

# SANTA ANA COLLEGE

## CURRICULUM & INSTRUCTION COUNCIL

DATE: August 27, 2012  
FROM: Monica Porter, Chair  
TO: Curriculum & Instruction Council  
RE: Minutes of Meeting of August 27, 2012  
2:00 pm, SAC Foundation Board Room, S – 215

Present: P. Canzona, J. Coffman, M. Collins, M. Colunga, B. Courter, D. Gilmour, B. Kehlenbach, L. Pedroza, M. Porter, L. Rose, K. Ross, C. Takahashi, J. Vercelli, D. Vu.

Guests: C. Carrera, M. Gable, H. Kim, B. Miller, B. Sos, K. Takahashi.

1. MINUTES OF MEETING OF MAY 7, 2012 APPROVED
2. TECHNICAL COMMITTEE REPORT (See Attachment) APPROVED AS AMENDED
3. CURRICULUM ITEMS (See Attachment) APPROVED AS AMENDED
4. REPEATABILITY UPDATE INFORMATION
  - A. Brian Kehlenbach pointed out that there are some exceptions on the repeatability rules on variable units, open entry/exit, and cooperative work experience.
  - B. Brian Kehlenbach and Brian Sos discussed with the council about the repeatability on vocational, intercollegiate, and UC/CSU transfer courses that may be categorized into different family and courses levels. Discussion ensued.  
Brian Sos expressed concern regarding the removal of repeatability from all courses and it's possible impact on future class schedules and state apportionment to the college. Based on discussion, and continued need for clarification, a small workgroup will be convened by Monica Porter to review the current information from the state chancellor's office and to bring recommendations forward to the council.  
Monica Porter also provided the council with a handout regarding this topic from the ASCCC Curriculum Institute held in July.
5. AA-T AND AS-T DEGREE UPDATE INFORMATION
  - A. Monica provided the council with a handout regarding current TMC's available and general information regarding transfer degree development.

6. OTHER

INFORMATION

7. STAND-ALONE TRAINING

CERTIFICATION

Monica Porter conducted the stand-alone training after the Curriculum and Instructional Council.

**The next meeting is Monday, September 10, 2012 at 2:00 p.m., SAC Foundation Board Room, S – 215.**

**REVISED COURSES**

*Item #1 was approved with the repeatability changed from R3 to NR.*

Science, Math and Health Sciences

1. Biology 179, Plants of Orange County  
(Repeatability changed from R3 to R2)

**REVISED COURSES WITH SLO – NO CHANGE TO CATALOG AND CLASS SCHEDULE DESCRIPTION**

*Items #2 through #15 were approved.*

Human Services

2. Culinary Arts 062, Basic Techniques of Cooking
3. Culinary Arts 066, Baking
4. Culinary Arts 070, Beverage Service
5. Culinary Arts 100, Introduction to Culinary Arts and Hospitality
6. Culinary Arts 145, Foods Presentation Pantry/Garde Manger

Humanities

7. Anthropology 101L, Physical Anthropology Laboratory
8. Anthropology 104, Language and Culture
9. Anthropology 104H, Honors Language and Culture

Science, Math and Health Sciences

10. Biology 109, Fundamentals of Biology
11. Biology 109H, Honors Fundamentals of Biology
12. Biology 212, Animal Diversity and Ecology
13. Biology 214, Plant Diversity and Evolution

Continuing Education

14. High School Subjects 229, Skills for Success
15. High School Subjects – English 070, The Short Story

**REVISED COURSE – FIRST READING**

*Item #1 was approved with the repeatability changed from R3 to NR. Items #2 through #17 were presented for first reading.*

Humanities

1. Japanese 198, Topics in Japanese

Science, Math and Health Sciences

2. Biology 109L, Fundamentals of Biology Laboratory
3. Biology 127, Ecology
4. Biology 128, Natural History of the California Coast
5. Biology 129, Ecology of Southern California
6. Biology 131, Natural History of the Southwest
7. Biology 132, Natural History of Death Valley
8. Biology 133, Desert Biology
9. Biology 134, Natural History of the Sonoran/Colorado Desert
10. Biology 169, Natural History of the Sierra Nevadas
11. Biology 229, General Mircobiology
12. Medical Assistant 001, Cooperative Work Experience Education – Occupational
13. Medical Assistant 054, Medical Insurance and Billing Forms
14. Physics 279, College Physics I

Continuing Education

15. English As A Second Language 580, Conversation 2
16. High School Subjects 010, Learning Skills and Strategies
17. High School Subjects – Math 173, Basic Consumer Math 1B

**REVISED COURSE – SECOND READING**

*Items #18 though #20 were deferred. Items #21 through #24 were approved. Item #23 was approved with the repeatability changed from R3 to NR*

Fine and Performing Arts

18. Art 196A, 3D Modeling Fundamentals
19. Art 197A, 3D Animation Fundamentals
20. Dance 130, Dance Improvisation
21. Dance 204A, Dance Production

22. Dance 204B, Dance Production
23. Dance 206A, Modern Dance I
24. Music 162, Class Piano II

### **NEW PROGRAM – FIRST READING**

*Items #25 through #28 were presented for first reading. Motion made to suspend second reading of item #27. Motion was moved, seconded and approved. Item #27 was approved.*

#### Human Services

25. Pharmacy Technology Degree (sac.phar.as) and Advanced Certificate Option (sac.phar.ca)
26. Pharmacy Technology Basic Certificate Option (sac.pharb.cert)

#### Kinesiology

27. Kinesiology AA-T Degree (sac.kin.aat)

#### Science, Math and Health Sciences

28. Medical Assistant – Administrative/Clinical Degree (sac.ma.as) and Certificate (sac.ma.ca)



CURRICULUM & INSTRUCTION COUNCIL

SEPTEMBER 10, 2012

**REVISED COURSE – FIRST READING**

Kinesiology

1. Kinesiology Health Education 105, First Aid and Personal Safety
2. Kinesiology Health Education 107, Cardiopulmonary Resuscitation

