of California, Los Angeles

## Estrada, Maria (2016)

Assistant Professor, Counseling
B.A., University of California, Los Angeles
M.A., San Diego State University

Ettinger, Becky (2006)
Professor, Nursing
A.D.N., Cerritos College
B.S.N., University of Phoenix
M.S.N., California State University, San Bernardino
D.N.P., Western University of Health Sciences

Everett, Mike (2002)
Professor, Mathematics
B.A., B.S., M.A., California State University, Fullerton

Fernandez, Joseph (2018)
Professor, Nursing
B.S.N.; Oakland Universty, Rochester, MI
M.S.N., Madonna University, Livonia, MI

Fish, Zachary (2004)
Professor, Philosophy
B.A., Philosophy, University of New Orleans
M.A., Ph.D., University of California, Riverside

Fondren, Stephanie R. (1996)
Professor, Communication Studies
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

Fosmire, Edward (2015)
Associate Professor, Art History
B.A., M.A., California State University, Long Beach

Freeman, Suzanne (1993)
Professor, Fire Technology
B.A., California State University, Long Beach

Funaoka, Mary (2014)
Associate Professor, Child Development and Education Studies
B.A., University of California, Los Angeles
M.A., Loyola Marymount University

Ed.D., University of Southern California
Gallego, Robert (1989)
Counseling
A.A. Fullerton College
B.A., California State University, Fullerton
M.A., National University

## Galván, Javier (1996)

Professor, Spanish
B.A., California State University, Los Angeles
M.A., M.S., Ph.D., University of Southern California
M.A., California Polytechnic University, Pomona

Garcia, Yolanda (1985)
Professor, Librarian
B.A., California State University, Long Beach
M.L.S., University of California, Los Angeles

Garnett, Susan (2007)
Associate Professor, ESL/California Adult Education Program Faculty Coordinator
B.A., University of California at Los Angeles
M.S., California State University Fullerton

Gillette, Heather (1999)
Professor, Dance
B.F.A., California State University, Long Beach
M.F.A., University of Utah

Certified Laban Movement Analyst
Gilmour, Dennis (1991)
Counseling
A.S., Grossmont College
B.S., M.S., California State University, San Diego

Gilreath, Genice (1997)
Professor, Reading
M.A., California State University, San Bernardino

Gonis, Andy (2005)
Professor, Criminal Justice
B.S., California Sate University, Long Beach
M.S., California State University Long Beach

Ph.D., Northcentral University
Graduate, FBI National Academy
Gonzaga-Siguenza, Patricia (1996)
Professor, Counseling
B.A., M.S., California State University, Fullerton

Gonzalez, Adrianna (2014)
Associate Professor, Adult Basic Education /GED
B.A., University of California, Irivine
M.A., California State University, Long Beach

TESOL Certificate, University of Anaheim
Gonzales, Gregory (2019)
Assistant Professor, Welding Technology
Los Angeles City Certified Welder
Certified Welding Inspector/Education, American Welding Society (AWS)
Gonzalez, Haydee (2015)
Counseling
A.A., Los Angeles Harbor College
B.A., University of California, Los Angeles
M.S., California State University, Long Beach

Guerrero-Phlaum, Martha (2005)
Professor, Spanish
B.A., M.A., Ph.D., University of California, Irvine

Guzmán, Kristen (2006)
Professor, History/Ethnic Studies
B.A., University of California, Santa Cruz

Ph.D., University of California, Los Angeles

## Ha, Michael (2017)

Assistant Professor, Counselor
B.A., Divine Word College
M.A., Chapman University

Hager, Benjamin (2013)
Associate Professor, Mathematics
B.A., M.A., California State University, Fullerton

## Hampton, Jubal (2001)

Professor, Biology
B.S., University of California, Irvine
M.A., California State University, Fullerton

Hardy, Michelle (2014)
Associate Professor, Child Development and Education Studies
B.A., California State University, Fullerton
M.A., California State University, Long Beach

Hassel, Elissa A. (1996)
Professor, ESL
B.S., University of California, Davis
M.A., Biola University

Heremans, Tiffany
Assistant Professor, Hospitality and Culinary Arts
B.S., University of Phoenix

Hester, James (1996)
Professor, Computer Science
B.S., M.S., Ph.D., University of California, Irvine

Hicks, Raymond (2002)
Professor, ESL
B.A., Bowling Green State University
M.A., United States International University
M.B.A., Heriot-Watt University

Higgins, Conor (2015)
Associate Professor, English
A.A., Orange Coast College
B.A., M.F.A., California State University, San Diego

Higgins, Mark (1989)
Professor, English
B.S., St. Vincent College
M.A., University of Southern California

## Higuera, Daniel (2019)

Assistant Professor, Physical Fitness, Wellness and Fire Technology' A.S., Mount San Antonio College
B.S., California State Polytechnical University, Pomona
M.S., California State Polytechnical University, Pomona

Hoang, Susan (2015)
Associate Professor, Librarian
B.A., Pomona College
M.L.I.S. San Jose State University

## Holder, Vera (1988)

Professor, Communication Studies
B.A., California State University, Long Beach
M.A., California State University, Northridge

Horenstein, Daniel (2017)
Assistant Professor, Astronomy
B.S., Columbia University
M.S., Georgia State University

Hostetter, Darren (2015)
Assistant Professor, Studio Arts
BFA, MFA, California State University, Long Beach

## Huebsch, Mary (2001)

Professor, Communication Studies
B.A., Mount Holyoke College
M.A., University of California, Los Angeles
M.A., California State University, Fullerton

## Hughes, Philip (1989)

Professor, Earth Science/Geology
B.S., University of Southern California
M.S., Ohio State University

Huskey, Jason (2019)
A.A., Fullerton College
B.S., California State. :pmg Beach
M.A., California State University, San Bernardino
J.D., Western State University Colleg of Law

Isbell, James (2004)
Professor, English
B.A., M.A., Chapman University

Jang, Charles (2014)
Associate Professor, Biology
B.S., California State University, Fullerton
M.S. equiv., University of California, Riverside

Janio, Jarek (2007)
Professor/Coordinator, English as a Second Language
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

Ph.D., Walden University,
TESOL Certificate, Seattle Pacific University
Janus, Louise (2011)
Associate Professor, Learning Disability Specialist
B.A., University of San Diego
M.Ed., Argosy University
L.D. Certificate, California State University, Sacramento

Jenkins, Crystal (2004)
Professor, Chemistry
B.A., M.S., University of California, San Diego
M.S., California State University, Long Beach

Jenkins, Robert (1996)
Professor, ESL
B.S., M.S, TESOL, California State University, Fullerton

Jin, Jungwon (2011)
Associate Professor, Music
B.M., Juilliard School
M.M., D.M.A., University of Southern California

Jones, Elliott (2000)
Professor, Music
B.A., M.M., Arizona State University
D.M.A., University of Miami

Jones, Geoff (2004)
Professor, Kinesiology
B.A., Chapman University
M.A., Azusa Pacific University

Jones, Louise (2014)
Associate Professor, Nursing
A.D.N., Santa Ana College
B.S., M.S.N., Nursing California State University, Fullerton
D.N.P., Grand Canyon University