Science, Math and Health Sciences

3. Biology 135, Natural History of the Mojave Desert

**REVISED COURSE – SECOND READING**

Humanities

4. Japanese 198, Topics in Japanese

Science, Math and Health Sciences

5. Biology 109L, Fundamentals of Biology Laboratory
6. Biology 127, Ecology
7. Biology 128, Natural History of the California Coast
8. Biology 129, Ecology of Southern California
9. Biology 131, Natural History of the Southwest
10. Biology 132, Natural History of Death Valley
11. Biology 133, Desert Biology
12. Biology 134, Natural History of the Sonoran/Colorado Desert
13. Biology 169, Natural History of the Sierra Nevadas
14. Biology 229, General Microbiology
15. Medical Assistant 001, Cooperative Work Experience Education – Occupational
16. Medical Assistant 054, Medical Insurance and Billing Forms
17. Physics 279, College Physics I

Continuing Education

18. English As A Second Language 580, Conversation 2
19. High School Subjects 010, Learning Skills and Strategies
20. High School Subjects – Math 173, Basic Consumer Math 1B

**REVISED PROGRAMS – SECOND READING**

Human Services

21. Pharmacy Technology Degree (sac.phar.as) and Advanced Certificate Option (sac.phar.ca)
22. Pharmacy Technology Basic Certificate Option (sac.pharb.cert)



first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Kinesiology Health Education 105, First Aid and Personal Safety  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Kinesiology Health Education
Course Number	105
Course Title	First Aid and Personal Safety
Former Title	
Units	1.5
Lecture Hours	24
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	24

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**
**PREREQUISITE(S)**
**Prerequisite**

None

**CATALOG DESCRIPTION** ~~Instruction in accident prevention~~

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. Certificate available upon completion. Prepares student for Kinesiology Health Education 106 American Heart Association first aid certification upon successful completion. Completion of KNHE 105 & KNHE 107 equate to C-ID KIN 101.

<b>Budget Unit</b>	15430
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	10
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	R3 - Repeatable x3
<b>TOPS Code</b>	83700 - Health Education
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: ~~0908/2029/11-12~~ by: ~~Myron Brown~~ Jodi Coffman

Division Chair Approval Date: ~~0908/29/11-12~~ by: ~~Avie Bridges~~ Jodi Coffman

Curriculum and Instruction Council Chair Approval Date: 10/24/2011

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

~~1. Course Objectives: At the conclusion of this course, the student will be able to:~~

Assess victims of injury and medical emergencies and apply emergency action plan

Describe the signs and symptoms associated with common medical emergencies

Demonstrate bandaging and splinting techniques

Demonstrate emergency rescue moves

Evaluate their lifestyle for health and safety concerns and set personal goals for achieving a safe and healthy lifestyle

Content:

1. **Accident prevention:** 1. Reduce and eliminate potential hazards and introduce the skills needed for more advanced course work of E of K.S.N. Health Education 106, Advanced First Aid. (2 hours)
2. **Wounds, injuries and shock:** 1. Provides necessary care to the victim and provide proper body positions for shock until professional assistance is available. Anaphylaxis and special circumstances are discussed. (5 Hours)
3. **Respiratory emergencies and artificial respiration, choking and airway obstruction:** 1. Recognize signs and symptoms of respiratory emergencies, learn to provide artificial respiration, and provide proper first aid for choking and airway obstruction. (5 hours)
4. **Poisoning and burns:** 1. Poisoning and dilute/when not to induce vomiting. Treatment of 1st, 2nd, and 3rd degree burns. (2 hours)
5. **Exposure, cold and heat plus sudden illnesses.** 1. Effectively identify and treat a heat or cold injury and provide proper first aid care. (2 hours)
6. **Dressings and bandages:** 1. ~~Being~~ Care for bleeding emergencies. Being able to select and apply dressings and bandages to all body planes. Practical skills tests for bandaging. (2 hours)
7. **Bone and joint injuries:** 1. Immobilize bone and joint injuries. Treat internal/soft tissue injuries. Practical skills tests for splinting. (2 hours)
8. **Emergency rescue and transfer:** 1. Determine the need for rescue and assistance (911). (2 hours)
9. **Heart attack/stroke:** 1. Recognizing signs and symptoms of cardiac distress, heart attack, and stroke. (2 hours)

**COURSE MATERIALS**

Required texts and/or materials.(Include price and date of publication.)

**Required:** Bergeron, J. D. *First Responder*, 8 ed. Upper Saddle River: Prentice Hall, 2009, ISBN: 9780136140597. 90.67

**Recommended readings and/or materials:**

None

Other:

#2

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Kinesiology Health Education 107, Cardiopulmonary Resuscitation  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Kinesiology Health Education
Course Number	107
Course Title	Cardiopulmonary Resuscitation
Former Title	
Units	2
Lecture Hours	32
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	32

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**
**PREREQUISITE(S)**
**Prerequisite**

None

**CATALOG DESCRIPTION**

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) will also be included. Successful completion may lead to American Heart Association Certificate and/or American Red Cross Heartsaver or Health Care Provider with AED Certificate. May be repeated for recertification. Completion of KNHE 105 & KNHE 107 equate to C-ID KIN 101.