Kapil, Jill (2019)
Psychologist
B.A., University of California, Irvine

Psy.D., California School of Professional Psychology

## SANTA ANA COLLEGE FACULTY (Continued)

## Keith, Katharine (1991)

Professor, ESL
B.A., Connecticut College
M.A., University of Wisconsin, Madison

Kehlenbach, E. Brian (1990)
Professor, Music
B.S., M.M., University of Connecticut
D.M.A., University of Southern California

Kelley, Sara A. (2016)
Assistant Professor, English
B.A., M.A., California State University, Fullerton

Khalid, Donna Sir (2016)
Assistant Professor/Coordinator ASE Science
B.S., University of California, Irvine

Ph.D., University of Southern California
Kim, Henry (2001)
Professor, ESL
B.A., University of Hawaii at Manoa
M.A., California State University, Long Beach

Kimmel, Michelle (2018)
Assistant Professor, Child Development and Education Studies'
B.A., California State University, Long Beach
M.A., California State University, Long Beach

Ed.D., University of Southern California
King, Jaki (2016)
Assistant Professor/Librarian
B.S., Art Institute of Portland
M.L.I.S., Emporia State University

## Knight, Annie (2014)

Associate Professor, Librarian
B.A., California State University, San Bernardino
M.L.I.S., San Jose State University

Kowsari, Ali (2016)
Assistant Professor, Global Business and Entrepreneurship
B.S., Civil Engineering, Tehran University, Iran
M.S., Electronic commerce, National University
M.B.A., University of California, Irvine

Kushida, Cherylee (1996)
Coordinator, Distance Education
B.S., University of California, Irvine
M.B.A., Claremont Graduate School

Lamourelle, Chantal (2016)
Assistant Professor, Child Development and Education Studies
B.A., University of California, Los Angeles
M.S., Nova University

Lange, Megan (2017)
Assistant Professor, History
B.A., North Park University
M.A., University of California, Santa Barbara
M.A., California State University, Los Angeles

Lechuga, Janet (2013)
Associate Professor, Mathematics
B.A., M.A., California State University, Fullerton

Leeds, Kelvin (1997)
Professor, Mathematics
B.A., Southern California College
M.A., California State University, Fullerton

Lewis, Michael L. (1996)
Professor, ESL
B.A., California State University, Fullerton
M.A., United States International University

Little, Charles (1986)
Professor, Communications and Media Studies
B.A., Azusa Pacific University
M.A., University of La Verne

Littlejohn, Stacey (2014)
Associate Professor, Chemistry
B.S., Kansas Wesleyan University
M.S., University of California, Irvine

Lockhart, Ann (2011)
Counseling
B.S.W., M.S.W., California State University, Long Beach

Lockwood, Lance (2005)
Professor, Communication Studies
A.A., Victor Valley College
B.A., M.A., Chapman University

Lopez, Jorge (2007)
Professor, Biology
B.S., University of California, Davis
M.S., University of Chicago

Ph.D., Indiana University
Lopez-Jaurequi, Leticia (1994)
Professor, ESL
B.A., Yale University
M.A., TESOL Certificate, California State University, Fullerton

Lopez Mercedes, Jose (2017)
Assistant Professor, ESL
A.A. Santa Ana College
B.A., California State University, Fullerton
M.A., TESOL Certificate, California State University, Fullerton

Lui, Rachel (2015)
Assistant Professor, Mathematics
A.A., Fullerton College
B.A., University of California, Los Angeles
M.A., California State University, Fullerton

Luppani, Flo (2004)
Professor, Kinesiology
B.A., Chapman University
M.A., Humboldt State University

Macdonald, Juli (1996)
Professor, Kinesiology
B.S., M.S., California State University, Fullerton

Macintyre, Michelle (2015)
Counseling
B.A., University of Hawaii
M.A, Concordia University
M.A., California Polytechnic State University, San Luis Obispo

Madrigal, Osiel R. (2016)
Assistant Professor/Coordinator, Workforce Development B.S., M.P.A., San Diego State University

Ed.D., University of La Verne

## Madrigal, Romelia (2002)

Coordinator-SSSP/Upward Bound
B.A., California State University, San Diego
M.A., National University

Mandir, Joshua (2014)
Associate Professor, Chemistry
B.S., University of California, Irvine

Ph.D., University of Wisconsin, Madison
Manzano, Richard (1990)
Professor, Legal Studies
A.A., Glendale Community College
B.S., California State University, Los Angeles
J.D., Southwestern University School of Law

Member of California State Bar

## Marquez, Phil (2011)

Associate Professor, Art
B.A., California State University, Fullerton
M.F.A., Claremont Graduate University

Marr, John (2014)
Associate Professor, Music
B.A., M.A., California State University, Fullerton

Martinez, Donato (1996)
Professor, English
B.A., California State University, Pomona
M.A., California State University, Fullerton

Mathis, Jane (2005)
Counseling
B.A., University of California, Irvine
M.S., California State University, Long Beach

Mathot, Sarah (2015)
Associate Professor, Nutrition \& Foods
B.S., California Polytechnic State University, San Luis Obispo
M.S., R.D.N., California State University, Long Beach

## McCallick, Mark (2014)

Associate Professor, Accounting and Business Administration
B.S., Loyola Marymount University, Los Angeles

Certified Public Accountant, State of California
McKenna-Sallade, Dawn (2017)
Assistant Professor, Occupational Therapy Assistant
Occupational Studies Bachelor Degree Program
B.S., Tufts University
M.A., University of California

McKowan-Bourguignon, Lisa (2011)
Associate Professor, Mathematics
A.A., Santa Ana College
B.S., M.S., California State University, Long Beach

McMillan, Jeffrey (1992)
Professor, Chemistry
A.A., Santa Ana College
B.S., University of California, Irvine

Ph.D., Princeton University
Meckes, Ana M. (2015)
Counseling
B.A., M.S., California State University, Long Beach

Medina, Moises (2014)
Associate Professor, History
B.A., California State University, Northridge
M.A., University of California, Riverside

Meier, Krystal (1997)
Professor, Mathematics
B.A., California State University, Long Beach
M.A., Azusa Pacific
M.A., California State University, Fullerton

Mishal, Amit (2015)
Assistant Professor, Mathematics
B.A., M.A., University of California, Los Angeles
M.A., California State University, Fullerton

Ed.D., University of Southern California
Mixer, Dale (2004)
Professor, Nursing
A.D.N., Cerritos College
B.S.N., California State University, Fullerton
M.S.N., University of Phoenix

Montes, Agustin (1998)
Professor, Economics
B.A., M.A., California State University, Long Beach

Moreno, Alejandro (2016)
Assistant Professor, Counselor
B.A., Univeristy of California, Irvine
M.A., Azusa Pacific University

Morgan, Adam (2018)
Assistant Professor, Business Application and Technology
Morris, A. Kimo (2011)
Associate Professor, Biology
B.A., University of California, Santa Barbara
M.Sc., Oregon State University

Ph.D., University of California, Los Angeles
Mowrer, Melanie (2002)
Professor, ESL
B.A., Moravian College, Bethlehem, PA
M.A., United States International University, Irvine

TESOL Certificate, University of California, Irvine
Muir, Shannon (2016)
Assistant Professor, Counseling
B.A., University of California, Los Angeles
M.A., California Graduate Institute
M.Ed., University of Southern California