<b>Budget Unit</b>	15430
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	10
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	R3 - Repeatability x3
<b>TOPS Code</b>	83700 - Health Education
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: ~~0108/1929~~/12 by: Jodi Coffman

Division Chair Approval Date: ~~0208/1429~~/12 by: Jodi Coffman

Curriculum and Instruction Council Chair Approval Date: ~~02/27/2012~~

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

~~1. Students will learn basics of cardiac care. 2. Students will learn aspects of Course Objectives: *At the conclusion of this course, the student will be able to:*~~

~~Assess victims of injury and medical emergencies and apply emergency action plan~~

~~Describe the signs and symptoms associated with common medical emergencies~~

~~Understand basics of cardiac care as well as airway obstruction in relation to adult/infant, witness/unwitnessed, and conscious/unconscious victims. 3. Students will learn cardiovascular risk factors as well as strategies for prudent healthful living. 4. Students will learn CPR physiology. 5. Students will learn~~

~~Demonstrate cardiopulmonary resuscitation (CPR) and the use of AED~~

~~Demonstrate concepts and skills associated with emergency rescue moves & artificial resuscitation techniques such as mouth-to-mouth, mouth-to-nose, and mouth-to-stoma. 6. Students will learn single person and double person rescue CPR. 7. Students will learn infant rescue CPR.~~

~~I. Orientation — a. Rules~~

~~Students will know cardiovascular risk factors as well as strategies for prudent healthful living~~

Course Content for Infant, Child, and Adult:

### Orientation

Rules, grading system, attendance, expectations, procedures. 1 hour—H.

Legal issues associated with being a CPR provider.

Instruction in cardiac care. 3 hours

a. Signs and symptoms

b. Cardiac physiology—~~III.~~

Airway obstruction. 2 hour—IV.

Cardiovascular risk factors and strategies for healthful living.

a. High blood pressure, cholesterol, diabetes, smoking, stress, and family history. 2 hours—~~V. CPR~~

CPR physiology. 3 hours

a. Heart, lungs, and circulatory systems.—~~VI.~~

Artificial resuscitation.—~~9~~ 6 hours

a. Mouth to mouth

b. Mouth to nose

c. Mouth to nose and mouth

d. Mouth to stoma—~~VII.~~

Hands-on CPR with proper verbal communication. 9 hours

a. Single person rescue

b. Double person rescue—~~VIII. Hands~~

Hands-on CPR with proper verbal communication. 3 hours

a. Infant rescue

Hands-on AED with proper verbal communication. 3 hours

## COURSE MATERIALS

Required texts and/or materials.(Include price and date of publication.)

**Required:**American Heart Association. *BLS for Health Care Providers*, ed. Dallas, Texas: American heart Association, 2010, ISBN: 0-87-493-461-. \$12.95

**Recommended readings and/or materials:**

None

#3

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Biology 135, Natural History of the Mojave Desert  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Biology
Course Number	135
Course Title	Natural History of the Mojave Desert
Former Title	Ecology of the Mojave Desert
Units	1
Lecture Hours	16
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>16</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)**

**Prerequisite**  
None

**CATALOG DESCRIPTION**

Ecological relationships of Mojave Desert plant and animal life will be observed and studied. This is a field study course and includes overnight camping.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	10
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 02/08/12 by: Kathleen Takahashi

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.) ~~A written report of field experiences requiring students to identify materials used, methods employed, results and/or observations and conclusions based upon the data. This will require students to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological problems in a clear, logical, and concise manner.~~ HOURS ON CAMPUS 1. Orientation 3 Itinerary and equipment and food needed for field study. FIELD STUDY 2. General Ecology 3 General ecology of mountains and canyons of desert. of Mojave Desert 3. Flora and Fauna 6 Identification of plants and animals of Mojave Desert. of Mojave Desert 4. Geology and 2 Landforms and climatology. Climate of Mojave Desert 5. Environmental 2 Environmental problems of desert. Problems of Mojave Desert TOTAL 16 Hours

This course will include the following topics:

1. Introduction to the Mojave desert (1.5 hours)
2. Orientation and logistics of fieldtrip (1 hour)
3. Ecology of mountains, canyons and other Mojave desert habitats (1.5 hours)
4. Plants of the Mojave desert (2 hours)
5. Vertebrate animals of the Mojave desert (1 hour)
6. Invertebrates and other organisms of the Mojave desert (1.5 hours)
7. Adaptations of Mojave desert organisms (1.5 hours)
8. Evolution and speciation of Mojave desert biota (1.5 hours)
9. Ecological interactions among desert organisms (1.5 hours)
10. Geologic history of the Mojave desert (1 hour)
11. Human history and human impact on the Mojave desert environment (2 hours)

#### **COURSE MATERIALS**

Required texts and/or materials.(Include price and date of publication.)

**Required:** Ward, D. *The Biology of Deserts*, ed. Oxford University Press, 2009, ISBN: 0199211477. \$45

**Recommended readings and/or materials:**

None

**Other:**

None

#### **WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?**

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS )

#### **STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

#### **Communication Skills**

-

5 - Essential-always try to achieve

1. -Lecture Discussion Demonstration Observation

#4

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Japanese 198, Topics in Japanese

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Japanese	
Course Number	198	
Course Title	Topics in Japanese	
Former Title		
Units	<u>0.5 - 3</u>	
Lecture Hours	None	<u>8 - 48</u>
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>8 - 48</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)****Prerequisite**

None

**CATALOG DESCRIPTION** Specialized courses

A specialized course on topics related to current needs of students.

<b>Budget Unit</b>	<u>15642</u>	
<b>Classification Code</b>	Y	
<b>Transfer Code</b>	<u>A B</u> -Transferable to <del>both UC and CSU</del> <u>only</u>	
<b>Method of Instruction</b>	10	
<b>SAM Priority Code</b>	E - Non-Occupational	
<b>Repeatability</b>	<u>R3-NR</u> - Repeatable x3 <u>Non-Repeatable: D, F, NC, W</u>	
<b>TOPS Code</b>	110100 - Foreign Languages, General	
<b>Topics Course</b>	No	<u>Yes</u>
<b>Open Entry/Exit</b>	No	
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>	

Curriculum Office Use Only.

Department Chair Approval Date: 04/12/12 by: Martha GuerreroDivison Chair Approval Date: 04/26/12 by: Kathleen Patterson

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

This plan of instruction requires and provides critical thinking skills throughout the course. Students develop the ability to apply college level concepts, vocabulary, and learning skills. Written assignments stress expository and analytical techniques using a variety of methods of presentation designs for the specific topics being studied.

Individual segments will be designed ~~with~~ with 0.5-3.0 units for each course.

The proposed course outline will be submitted to the Dean of Humanities and Social Sciences and the Vice President of Academic Affairs at Santa Ana College for approval, prior to scheduling each course. The syllabus will be presented with a new course proposal form. When appropriate the course will be proposed with a permanent course number.

Content will stress general principles of wide applicability.

Hours: ~~variable:~~

### **COURSE MATERIALS**

Required texts and/or materials.(Include price and date of publication.)

#### **Recommended readings and/or materials:**

None

**Other:** None

College level materials will be selected for individual topics as needed.

### **WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?**

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS )

#### **STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

##### **Communication Skills**

4 - Very important-often try to achieve

1. Reading and Writing - Write the assignments in Japanese at the intermediate level while applying correct grammatical structures and using relevant vocabulary items.



#5

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**
**DISCIPLINE, NUMBER, TITLE:** Biology 109L, Fundamentals of Biology Laboratory

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Biology
Course Number	109L
Course Title	Fundamentals of Biology Laboratory
Former Title	
Units	1
Lecture Hours	None
Laboratory Hours	48
Arranged Hours	None
Total Semester Contact Hours	48

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**
**PREREQUISITE(S)**

~~Prerequisite Biology 109/109H or concurrent enrollment.~~

None **Corequisite**

BIOL 109

or

BIOL 109H

**CATALOG DESCRIPTION**

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 109/109H lecture material. Fieldtrip required.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	20
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	Letter Grade or P/NP

Curriculum Office Use Only.

Department Chair Approval Date: 02/02/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

## **COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

Requires the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner.

CONTENTS OF LABS BY HOURS: 1. Introduction At least 15 of the following lab topics for a total of 48 lab hours:

1. The microscope: Introduction to the use of the compound microscope and microscope and dissecting microscope while observing various organisms, Introduction introduction to the metric system; - 3 hours.
2. Introduction to the cell and cellular organelles using prepared slides of body tissues, preparation of wet mount slide, introduction to diffusion and osmosis; - 3 hours
3. Chemistry: pH scale introduced and pH measurements made, testing for organic molecules; - 3.5 hours
4. Introduction to anaerobic and aerobic respiration with fermentation reaction performed by the students; - 3 hours
5. Cellular division-- Introduction to mitosis, meiosis and karyotyping; - 3 hours
6. Mendelian Genetics with emphasis on blood typing, Rh factor, X-linked inheritance, relationship between cholesterol levels, heredity and heart disease; - 3 hours
7. Midterm Lab Practicum covering first six labs; - 3 hours 40 minutes
8. Molecular Genetics with emphasis on DNA structure and replication and protein synthesis, and introduction to genetic diseases; - 3 hours
9. Embryology of several species including starfish, frog, chicken, and human; - 3 hours
10. Animal Anatomy with emphasis on the detailed internal and external anatomy of the frog, and circulatory, skeletal, reproductive, and nervous human organ systems; - 3.5 hours
11. Plant Anatomy covering the structure The cell: cell structure, organelle function, membrane function.
12. Chemistry: pH scale, macromolecules.
13. Aerobic and anaerobic respiration.
14. Cellular division – mitosis and meiosis.
15. Classical (Mendelian) genetics.
16. Midterm Lab Practicum.
17. Molecular Genetics - DNA structure and replication, and protein synthesis.
18. Embryology – early animal development.
19. Animal Anatomy with emphasis on human anatomy and including an animal dissection.
20. Plant Anatomy - structure and function of seeds, roots, stems, leaves and flowers; - 3 hours 10 minutes.
21. -Field trip to Irvine Park to introduce the chaparral environment and the plants and animals common to this environment; - 3 hours 10 minutes
22. Evolution with a natural selection simulation of the evolution of the peppered moth, geographical distribution of species studying the desert pupfish, and introduction to Paleontology using fossil records; - 3 hours 40 minutes
23. Final Lab Practicum on Labs 8 through 13; - 3 hours 10 minutes
24. Review of Final Practicum and Final Lab Grades. - 3 hours 10 minutes– field observation of organisms and biological processes.
25. Evolution and natural selection, allopatric speciation, introduction to the fossil record.
26. Final Lab Practicum.
27. Review of Final Practicum
28. Environmental issues – pollution, habitat destruction, climate change and other current issues.
29. Ecology – population growth and species interactions
30. Biotechnology and ethics – ethical issues related to modern biotechnology.
31. Animal diversity – introduction to the diversity of the animal kingdom.
32. Plant diversity – introduction to the diversity of plants.
33. Microorganisms and disease.
34. The scientific method

List subcategories and activities as needed for Category

<b>SANTA ANA COLLEGE COURSE</b>	
<b>OUTLINE</b>	
DISCIPLINE, NUMBER, TITLE: Biology 127, Ecology	
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)	
<b>CATALOG ENTRY</b>	
Discipline	Biology
Course Number	127
Course Title	Ecology
Former Title	
Units	1
Lecture Hours	16
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>16</u>
<b>COURSE IDENTIFICATION NUMBER(S) (C-ID)</b>	
<b>PREREQUISITE(S)</b>	
<b>Prerequisite</b>	None
<b>CATALOG DESCRIPTION</b>	
Introduction to the basic principles of ecology. Study of ecosystems, biomes, and the relationships of plants and animals in the natural world. <u>This is a field study course and includes overnight camping.</u>	
<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	<del>A</del> <u>B</u> - Transferable to <del>both UC and CSU</del> <u>only</u>
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R1</del> <u>R2</u> - Repeatable <del>x1</del> <u>x2</u>
<b>TOPS Code</b>	<u>40100 - Biology, General</u>