Murphy, Tim (2000)
Professor, Political Science
B.S., M.A., Ball University

Ph.D., University of Cincinnati
Nair, Arjun (2018
Assistant Professor, Biology
B.S., University of California, Davis
M.S., University of California, Irvine

Ph.D., University of California, Irvine
Nguyen, Huy (2018)
Assistant Professor, Computer Science
B.S. California State University, Long Beach
M.S. Boston University

## Nguyen, Kelly K. (2016)

Assistant Professor, Mathematics
B.A., California State University, Long Beach
M.A., California State University, Fullerton

## Nguyen, Madeleine (1996)

Counseling
B.A., California State University, Fullerton
M.A., California State University, Dominguez Hills

Nguyen, Thu T. (2014)
Counseling
B.A., University of California, Irvine
M.S., California State University, Long Beach

## Nguyen, Van Thi (1995)

Counseling
B.A., M.S., California State University, Long Beach

Nguyen, William (2003)
Professor, Chemistry
A.S., Santa Ana College
B.S., Ph.D., University of California, Los Angeles

Nick, JoAnn (1996)
Professor, Nursing
B.S.N., South Dakota State University
M.S.N., California State University, Long Beach

## Nilles, Tom (2015)

Assistant Professor, Kinesiology
A.A., Laney College
B.A., University of California, Davis
M.A., St. Mary's College of California

## Nutter, Kim (1991)

Professor, Kinesiology
B.S., California Polytechnic University, Pomona
M.A., California State University, Dominguez Hills

Nyssen, Adam (2013)
Assistant Professor, Kinesiology
M.A., Azusa Pacific University
M.A., San Diego State University

Oertel, Patricia (2008)
Professor, Biology
B.S., California State University, Long Beach

Ph.D., University of California, Irvine

## Oh, Suanne (2017)

Assistant Professor, Mathematics
M.S. Mathematics, California State University, Northridge.
B.S. Mathematics, University of California, Irvine.

Orr, Estelle C. (1970)
Professor, Art
B.A., M.A., University of California, Berkeley

Ortiz, Rebecca Vasquez (2017)
Assistant Professor, Psychology
B.A., University of California, Riverside
M.A., University of California, Riverside

Ph.D., University of California, Riverside
Papa, Elenor (2016)
Assistant Professor, Nursing
B.S., University of California, Riverside
M.S.N., California Baptist University

## Pastrana, Leo (2014)

Counseling
A.A., Orange Coast College
B.A., California State University, Dominguez Hills
M.A., Azusa Pacific University

Patterson, Kathleen (1996)
Professor, English
B.A., M.A., California State University, Fullerton

Patton, Carrie (2013)
Associate Professor, High School Subjects
B.A., St. Mary's College
M.A., National University

Paunovic, Mila (2006)
Professor, Nursing
B.S.N., Loma Linda University
M.S.N., University of Phoenix

Pedroza, Jeffrey (2001)
Professor, Psychology
B.S., M.S., Eastern Michigan University

Pedroza, Luis (1994)
Professor, Librarian, Department Co-Chair
B.A., California State University, Long Beach
M.L.I.S., University of California, Berkeley

Peraza, Daniel (2017)
Assistant Professor, Counseling
B.A., California State Polytechnic, Pomona
M.S., California State University, Long Beach

Pierce, Cathryn (2014)
Associate Professor, Communication Studies B.A., California State University, Long Beach
M.A., New York University

Pineda, Maribel (2016)
Counseling
A.A., Santa Ana College
B.A., University of California, San Diego
M.S.W., California State University, Dominguez Hills

Polanco-Zook, Rochelle (2001)
Counseling
A.A., Rio Hondo College
B.A., M.S.W., California State University, Long Beach

Quach, Nguyen (2015)
Associate Professor, Computer Science
B.S., M.S., California State University, Fullerton

Ramirez, Adrian (2017)
Assistant Professor, History
A.A., Santa Ana College
B.A., University of California, Irvine
M.A., University of California, Irvine

Ramshaw, Charles (2001)
Professor, English
B.A., California State University, Fullerton
M.A., Chapman University

Ro, Kelly (2015)
Assistant Professor, Mathematics
B.S., University of California, Los Angeles
M.A., University of Phoenix
M.A., California State University, Fullerton

## Robertson, Mario C.S. (2006)

Professor, Anthropology
B.A., M.A., California State University, Fullerton

## Robinson, Kristen (2011)

Associate Professor, Legal Studies
A.S., Snow College
B.A., Southern Utah University
J.D., Brigham Young University

Member of California State Bar

## Robledo, Rey (2005)

Counseling
B.S., California State University, Fullerton
M.S., University of La Verne

Rocke, Brandon (2014)
Associate Professor, English
B.A., California State University, Long Beach
M.A., Chapman University

Rogers, Neal L. (1973)
Professor, Mathematics
B.A., M.S., Ed.D., University of Southern California

Romero, Martin (2014)
Associate Professor, Mathematics
B.S., University of California, Los Angeles
M.S., California State University, Los Angeles

Ph.D., University of California, Los Angeles
Roper, David (2018)
Assistant Professor, Automotive Technology
A.A., Cerritos College
B.A., California State University, Los Angeles
M.A., Arizona State University

Ross, Kris (2006)
Professor, Fire Technology
B.A., M.A., California State University, Long Beach

Ross Jr., John (2009)
Professor, Pharmacy Technology
B.S., California State University, Fullerton

CPhT, Santa Ana College
Rudd, James (2014)
Associate Professor, Automotive Technology
A.A., Cerritos College

Russo, Stacy (2011)
Associate Professor, Librarian
A.A., Cypress College
B.A., University of California, Berkeley
M.L.I.S., San Jose State University M.A., Chapman University

Sabzevary, Mohammadreza Mirbeik (2017)
Assistant Professor, Mathematics
B.S., M.A, Iran-University of Tehran

Sanabria, Reina (2001)
Counseling
A.A., Fullerton College
B.S., California State University, Fullerton
M.A., Chapman University

## Saterfield, Kalonji (2016)

Assistant Professor, Communication Studies
B.A., California State University, Stanislaus
M.A., California State University, Fullerton

Schroeder, Brian (1989)
Professor, Nursing
B.A., California State University, Fullerton
B.S.N., M.S.N., Azusa Pacific University

Seitz Carol (2016)
Assistant Professor, Medical Assisting
B.A., University of California, Irvine

Shaffer, Cathie (2006)
Counseling/MESA Program Director
B.A., Psychology, University of California, Irvine
M.S., Counseling and Guidance, California State University, Fullerton

Shahbazian, Roy (2007)
Professor, Mathematics
B.S., M.S., University of California, Irvine

## Shweiri, Gabriel (2011)

Associate Professor, Global Business and Entrepreneurship
B.A., The George Washington University
M.IM, Thunderbird American Graduate School of International

Management
Sill, Kenneth (1994)
Professor, Mathematics
B.S., University of California, Irvine
M.S., University of California, Riverside

Sim, Jai S. (2018)
Assistant Professor, Computer Science
B.A. Kean University
M.B.A., Saint Peters University
M.B.A., Northeastern University

Simbro, Teresa (1997)
Professor, Nursing
A.D.N., Santa Monica College
B.S.N., M.S.N., California State University, Dominguez Hills

Simmerman, Stacy (2016)
Assistant Professor, English
A.A., Santiago Canyon College
B.A., University of California, Irvine
M.A., Claremont Graduate University