<b>Topics Course</b> No <b>Open Entry/Exit</b> No <b>Grading Options</b> <u>Letter Grade or P/NP</u> Curriculum Office Use Only.						
Department Chair Approval Date: <u>02/09/12</u> by: <u>Jubal Hampton</u> Division Chair Approval Date: <u>05/03/12</u> by: <u>Phil Hughes</u> Curriculum and Instruction Council Chair Approval Date:						
<b>COURSE CONTENT</b> (Include major topics of the course, time required, and what the student is expected to learn.) Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.						
		<b>Weeks</b>				
2		2-	3	3-	4	4-
		Ecology of the ocean and saltwater marsh		3- Ecology of deciduous forest and chaparral		4- Ecology of mountains
						3- Ecology of deserts
						4

1. - Apply knowledge of terminology found in plant and animal keys of Southern California ocean, chaparral, mountain and desert ecosystems. Contrast habitats of Southern California chaparral, mountains and deserts:

1. - Describe the major ecological areas of the Southern California chaparral, mountains and deserts. Develop a working knowledge of appropriate field guides for animal and plant species of the Southern California chaparral, mountains and deserts:

1. - Appreciate the diversity of habitats found in the Southern California chaparral, mountains and deserts. Appreciate the diversity of ecological life zones found in the Southern California ocean, mountain and desert areas:

1. - Recognize the importance of understanding natural environments and work to preserve floral and faunal diversity:

1. - Integrate information in the course to develop a personal appreciation of nature. Employ information from the course for an individual's greater awareness to conserve wild and natural environments:

#### Communication Skills

5 - Essential-always try to achieve

1. - Listen and comprehend lectures, and observe displays about ecology. Read assigned material understanding vocabulary used in ecology. Discuss materials used in course, using correct terminology:

#### Thinking and Reasoning



Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)****Prerequisite**

None

**CATALOG DESCRIPTION**

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.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	<del>A-Transferable to both UC and CSU</del>
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R1-NR - Repeatable x1</del>
<b>TOPS Code</b>	-
<u>Non-Repeatable: D, F, NC, W</u>	
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	

Department Chair Approval Date: 02/09/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

~~Requires the student to critically discern the interrelationships between the abiotic and biotic components of coastal terrestrial and marine ecosystems. Requires the student to enumerate, delineate and differentiate flora and fauna of the inter-tidal area of the Neritic Zone. Requires the student to enumerate, delineate and differentiate flora and fauna of coast marine and terrestrial ecosystems. Requires the student to critically elucidate and excogitate data amassed from survey of coastal marine and~~

#8

**ARE EMPLOYED?**

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS )

**STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

<b>SANTA ANA COLLEGE COURSE OUTLINE</b>	
DISCIPLINE, NUMBER, TITLE: Biology 129, Ecology of Southern California (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)	
<b>CATALOG ENTRY</b>	
Discipline	Biology
Course Number	129
Course Title	Ecology of Southern California
Former Title	
Units	1
Lecture Hours	16
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>16</u>
<b>COURSE IDENTIFICATION NUMBER(S) (C-ID)</b>	
<b>PREREQUISITE(S)</b>	
<b>Prerequisite</b>	None
<b>CATALOG DESCRIPTION</b>	
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. <u>This is a field study course and includes overnight camping.</u>	
<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	R1-NR - Repeatability
<b>TOPS Code</b>	-
<u>Non-Repeatable: D, F, NC, W</u>	
<b>TOPS Code</b>	<u>40100 - Biology, General</u>

<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	
Department Chair Approval Date: <u>02/09/12</u> by: <u>Jubal Hampton</u>	
Divison Chair Approval Date: <u>05/03/12</u> by: <u>Phil Hughes</u>	
Curriculum and Instruction Council Chair Approval Date:	
<b>COURSE CONTENT</b>	
(Include major topics of the course, time required, and what the student is expected to learn.)	
Requires the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.	
-	<b>Hours</b> -
1. Ecology of California	2 5 5 6 16

1. - Apply knowledge of terminology found in plant and animal keys of southern California mountains and deserts ecosystems. Contrast southern California mountains and deserts habitats.

1. - Describe the major life zones of the southern California mountains and deserts. Develop a working knowledge of appropriate field guides for animal and plant species of the southern California mountains and deserts.

1. - Appreciate the diversity of habitats found in the southern California mountains and deserts. Appreciate the diversity of ecological life zones found in the southern California mountains and deserts.

1. - Recognize the importance of understanding natural environments and work to preserve floral and faunal diversity.

1. - Integrate information in the course to develop a personal appreciation of nature. Employ information from the course for an individual's greater awareness to conserve wild and natural environments.

#### Communication Skills

-

#### 5 - Essential-always try to achieve

1. - Listen and comprehend lectures, and observe displays about biology of the southern California mountains and deserts. Read assigned material understanding vocabulary used in ecology. Discuss materials used in course, using correct terminology.

#### Thinking and Reasoning

-

#### Information Management

-

#### Diversity

-

#### Civic Responsibility

-

#### Life Skills

-

#### Careers

-

1. - Discuss careers in Federal and State agencies that involve preservation and conservation of the



#9

Biology 131

Natural

Course Title	History of the Southwest
Former Title	
Units	3
Lecture Hours	48
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	None <u>48</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)**

**PREREQUISITE(S)**

**Prerequisite**

None

**CATALOG DESCRIPTION**

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.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R+NR</del> - Repeatable x1
<b><del>TOPS Code</del></b>	-
<b><u>Non-Repeatable:</u></b> <b><u>D, F, NC, W</u></b>	
<b><u>TOPS Code</u></b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No

<p><b>Grading Options</b> <u>Letter Grade or P/NP</u> Curriculum Office Use Only.</p>					
<p>Department Chair Approval Date: <u>02/09/12 by: Jubal Hampton</u> Divison Chair Approval Date: <u>05/03/12 by: Phil Hughes</u> Curriculum and Instruction Council Chair Approval Date:</p>					
<p><b>COURSE CONTENT</b> (Include major topics of the course, time required, and what the student is expected to learn.)</p> <p>- Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.</p>					
<p><b>Field Study</b></p>	-	-			
<p>General ecology of deserts and mountains of Utah, Colorado, Arizona and New Mexico</p>					
<p>2. Geology</p>	3	Geology of Southwest			
<p>3. Flora and Fauna of the Southwest</p>	6	Flora and Fauna of Southwestern deserts, canyons, and mountains			
<p>9</p>	9	4	5	Environmental impacts of strip mining, pollution, water diversions, and power plants	8. Indians of the Southwest 5

1. - Apply knowledge of terminology found in plant and animal keys of Southwestern ecosystem. Contrast Southwestern habitats of mountains and deserts.