Singh, Nirbhai (Nick) (1999)
Professor, Manufacturing Technology
B.S., University of Punjab, India

Smith, Kimberly, Esq. (2016)
Assistant Professor, Legal Studies
B.A., California State Polytechnic University, Pomona
J.D., Southwestern University School of Law

Member of California State Bar
Smith, Sean (2017)
Assistant Professor, Mathematics
B.S. Applied Mathematics, Cal Poly Pomona
M.S. Pure Mathematics, Cal Poly Pomona

## Solheid, Christa (2000)

Professor, Mathematics
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

Ed.D., Argosy University, Orange County
Soriano, Irene (1994)
Professor, Art History/Ethnic Studies
B.A., University of Texas at El Paso
M.A., Boston College, Chestnut Hill
M.A., Ph.D., Boston University, Boston

Sos, Brian (2011)
Associate Professor, Kinesiology/DSPS
B.S., M.A., San Diego State University

Ph.D., Florida State University
Sosta, Rachel (2011)
Professor, English
B.A., Occidental College
M.A., California State University, Fullerton

Steckler, Mary (2002)
Professor, Nursing
A.D.N., Saddleback College
B.S.N., M.S.N., California State University, Dominguez Hills

## Stevens, Hayley (2019)

Assistant Professor, Physical Fitness, Wellness and Criminal Justice
B.S., California State University, Fullerton
M.S., California State University, Fullerton

## Strong, John Henry Thomas (2015)

Associate Professor, Accounting and Business Administration
B.S., M.S., University of Texas at Dallas

Certified Public Accountant, State of Texas

## Stucken, Robert (2006)

Professor, Nursing
A.D.N., Golden West College
B.A., Califotrnia State University, Long Beach
M.S.N., University of Phoenix

## Sung, Linda (2016)

Assistant Professor, Accounting and Business Administration
B.S., California State Polytechnic University, Pomona
J.D., Northwestern California University School of Law

Member of California State Bar
Certified Public Account, State of California

## Sweeney, George (2011)

Associate Professor, Mathematics
B.A., University of California, Los Angeles
M.S., California State Polytechnic University, Pomona

Ph.D., San Diego State University
Takahashi, Craig (2006)
Professor, Engineering
B.S., M.S., Ph.D., University of California, Irvine

Takahashi, Kathleen (2005)
Professor, Biology
B.S., University of California, Irvine
M.S., California State University, Long Beach

Ph.D., University of California, Los Angeles

## Tashima, John (2014)

Associate Professor/Coordinator, Adult Basic Education
B.A., University of California, Santa Cruz
M.A., California State University, Long Beach

Taylor, Michael (2015)
Associate Professor, Television \& Video Communications
B.A., California State University, Fullerton

Tolentino, Justin (2016)
Assistant Professor, Mathematics
B.A., M.A., California State University, Fullerton

Tran, Melissa L. (1999)
Professor, English
B.A., Wellesley College
M.A., Chapman University

Trone, Jinhee (1999)
Professor, Accounting and Business Administration
B.S., California State University, Los Angeles

Certified Public Accountant, State of California
Turner, Mark (2014)
Learning Disability Specialist, Associate Professor
B.A., Psychology, University of California, Irvine
M.A., Clinical Psychology, California School of Professional Psychology (Alliant University)

## Valles, Rodrigo (2016)

Assistant Professor, Ethnic Studies
A.A., East Los Angeles College
B.A., California State University, Dominguez Hills
M.A., California State University, Los Angeles

Valtairo, Rowena (2007)
Professor, Nursing
B.S.N., M.S.N., California State University, Fullerton
D.N.P., Western University of Health Sciences

## Vargas, Martha (1997)

Counseling-Transfer Center
B.A., California State Polytechnic University, Pomona
M.S., California State University, Fullerton

Vasquez, Michelle (2015)
Assistant Professor, Nursing
A.A., Golden West College
B.S.N., California State University, Fullerton
M.S.N., California State University, Long Beach

Veyna, Angelina F. (1993)
Professor, History/Ethnic Studies
B.A., University of California, Irvine
M.A., University of California, Los Angeles

Viera, Violeta (2016)
Assistant Professor, Counselor
B.A., California State University, Fullerton
M.A, University of San Diego

Vu, Dahlia (2006)
Professor, Mathematics
B.S., M.A., University of California, Riverside

## Walczak, Katharine (2014)

Associate Professor, Learning Center Coordinator
B.A., Earlham College
M.Ed., Cleveland State University
M.B.A., Baldwin-Wallace University

## Wang, Wendy (2019)

Assistant Professor, Occiupational Studies Bachelor Degree Program
B.S., University of California, Davis
M.S., University of Southern California

Wann, Terri (1985)
Professor, Fire Technology
B.S., M.S., California State University, Fullerton

Waterman, Patricia (2001)
Professor, Art
B.F.A., Art Center College of Design

Weber, Merari L. (2016)
Assistant Professor/Coordinator, ESL
B.A., M.A., California State University, Los Angeles

Ed.D., University of Southern California
Yamada, Ted K. (1993)
Professor, Chemistry
B.S., Ph.D., University of Southern California

Zarske, John (1996)
Professor, Mathematics
A.A., Golden West College
B.A., California State University, Long Beach
M.S., University of Southern California

Zarske, Monica S. (2005)
Professor/Coordinator, Speech Language Pathology Assistant Program (SLPA)
B.A., M.A., San Diego State University


SAC Facilities and Locations To see the most recent version of this map, go to www.sac.edu/AboutSAC/Maps

| A | Cesar Chavez Building/ Business Computer Lab | K | Welding / Auto Diesel | U | Johnson Center (Under Construction) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B | Middle College High School | L | Nealley Library / Media Services | V | Early Childhood Education |
| C | Fine Arts / Art Gallery | M | Planetarium/Veterans Center |  | Center |
| D | Dunlap Hall | N | Music Building | VL | The Village |
|  |  | 0 | Central Plant |  | (Bookstore, Student Business |
|  |  | P | Phillips Hall Theatre |  | Go, Health \& Wellness, DSPS, |
| F | Locker Rooms |  |  |  | EOPS, Financial Aid, International |
| G | Cook Gym | Q | Sports Concession |  | Quick Center, Students Program, |
|  | Hammond Hall | R | Russell Hall |  | The Spot, Student Life) |
| H | Hammond Hall | S | Administration Building / | W | Kinesiology |
| I | Classroom Building |  | Admissions/Counseling | X | Security / Safety |
| J | Auto Shop | T | Technical Arts | Z | Maintenance |



## PARKING INFORMATION:

## CAMPUS PARKING INFORMATION

RSCCD requires parking permits for student and staff lots at Santa Ana College and Santiago Canyon College. Parking permits may be purchased at time of registration for $\$ 30.00$ in Room VL-205B, the Village at Santa Ana College, as well as in the Cashier's Office at Santiago Canyon College. The purchase of your permit funds parking services and vehicle security when parked on campus.

## REFUND OF PARKING FEE

Any student who withdraws from full-semester class(es) through the first two weeks of instruction may request a refund for his/her parking permit. The student is required to return the parking permit in its original condition. No refund will be allowed after the second week of instruction. No refund will be allowed if the parking permit is lost or stolen.