1. - Describe the major habitats of mountain and desert environments of the Southwestern. Develop a working knowledge of appropriate field guides for animal and plant species of the Southwestern.

1. - Appreciate the diversity of habitats found in the Southwestern area. Appreciate the diversity of

#90

first Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications. last

This is a field study course and includes overnight camping.

<b>SANTA ANA COLLEGE COURSE OUTLINE</b>		
DISCIPLINE, NUMBER, TITLE: Biology 132, Natural History of Death Valley (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)		
<b>CATALOG ENTRY</b>		
Discipline	Biology	
Course Number	132	
Course Title	Natural History of Death Valley	
Former Title		
Units	1	
Lecture Hours	16	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16</u>
		<b>Budget Unit</b>
<b>COURSE IDENTIFICATION NUMBER(S) (C-ID)</b>		
<b>PREREQUISITE(S)</b>		
<b>Prerequisite</b>	None	
<b>CATALOG DESCRIPTION</b>		
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. <u>Mandatory orientation and field trip. May be repeated. Not offered every semester.</u>		

<b><u>Budget Unit</u></b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R2</del> <u>NR</u> - Repeatable x2
<b><del>TOPS Code</del></b>	-
<u>Non-Repeatable: D, F, NC, W</u>	
<b><u>TOPS Code</u></b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	

Department Chair Approval Date: 02/06/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

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## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

This course will consist of 16 lecture hours that include the following topics. The approximate time spent on each topic is indicated:-

### Topic

### Time required (hours)

### Student expected to learn

#### Orientation

(2.5 hours

1. Orientation and trip logistics (1 hour)
2. Introduction to Death Valley

ecosystem

1. (1.5

~~Overview of course and Death Valley Ecosystem~~

~~Camping in Death Valley (logistics of field trip)~~

+

~~Camping equipment needed and other logistics of the trip~~

#### Field trip

(13.5 hours)

Climate (

1. hour)

Field experience:

1. Climate of Death Valley (current and past)

~~of Death Valley~~

1. (2

~~1) Basic climatological principles 2) Reasons for dry climate in Death Valley 3) Climatic history of the Death~~

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

This is a field study course and includes overnight camping.

SANTA ANA COLLEGE COURSE OUTLINE		Budget Unit
DISCIPLINE, NUMBER, TITLE: Biology 133, Desert Biology (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)		
<b>CATALOG ENTRY</b>		
Discipline	Biology	
Course Number	133	
Course Title	Desert Biology	
Former Title		
Units	1	
Lecture Hours	16	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>16</u>
<b>COURSE IDENTIFICATION NUMBER(S) (C-ID)</b>		
<b>PREREQUISITE(S)</b>		
<b>Prerequisite</b>		
None		
<b>CATALOG DESCRIPTION</b>		
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. <u>Mandatory orientation and field trip. May be repeated. Not offered every semester.</u>		

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	B-Transferable to CSU only
<b>Method of Instruction</b>	10
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R2</del> <u>NR</u> - Repeatable <del>x2</del>
<b>TOPS Code</b>	-
Non-Repeatable: D, F, NC, W	
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	

Department Chair Approval Date: 02/09/12 by: Jubal Hampton  
 Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

This course will consist of 16 lecture hours that include the following topics

~~The approximate time spent on each topic is indicated.~~

**Topic**  
**Time required (hours)**  
**Student expected to learn**  
**Orientation**

~~(2 hours:~~

1. Orientation and trip logistics (1 hour)
2. Introduction to Deserts ecosystems

+

~~Overview of desert environments and of the organisms that live in them  
 Camping in the desert (logistics of field trip)~~

+

~~Camping equipment needed and other logistics of the trip~~

**Field trip**  
**(14 hours)**

1. (1 hour)

Field experience:

1. Desert climate and the adaptations of organisms to cope with dry conditions (2

- ~~1) Basic climatological principles that affect the distribution of deserts in North America and the world~~
- ~~2) Physiological and behavioral adaptations of plants and animals to dry conditions~~

1. hours)
2. Identification of desert flora and fauna (4

- ~~1) Identify common plants and animals of the desert~~

1. hours)
2. Desert ecology (4

- ~~1) Understand how desert organisms interact: competition, mutualism, and predation~~
- ~~2) Understand the concept of food-webs and keystone species~~

1. hours)
2. Evolution in desert organisms (2

- ~~1) Understand the phylogenetic relationships among desert species and between desert species and their non~~

CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Biology	
Course Number	134	
Course Title	Natural History of the Sonoran/Colorado Desert	
Former Title		
Units	1	
Lecture Hours	16	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	<del>None</del>	<u>16</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)****Prerequisite**

None

**CATALOG DESCRIPTION**

Ecological study of the plants and animals of the Sonoran/Colorado Desert area of Southern California. This is a field study course and includes overnight camping.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	<del>A</del> <u>B</u> -Transferable to <del>both UC and CSU</del> <u>only</u>
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R1</del> <u>R2</u> - Repeatability <del>x1</del> <u>x2</u>
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 02/09/12 by: Jubal Hampton

Division Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

~~Requires the student to discern the biological and non-biological components of the Sonoran/Colorado Desert. Requires the student to distinguish the flora and~~

fauna of the Sonoran/Colorado Desert. Requires the student to critically analyze data obtained from field trip experience and compile into a completed form.			
	<b>HOURS</b>	-	
Orientation	3	Field Trip (Minimum of 3 days)	13