## PARKING LOT DISCLAIMER

Rancho Santiago Community College District is not responsible for damages to, loss of, or thefts from vehicles parked on campus, except as defined under the applicable Government Codes of California, including [810-966.6]. CAUTION!
Parking in Bristol Marketplace, across the street from Santa Ana College, is not allowed. Violations will result in tow-aways.

Fairview


## INDEX

A
AB $540 \ldots .$. ............................................................ 15
Absence/Non Participation/Drop . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55
Academic Computing Center.......................................... 50
Academic Honesty Policy Information ............................... . . . . 55
Academic Honors ...................................................... . 55
Academic Renewal. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55
Accreditation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Administration . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
Administrators Listing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 366
Admission Eligibility . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 14
Admissions and Records Information . . . . . . . . . . . . . . . . . . . . . . . . . . . . 14
-International Students . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16
Advanced Placement Policies . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 34
Announcement of Courses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 192
Assembly Bill AB 705. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 17
Assessment .......................................................................... . . . . . 50
Assessment Center. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
Associate Degree . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23
-for Transfer . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23
-Programs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26
-Requirements. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26
Associated Students . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 53
Attendance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55
Auditing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55
Awards. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55
Board of Trustees . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
Bookstore . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
C
Calendars
-Continuing Education. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 332
-Credit . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
California College Promise Grant (CCPG) . . . . . . . . . . . . . . . . . . . . . . . 21
California State University General Education Breadth
Certificate and Associate Degree Programs ........................ . . . . 89
Certificate of Achievement. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30
California State University System, Transfer . . . . . . . . . . . . . . . . . . . . . 30
CalWORKs . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
Campus Regulations . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 56
Career Advanced Placement Program (CAP) . . . . . . . . . . . . . . . . . . . . . . . 18
Career and Job Resource Center. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
Catalog Content . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
Centennial Education Center . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 333
Certificates
-Competency . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23
-Programs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23
-Requirements. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 23
Child Development Centers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 51
Chính Sách Bất Kỳ Thị . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11
Classification of Students . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18
Class Schedules. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18, 20
College Advancement/Foundation. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
College-Level Examination (CLEP) Policies . . . . . . . . . . . . . . . . . . . 37, 38
COLLEGE CREDIT COURSES:
Accounting (ACCT) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 196
American Sign Language (ASL) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 197
Anthropology (ANTH) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 198
Art (ART). . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 199
Asian American Studies (ASIA) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 206
Astronomy (ASTR) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 206
Automotive Technology (AUTO) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 206
Banking (BANK) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 208
Biology (BIOL) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 208
Black Studies (Blst) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 211
Business (BUS) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 211
Business Applications (BA) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 213
Chemistry (CHEM) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 216
Chicano Studies (CHST) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 217
Child Development (CDEV) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 217
Chinese (CHNS) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 220
Communication Studies (CMST). . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 220
Communications \& Media Studies (CMSD) ..... 222
Computer Science (CMPR) ..... 223
Counseling (CNSL) ..... 226
Criminal Justice (CJ) ..... 228
Criminal Justice Academies (CJA). ..... 229
Culinary Arts (CULN). ..... 236
Dance (DNCE) ..... 237
Diesel (DSL) ..... 242
Earth Science (ERTH) ..... 244
Economics (ECON) ..... 245
Education (EDUC). ..... 245
Emergency Medical Technician (EMT) ..... 246
Engineering (ENGR) ..... 246
English (ENGL). ..... 250
English As A Second Language (ESL). ..... 252
English Multilingual Students (EMLS) ..... 252
Entrepreneurship (ENTR) ..... 253
Environmental Studies (ENVR) ..... 255
Ethnic Studies (ETHN) ..... 255
Fashion Design Merchandising (FDM) ..... 255
Fire Academy (FAC) . ..... 258
Fire Officer Training (FOT) ..... 261
Fire Public Safety (FSA) ..... 268
Fire Technology (FTC) ..... 269
French (FREN) ..... 269
Geography (GEOG) ..... 270
Geology (GEOL). ..... 271
History (HIST) ..... 272
Interdisciplinary Studies (IDS) ..... 273
Italian (ITAL). ..... 273
Japanese (JAPN) ..... 274
Kinesiology Activities (KNAC) ..... 274
Kinesiology Adapted Activities (KNAD) ..... 277
Kinesiology Aerobic Fitness (KNAF) ..... 278
Kinesiology Aquatics (KNAQ) ..... 279
Kinesiology Fitness (KNFI) ..... 279
Kinesiology Health Education (KNHE) ..... 280
Kinesiology Intercollegiate Athletics (KNIA) ..... 281
Kinesiology Professional (KNPR) ..... 284
Kinesiology Sports Medicine (KNSM) ..... 285
Law (LAW) ..... 285
Library \& Information Studies (LIBI). ..... 286
Library Technology (LIBR) ..... 286
Management (MGMT) ..... 286
Manufacturing Technology (MNFG). ..... 287
Manufacturing Technology (MNFG). ..... 287
Marketing (MKTG). ..... 290
Mathematics (MATH). ..... 291
Medical Assistant (MA) ..... 294
Music (MUS) ..... 295
Nursing-Continuing Education (NCE) ..... 301
Nursing-Registered (NRN) ..... 301
Nutrition and Food (NUTR) ..... 305
Occupational Studies (OS) . ..... 306
Occupational Therapy Assistant (OTA) ..... 307
Paralegal (PARA) ..... 308
Pharmacy Technology (PHAR) ..... 310
Philosophy (PHIL) ..... 312
Photography (PHOT). ..... 313
Physical Science (PSC) ..... 314
Physics (PHYS) ..... 314
Political Science (POLT). ..... 314
Psychology (PSYC) ..... 315
Reading (Read) ..... 316
Sociology (SOC) ..... 317
Spanish (SPAN). ..... 317
Special Services (SPEC) ..... 318
Speech-Language Pathology Assistant (SLPA). ..... 319
Study Skills (STDY). ..... 320
TV/Video Communications (TELV) ..... 320
Theatre Arts (THEA) ..... 323
Vietnamese (VIET) ..... 327
Welding (WELD). ..... 328
Women's Studies (WMNS) ..... 331
College Credit Instructional Programs ..... 64
College Policies ..... 55
Community Services. ..... 50
Complaint Procedures (see Grievance Procedures) ..... 59
CONTINUING EDUCATION DIVISION ..... 50, 332
-Admissions and Fees ..... 336
-Adult High School Diploma Program. ..... 334, 337
-Adult Basic Education (ABE) ..... 344
-Adult Secondary Education (ASE) ..... 344
-Career Education. ..... 345
-Centennial Education Center ..... 333
-Certificates ..... 345
-Childcare Licensing Program ..... 334
-Citizenship. ..... 334, 351
-Community Learning Center ..... 335
-Developmentally Disabled Adults ..... 334
-English as a Second Language. ..... 334, 347
-GED Preparation ..... 334
-Goals and Objectives ..... 334
-Health and Safety Education. ..... 335, 359
-Instructional Calendar ..... 332
-Instructional Programs and Student Services. ..... 335
-Parent Education. ..... 334, 361
-Policies Governing Students. ..... 339
-Program Objectives ..... 334
-Programs. ..... 344
-Student Services and Special Needs ..... 340
-Vocational Education ..... 334
-Vocational Training Programs ..... 335
Cooperative Work Experience Education ..... 56
Corequisite ..... 19
Corequisites ..... 19
Counseling (Continuing Education) ..... 338
Counseling Services ..... 50
Course Identification Numbering System (C-ID) ..... 193
Course Repetition ..... 56
Courses Related in Content ..... 56
Credits
-By Examination ..... 57
-Unit of Credit ..... 63
DEGREES AND CERTIFICATES
Accounting ..... 66
Accounting Degree ..... 66
General Accounting Certificate ..... 66
Computerized Accounting Certificates. ..... 67
Computerized Accounting-QuickBooks Certificate ..... 67
Computerized Bookkeeping - QuickBooks Certificate ..... 67
General Bookkeeping Certificate ..... 67
Accounting and Financial Planning Certificate ..... 68
Enrolled Agent Certificate ..... 68
Professional Accounting - Accounting Study \& Ethics Certificate ..... 68
Professional Accounting - Accounting Subjects Certificate ..... 69
Professional Accounting - Business Subjects Certificate ..... 70
Tax Preparer Certificate ..... 71
Administration of Justice ..... 71
American Sign Language ..... 71
American Sign Language Certificate ..... 71
Anthropology ..... 72
Anthropology Degree ..... 72
Associate in Arts Degree in Anthropology for Transfer . ..... 73
Art ..... 73
Art Degree ..... 73
Associate in Arts in Art History for Transfer. ..... 74
Associate in Arts in Studio Arts for Transfer. ..... 75
Crafts Option Certificate. ..... 75
Crafts Certificate A-Jewelry Emphasis Certificate ..... 75
Crafts Certificate D-Ceramics Emphasis Certificate ..... 75
Art-Graphic Design Degree ..... 76
Degree Program A-Professional Emphasis or Transfer Preparation to Art School ..... 76
Degree Program B-Transfer to State University ..... 76
3D Modeling and Animation Certificate A - Art Emphasis Certificate ..... 76
Art-Digital Media Arts Degree ..... 77Digital Media Arts Certificate B-UX Design Certificate78
Public and Community Art - Mural Painting Certificate ..... 78
Automotive Technology. ..... 78
Automotive Technology Degree . ..... 78
Advanced Engine Performance Option Certificate ..... 79
Automotive Business Technology Certificate ..... 79
Chassis Service Option Certificate ..... 79
Drive Train Service Option Certificate ..... 80
Engine Performance and Electrical Option Certificate ..... 80
Engine Service Option Certificate ..... 80
Automotive Air Conditioning Maintenance Certificate ..... 80
Alternative Fuels and Hybrid Maintenance Certificate ..... 80
Automotive Chassis Maintenance ..... 81
Automotive Electrical Maintenance Certificate ..... 81
Automotive Engine Maintenance Certificate ..... 81
Biology . ..... 81
Biological Science Degree ..... 81
Associate in Science in Biology for Transfer ..... 82
Biotechnology. ..... 82
Biotechnology Degree ..... 82
Biotechnology Lab Assistant Certificate ..... 82
Biotechnology Biomanufacturing Technician Certificate ..... 83
Biotechnology Laboratory Technician Certificate ..... 83
Certificate ..... 83
Black Studies ..... 83
Black Studies Degree ..... 83Business Administration Degree8
Associate in Science in Business Administration for Transfer ..... 85
Business Applications ..... 85
Business Applications and Technology Degree . ..... 85
Business Applications and Technology Certificate ..... 86
Digital Publishing Degree ..... 86
Digital Publishing Certificate ..... 86
Digital Graphic Design for Business Certificate ..... 87
Adobe Applications for Business Certificate ..... 87
Adobe Web Projects for Business Certificate ..... 87Microsoft Office Professional Degree88
Microsoft Office Professional Certificate ..... 88
Office Management Degree ..... 88
Management Certificate ..... 88
Spanish / English Interpretation and Translation Certificate ..... 89
Chemistry ..... 89
Chemistry Degree. ..... 89
Associate in Science in Chemistry for Transfer ..... 89
Chicano Studies. ..... 90
Chicano Studies Degree ..... 90
Child Development ..... 90
Associate in Science in Early Childhood Education for Transfer ..... 90Development Degree.91
Chid Development - Emphasis in Preschool Age Care and Development Degree. ..... 91
Recreation Degree ..... 92
Bilingual (English/Spanish) Preschool Associate Teacher Certificate ..... 92
Early Childhood Teacher Certificate ..... 92
Infant/Toddler Teacher Certificate ..... 93
School-Age Teacher Certificate ..... 93
Early Childhood Assistant Teacher Certificate ..... 94
Certificate for Early Childhood Educators CertificateSupport for Students with Special Needs Certificate