~~1. - Apply knowledge of terminology found in plant and animal keys of Sonoran/Colorado Desert ecosystem. Contrast Sonoran/Colorado Desert habitats of mountains and deserts.~~

~~1. - Describe the major habitats of mountains and desert environments of the Sonoran/Colorado Desert areas. Develop a working knowledge of appropriate field guides for animal and plant species of the Sonora/Colorado Desert.~~

~~1. - Appreciate the diversity of habitats found in the Sonoran/Colorado Desert. Appreciate the diversity of ecological life zones found in the mountains and deserts of the Sonoran/Colorado Desert.~~

~~1. -~~

~~- Recognize the importance of understanding natural environments and work to preserve floral and faunal diversity.~~

~~1. - Integrate information in the course to develop a personal appreciation of nature. Employ information from the course for an individual's greater awareness to conserve wild and natural environments.~~

### **Communication Skills**

-

5 - Essential-always try to achieve

~~1. - Listen and comprehend lectures, and observe displays about biology of the Sonoran/Colorado Desert ecosystem. Read assigned material understanding vocabulary used in ecology. Discuss materials used in course, using correct terminology.~~

### **Thinking and Reasoning**

-

### **Information Management**

-

### **Diversity**

-

### **Civic Responsibility**

-

### **Life Skills**

-

### **Careers**

-

~~1. - Discuss careers in Federal and State agencies that involve preservation and conservation of the environment. Reading and Writing - Students will learn the basics of the technical vocabulary of biology.~~

~~2. Reading and Writing - Students will develop their ability to comprehend readings on biological subjects.~~

### **Thinking and Reasoning**

5 - Essential-always try to achieve

1. Critical Thinking - Students will develop their critical thinking skills by evaluating scientific evidence to reach valid conclusions.

### **Information Management**

1 - Not applicable-never try to achieve

### **Diversity**



**Indians**

Biology 169

1. early native American to the 21<sup>st</sup> Century (2 hours)

**COURSE MATERIALS**

Required texts and/or materials.(Include price and date of publication.)

**Required:**Laws, John Muir. *Laws Field Guide to the Sierra Nevada*, ed. Heyday, 2007, ISBN: 159714052X. \$20

and/or

**Required:**Beesley, D.. *Crow's Range: An Environmental History Of The Sierra Nevada* , ed. University of Nevada Press , 2004, ISBN: 0874175623. \$40

**Recommended readings and/or materials:**

None

~~Other: None~~Handouts**WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?**

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS )

**STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

SANTA ANA COLLEGE COURSE OUTLINE	
DISCIPLINE, NUMBER, TITLE: Biology 169, Natural History of the Sierra Nevadas	
(If the discipline, number or title is being revised, above should reflect the NEW information;)	
AND, the complete former course name MUST be included in the CATALOG ENTRY below.)	
CATALOG ENTRY	
Discipline	Biology
Course Number	169
Course Title	Natural History of the Sierra Nevadas
Former Title	
Units	1 – 3
Lecture Hours	16 – 48
Laboratory Hours	None
Arranged Hours	None
Total Semester Contact Hours	<del>None</del> <u>16 – 48</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)****Prerequisite**

None

**CATALOG DESCRIPTION**

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.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	<del>A B</del> -Transferable to both <del>UC</del> and CSU <u>only</u>
<b>Method of Instruction</b>	60
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	<del>R1</del> <u>R2</u> - Repeatable <del>x1</del> <u>x2</u>
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>
Curriculum Office Use Only.	

Department Chair Approval Date: 02/09/12 by: Jubal Hampton

Divison Chair Approval Date: 05/03/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

**COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

~~Require the ability to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, results and/or observation and conclusions based upon the data.~~

	HOURS
<b>FOR 1 UNIT</b>	-
1. Orientation Meeting	
<b>FOR 2 UNITS</b>	-
<b>FOR 3 UNITS</b>	-

~~1. - Apply knowledge of terminology found in plant and animal keys of Sierra Nevada ecosystem. Contrast mountain habitats of the Sierra Nevada mountains.~~

~~1. - Describe the major life zones of the Sierra Nevada Mountains. Develop a working knowledge of appropriate field guides for animal and plant species of the Sierra Nevada Mountains.~~

~~1. - Appreciate the diversity of habitats found in the Sierra Nevada Mountains. Appreciate the diversity~~

#14

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Biology 229, General Microbiology

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Biology
Course Number	229
Course Title	General Microbiology
Former Title	
Units	5
Lecture Hours	48
Laboratory Hours	96
Arranged Hours	None
Total Semester Contact Hours	144

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)****Prerequisite**

Biology 109/109H and 109L, or 139, or 149, or 211, or 239, or 249, or Chemistry 119 or Chemistry 209.

**CATALOG DESCRIPTION**

Introduction to microorganisms, their classification, structure, biochemistry, growth, control and their interactions with other organisms and the environment. Designed for biology, preprofessional, and prenursing (BSN) majors.

<b>Budget Unit</b>	<u>16410</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code</b>	<u>40100 - Biology, General</u>
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	Letter Grade or P/NP
Curriculum Office Use Only.	

Department Chair Approval Date: 01/23/12 by: Kathleen Takahashi

Divison Chair Approval Date: 05/03/12 by: Phil Hughes  
Curriculum and Instruction Council Chair Approval Date:

## **COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

Students will be required to compare and contrast, to interpret complex events, to analyze diverse concepts, recognize and identify significant structures and organisms, evaluate and apply problem solving techniques to specific examples, and to synthesize and express biological processes in a clear, logical and concise manner. A written report of laboratory exercises/field experiences requiring students to identify materials used, methods employed, Perform, explain and evaluate observations made and data collected during hands on work in the laboratory and/or the field. Correlate the relationships between structure and function, the interrelationships between organisms and the environment and identify and apply the principles and techniques which are relevant to solve a given biological problem. Results and/or observation and conclusions based upon the data.