Communications \& Media Studies . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 96
Communications \& Media Studies Degree96
Associate in Arts in Journalism for Transfer ..... 96
B-Broadcast Communications \& Media Studies Degree ..... 97
Communications \& Media Studies Certificate ..... 98
Community Social Services ..... 98
Community Social Services Degree. ..... 98
Computer Information Systems ..... 98
Computer Information Systems Degree. ..... 98
Computer Information Systems Certificate ..... 99
Database Certificate ..... 99
Enterprise Systems Certificate ..... 99
Help Desk Certificate ..... 100
Networking Certificate ..... 100
PC Maintenance and Troubleshooting Certificate ..... 100
Web Site Development Certificate ..... 100
Computer Related Programs. ..... 100
Computer Information Systems ..... 100
Computer Science. ..... 100
Computer Science Degree ..... 101
Associate in Science in Computer Science for Transfer . ..... 101
Computer Science Certificate ..... 101
Programming Certificate ..... 102
Criminal Justice ..... 102
Criminal Justice Degree ..... 102
Associate in Science in Administration of Justice for Transfer. ..... 103
Corrections Officer Program Certificate ..... 103
Law Enforcement Option Certificate ..... 104
Dance. ..... 104
Dance Degree ..... 104
Dance Certificate of Achievement ..... 105
Diesel Technology ..... 105
Diesel and Heavy Equipment Technology Degree ..... 105
Diesel and Heavy Equipment Technology Certificate ..... 106
Mid-Range Engine Service Option Degree ..... 106
Mid-Range Engine Service Option Certificate ..... 106
Transport Refrigeration/Temperature Control Option Certificate ..... 107
Heavy Duty Chassis Service Certificate ..... 107
Heavy Duty Diesel Engine Service Certificate ..... 107
Truck Air Conditioning Service Certificate ..... 107
Alternative Fuels - Clean Diesel Certificate ..... 107
Transit Bus Maintenance Certificate ..... 107
Earth Science ..... 108
Earth Science Degree ..... 108
Economics ..... 108
Economics Degree ..... 108
Associate in Arts in Economics for Transfer ..... 109
Education. ..... 109
Elementary Education (Pre-Professional) Degree ..... 109
Associate in Arts in Elementary Teacher Education for Transfer. ..... 110
After School Program Assistant Certificate ..... 111
After School Program Associate Teacher Certificate ..... 112
Engineering ..... 112
Engineering Degree ..... 112
Engineering Transfer ..... 113
Engineering Technology, Manufacturing Technology, and Industrial Technology Transfer ..... 113
Engineering Civil Technology Degree ... ..... 113
Engineering Civil Technology Certificate ..... 113
Engineering Computer Aided Drafting and Design Degree ..... 113
Computer Aided Drafting and Design Certificate ..... 114
Engineering Drafting and Design Option l-Engineering Drafting and Design Degree ..... 114
Engineering Drafting and Design Option l-Engineering Drafting and Design Certificate ..... 115
Engineering Drafting and Design Option II-Architectural/Civil Engineering/Construction Drafting and Design Degree. . ...... ..... 115
Engineering Drafting and Design Option II-Architectural/Civil Engineering/Construction Drafting and Design Certificate ..... 115
Engineering Mechatronics Technology Degree ..... 115
Engineering Mechatronics Technology Certificate ..... 116
Energy Analysis Certificate ..... 116
AutoCAD 2D Basics Certificate ..... 116
3D CAD Skill Builder Certificate ..... 117
Civil 3D CAD Certificate ..... 117
Engineering Mechanical 3D Solid Modeling CAD Certificate ..... 117
Sustainable Building Operations Management Degree ..... 117
Sustainable Building Operations Management Certificate ..... 117
Sustainable Facilities Management Certificate ..... 117
Sustainable Facility Skill Builder Certificate ..... 118
Surveying Skill Builder Certificate ..... 118
English ..... 118
English Degree ..... 118
Associate in Arts in English for Transfer ..... 119
Entrepreneurship ..... 120
Entrepreneurship and Innovation Degree ..... 120
Entrepreneurship and Innovation Certificate ..... 120
Freelancer Certificate ..... 120
Ethnic Studies ..... 121
Ethnic Studies Degree ..... 121
Fashion Design Merchandising ..... 122
Fashion Design Degree. ..... 122
Fashion Design Certificate ..... 122
Fashion Merchandising Degree ..... 123
Fashion Merchandising Certificate ..... 123
Apparel Product Development and Technical Design Degree.. 123
Apparel Product Development and Technical Design Certificate 124
Dressmaking and Alterations Option Certificate ..... 124
Fashion Assistant Certificate ..... 125
Quinceañera Dress Design Certificate ..... 125
Screen Printing and Embroidery Certificate ..... 125
Swimwear Design Certificate ..... 125
Visual Merchandising Certificate ..... 125
Fire Technology ..... 125
Administrative Fire Services Chief Officer Degree. ..... 125
Administrative Fire Services Chief Officer Certificate ..... 126
Fire Administration Option Degree ..... 127
Fire Administration Option Certificate ..... 127
Fire Prevention Officer Degree ..... 128
Fire Prevention Officer Certificate ..... 128
Public Fire Service Option Degree ..... 128
Public Fire Service Option Certificate ..... 129
Fire Service Core Competencies Certificate ..... 129
Geography ..... 129
Geography Degree ..... 129
Associate in Arts in Geography for Transfer. ..... 130
Geology ..... 131
Geology Degree ..... 131
Associate in Science in Geology for Transfer ..... 131
History ..... 132
History Degree ..... 132
Associate in Arts in History for Transfer ..... 132
Hospital Pharmacy Technology ..... 133
International Business ..... 133
International Business Degree ..... 133
International Business Certificate ..... 134
Global Trade Skills Certificate ..... 134
Survey of International Business Certificate ..... 135
Global Business and Entrepreneurship Certificate ..... 135
International Finance Specialist Certificate ..... 135
International Law Specialist Certificate ..... 135
International Logistics Specialist Certificate ..... 136
International Marketing Specialist Certificate ..... 136
Journalism ..... 136
Kinesiology ..... 136
Kinesiology Degree
Liberal Arts Degree. ..... 140

1. American Studies ..... 140
2. American Studies ..... 141
3. Arts, Humanities And Communications ..... 142
4. Business And Technology ..... 144
5. Kinesiology And Wellness ..... 144
6. Mathematics And Science ..... 147
7. Social And Behavioral Sciences ..... 148
Library Technology ..... 150
Library Technology Degree ..... 150
Library Technology Certificate ..... 150
Management ..... 151
Management Degree ..... 151
Management Certificate ..... 151
Retail Management Degree ..... 151
Retail Management Certificate ..... 152
Human Resource Management Certificate ..... 152
Small Business Certificate ..... 152
Supervision Certificate ..... 152
Manufacturing Technology ..... 153
CNC Lathe Set Up and Operation Option Degree. ..... 153
CNC Lathe Set Up and Operation Option Certificate ..... 153
CNC Machine Set Up and Operation Option Degree ..... 153
CNC Machine Set Up and Operation Option Certificate ..... 154
CNC Milling Machine Set Up and Operation Option Degree ..... 154
CNC Milling Machine Set Up and Operation Option Certificate 154
CNC Programmer A-Mastercam Option Degree ..... 155
CNC Programmer A-Mastercam Option Certificate ..... 155
Conventional Machining Option Degree ..... 155
Conventional Machining Option Certificate ..... 156
3D Solid Modeling Certificate ..... 156
Medical Device Quality Assurance Certificate ..... 156
Quality Control and Inspection Certificate ..... 156
Marketing ..... 157
Contemporary Marketing Degree ..... 157
Contemporary Marketing Certificate ..... 157
Mathematics ..... 158
Mathematics Degree ..... 158
Associate in Science in Mathematics for Transfer ..... 158
Medical Assistant ..... 158
Medical Assistant-Administrative/Clinical Degree ..... 158
Medical Assistant Degree Option: ..... 158
Medical Assistant-Administrative/Clinical Certificate ..... 159
Modern Languages. ..... 159
Modern Languages Degree ..... 159
Associate in Arts in Spanish for Transfer. ..... 160
Music. ..... 161
Music Degree ..... 161
Associate in Arts in Music for Transfer ..... 162
Digital Music Production Certificate ..... 162
Nursing. ..... 163
Nursing Degree Pre-Nursing for the Bachelor's Degree in Nursing ..... 163
Nursing-Registered Nursing Degree ..... 163
Nutrition and Food ..... 166
Nutrition and Dietetics Degree ..... 166
Associate in Science in Nutrition and Dietetics for Transfer ..... 167
Culinary Arts Foundation Option Certificate ..... 167
Hospitality Foundation Certificate ..... 167
Occupational Therapy Assistant. ..... 168
Occupational Therapy Assistant Degree ..... 168
Paralegal ..... 169
Paralegal Degree ..... 169
Paralegal Certificate ..... 170
Pharmacy Technology ..... 171
Pharmacy Technology Degree ..... 172
Pharmacy Technology Advanced Certificate ..... 172
Pharmacy Technology Basic Option Certificate ..... 173
Philosophy ..... 174
Philosophy Degree ..... 174
Associate in Arts in Philosophy for Transfer ..... 174
Photography. ..... 175
Photography Degree ..... 175
Commercial Photography Certificate ..... 175
Physics ..... 175
Physics Degree ..... 175
Associate in Science in Physics for Transfer ..... 176
Political Science ..... 176
Political Science Degree A.A. Degree ..... 176
Associate in Arts in Political Science for Transfer ..... 177
Psychology ..... 177
Associate in Arts in Psychology Degree ..... 177
Associate in Arts in Psychology for Transfer ..... 178
Science ..... 179
Science Degree ..... 179
Social Science ..... 180
Social Science Degree ..... 180
Sociology ..... 180
Sociology Degree ..... 180
Associate in Arts in Sociology for Transfer ..... 181
Speech-Language Pathology Assistant ..... 182
Speech-Language Pathology Assistant Degree ..... 182
Teaching ..... 183
Television/Video Communications ..... 183
Television/Video Communications Degree ..... 183
Associate in Science in Film, TV and Electronic Media for Transfer ..... 184
Television/Video Communications Certificate A-Television Production ..... 184
Television/Video Communications Certificate B-Broadcast Journalism ..... 185
Television/Video Communications C-Television Scriptwriter Certificate ..... 185
Television/Video Communications-Media Studies Certificate ..... 186
Theatre Arts ..... 186
Theatre Arts - Performance Emphasis Degree ..... 186
Theatre Arts - Technical Theatre Emphasis Degree ..... 187
Associate in Arts in Theatre Arts for Transfer ..... 187
Costume Design Certificate ..... 188
Entertainment Technology ..... 188
Screen Performance Certificate ..... 189
Welding Technology ..... 189
Welding Technology Degree ..... 189
Welding Technology Certificate ..... 189
Advanced Arc-Semi-Automatic Welding Certificate ..... 190
Advanced Pipe Welding Technology Certificate ..... 190
Automated Robotic Welding Systems Certificate ..... 190
Automated Laser Welding System Certificate ..... 191
Women's Studies. ..... 191
Women's Studies Degree. ..... 191
Distance Education ..... 23
Disabled Student Program (Continuing Education) ..... 336
Dismissal. ..... 60
Drop for Non-Payment ..... 20
English Language Academy ..... 51
Examinations ..... 57
Expenses ..... 20
Extended Opportunity Programs and Services (E.O.P.S.) ..... 51
Extenuating Circumstances ..... 58
Faculty Listing ..... 368
Family Education Rights and Privacy ..... 13
Family of Courses ..... 57
Fees. ..... 18, 20
-Enrollment. ..... 8, 20
General Education Requirements
-For Associate Degree (Plan A) ..... 26
-For The California State Universities (Plan B) ..... 28
-Intersegmental General Education Requirements (Plan C) ..... 30
Grades
-Grade Point Average ..... 58
-Incomplete ..... 58
-Probation. ..... 18
-Remedial Course List ..... 63
-Replacement Penalty Grades (Academic Renewal) ..... 55
-Withdrawal ..... 63
Grievance Procedures ..... 59, 62
H
14
14
Harassment and Discrimination
51
Health And Wellness Center .....
52 .....
52
High School and Community Outreach
7
History of the College.
55
Honors, Academic.
55
-At Graduation
55
55
-Departmental.
55
-President's Scholar
55
55
-Semester
52, 55
52, 55
Honors and Awards
Honors and Awards ..... 59
Housing Facilities ..... 16
Incomplete Work ..... 58
Independent Colleges, Transfer to ..... 40
Independent Study ..... 60
Institutional Core Competencies .....  6
Instructional Locations ..... 52
Instructional Programs ..... 64
Intercollegiate Athletics ..... 52
International Baccalaureate Policies ..... 39
International Student Admissions ..... 16
International Student Program ..... 52
International Transcripts - Evaluation Practices ..... 16
Intersegmental General Education Transfer Curriculum Certificate of Achievement ..... 136
K
Kinesiology
-Kinesiology Intercollegiate Athletics ..... 52
Late Registration ..... 18
Learning Center ..... 52
Library Services ..... 52
Loans, Student ..... 21
Locations, Instructional ..... 7
Loss of Enrollment Priority ..... 60
Maps
-Rancho Santiago Community College District .....  7
-Santa Ana College ..... 378
-Centennial Education Center ..... 379
Math Center ..... 53
Military Withdrawals ..... 54
Multiple and Overlapping Enrollments ..... 19
Nondiscrimination Policies ..... 11
Online Courses (see Distance Education) ..... 23
Open Enrollment ..... 18, 60
Organization, Rancho Santiago Community College District .....  8
Part-Time Student, Definition ..... 18
Pass/No Pass ..... 58
Photography. ..... 53
Politica Indiscriminatoria ..... 11
Prerequisite ..... 19
Prerequisites, Corequisites, and Advisories ..... 19
Priority Registration ..... 17
Probation. ..... 60
Public Affairs ..... 53
Rancho Santiago Community College District .....  .7
Rates of Student Progress ..... 12
Recommended Preparation ..... 19
Records, Privacy of ..... 61
Refunds ..... 20
Registered Sex Offender Information ..... 63
Registration ..... 17
Regulations, District ..... 56
Remedial Course Limit ..... 63
Repetition of Courses (see also Academic Renewal) ..... 55
Residency ..... 15
Review of Records ..... 61
Right to Review and Challenge Records ..... 61
Santa Ana College ..... 7
Santiago Canyon College ..... 7
Schedule of Classes ..... 18, 20
Scholarships ..... 53
Sexual Harassment Policy ..... 61
Sexual Misconduct, Intimate Partner Violence, and Stalking ..... 13
Smoking and Tobacco Use Policy ..... 14
Solomon Amendment for Military Recruiters ..... 20
Standards of Student Conduct ..... 61
Student Activities ..... 53
Student Consumer Information. ..... 13
Student Life. ..... 53
-Associated Students ..... 53
-Clubs and Organizations. ..... 53
-Publications ..... 53
Student Photo Identification Card ..... 18
Student Placement ..... 53
Student Resources ..... 12
Student Success and Support Program ..... 17
Student Right-To-Know Act ..... 12
Study Load ..... 55
Summer Session ..... 18
Testing (see Assessment) ..... 50
Topics Courses ..... 196
Transcripts ..... 58
Transfer Credit ..... 62
Transfer Programs ..... 40
Transfer to Other Colleges ..... 40
-California State University System ..... 30
-California, University of ..... 30
-Independent Colleges and Universities. ..... 40
University of California, Transfer to ..... 42
Transportation ..... 62
Tuition (Nonresident Students) ..... 20
-Refund ..... 20
Unit of Credit ..... 63
University Transfer Center ..... 40, 53
Veterans Resource Center ..... 53
Weekend College ..... 18
Withdrawal From Class ..... 63
Work Experience (see Cooperative Work Experience Education) ..... 56
YESS Program ..... 54

# SANTA ANA COLLEGE <br> 1530 West 17th Street. Santa Ana $\operatorname{sac}$.edu 

SCHOOL OF CONTINUING EDUCATION 2900 West Edinger Avenue • Santa Ana • sac.edu/sce
DIGITAL MEDIA CENTER
1300 South Bristol Street • Santa Ana • sac.edu/dmc
ORANGE COUNTY REGIONAL
Sheriff's Training Academy
15991 Armstrong Avenue • Tustin • sac.edu/ocr

JPTC-CN - JOINT POWER TRAINING CENTER-CENTRAL NET
Basic Fire Academy
18301 Gothard • Huntington Beach, CA 92648



[^0]:    A. English Language Communication and Critical Thinking (minimum 9 semester/12 quarter units)
    The 9 units selected from this area must include at least one course each from A1, A2, and A3. Each course must be completed with a grade of "C" or better.

[^1]:    High School Subjects -Natural Sciences 190
    Physical Science 1
    Credit(s): $5.0 \quad$ Class Hours: 72
    An introductory course designed to allow students to explore the basic concepts of physical science. Basic elements of chemistry will be covered. Open Entry/Open Exit.