3 Hours: Introduction to Course; Introduction to Microbiology; Review of Chemistry.

3 Hours: Exploration of the Macromolecular structure and function; Exploration of the cell and subcellular organelles; Identification of the differences between the prokaryotic and eukaryotic cell.

3 Hours: Continued discussion of the prokaryotic vs. eukaryotic cells; Discussion of physical and chemical structures influencing microbial growth.

3 Hours: Classification and Identification of fungi, protozoa and prokaryotes.

3 Hours: Microbial Metabolism - including enzymes structure and specificity, enzyme inhibition, biochemical pathways of energy production including fermentation, aerobic and anaerobic respiration.

3 Hours: Microbial Genetics - genetic structure of prokaryotes and eukaryotes, as well as DNA replication schemes, RNA transcription, protein translation, and operon regulation.

3 Hours: Viruses and Biotechnology - viral structure, classification, and life cycle. Biotechnology will include a discussion of the current biotech techniques and components derived from microbes.

3 Hours: Epidemiology and Pathogenicity - exploration of the cause, spread and virulence factors associated with infectious diseases.

3 Hours: Immunity - non-specific and specific including, cell mediated vs. humoral immunity and acquired vs. passive immunity.

3 Hours: Applied Immunology and Antimicrobials - discussion of how the principles of immunology have been applied to facilitate testing. The development and mechanisms of actions for antimicrobials will also be addressed.

3 Hours: Pathogenic Bacteria - gram positive and gram negative pathogenic bacteria will be discussed, including virulence, transmission, diagnosis and treatment.

3 Hours: Pathogenic Viruses - pathogenic DNA and RNA viruses will be discussed, including virulence, routes of transmission, diagnosis and treatment.

3 Hours: Parasites - parasitic protozoa and helminths will be discussed, including host range endemic regions, and life cycles.

3 Hours: Pathogenic Fungi and Environmental Microbiology - pathogenic fungal diseases will be discussed including endemic areas, identification and treatment. Industrial food and environmental microbiology will be

#15

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**  
 DISCIPLINE, NUMBER, TITLE: Medical Assistant 001, Cooperative Work Experience Education - Occupational  
 (If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Medical Assistant	
Course Number	001	
Course Title	Cooperative Work Experience Education - Occupational	
Former Title		
Units	1 - <del>4</del> 16	
Lecture Hours	None	
Laboratory Hours	<del>360</del>	<u>60 - 1200</u>
Arranged Hours	None	
Total Semester Contact Hours	<del>360</del>	<u>60 - 1200</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)**

Prerequisite None

MA 051A with a minimum grade of CMA 055 with a minimum grade of C**CATALOG DESCRIPTION**

Supervised paid or volunteer experience in student's major including new or expanded responsibilities. Units are earned based on the number of hours worked per semester: ~~75-149 hours = 2 units; 150-224 hours = 3 units; 225-299 hours = 4 units~~ 60 hours of nonpaid work hours = 1 unit; 150-224 hours = 2 units; 225-299 hours = 3 units and 300-360 hours = 4 units 75 hours of paid work hours = 1 unit. Maximum units per semester is 6. May be repeated. gradeGrade: Pass/No Pass only.

<b>Budget Unit</b>	<u>16630</u>	
<b>Classification Code</b>	Y	
<b>Transfer Code</b>	C-Not transferable	
<b>Method of Instruction</b>	40	
<b>SAM Priority Code</b>	C - Occupational	
<b>Repeatability</b>	<del>R3 - Repeatable x3</del>	<u>VR - May Be Repeated up to maximum units</u>
<b>TOPS Code</b>	120820 - Administrative Medical Assstng	
<b>Topics Course</b>	No	

**Open Entry/Exit** No  
**Grading Options** P/NP Only  
 Curriculum Office Use Only.

Department Chair Approval Date: 04/09/12 by: Catherine Emley

Division Chair Approval Date: 05/07/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date: .

### **COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

1. Orientation (3 hours): course learning objectives and course requirements.
2. Completion of the state mandated forms (2 hours): 1) Cooperative Work Experience Education Regulations, 2) Application/Agreement, 3) Performance Objectives & 4) Semester Time Sheet.
3. Earned units of Cooperative Work Experience are based on the number of hours worked per semester: 75-149 hours = 1 unit; 150-224 hours = 2 units; 225-299 hours = 3 units; 300-360 hours = 4 units.
4. Develop learning objectives which ensure the student will ~~objectives for the student to develop~~ skills in a new aspect of the job which promotes occupational or educational goals.
5. Identify new or expanded responsibilities or learning opportunities beyond those experienced previously.
6. Promote professional work habits and customer service skills.
7. Discuss avenues of growth for upward mobility on the job. 7
8. Determine which new skills will be developed, and the number of hours to be worked each week, to earn 1-4 units of college credit. 8
9. Complete the Performance Objectives and Semester Time Sheet and gather the necessary information to demonstrate how completion of the objectives are measured. 9
10. "Wrap-Up" session (1 hour) during week sixteen of the semester with instructor & peers to process the student learning objectives.

### **COURSE MATERIALS**

Required texts and/or materials.(Include price and date of publication.)

#### **Recommended readings and/or materials:**

- Chabner, Davi-Ellen (2010). The Language of Medicine. (9th Edition). ISBN: 1437705707. Price: \$72.00**  
**Lindh, Wilburta Q. (2009). Comprehensive Medical Assisting, Administrative and Clinical Competencies. (4th Edition). ISBN: 9781-4354-1914-8. Price: \$70.00.**  
**Morrison, Terri (2006). Kiss, Bow or Shake Hands. ISBN: 1593373686. Price: \$14.00.**  
**Robbins, Stephen P. (2008). Training in Interpersonal Skills. ISBN: 0132354993. Price: \$27.00**

**Other:** ~~None~~

Medical office scrubs/uniform, comfortable work shoes and a SAC identification badge.

### **WHAT STUDENT LEARNING OUTCOMES DOES THIS COURSE ADDRESS? WHAT ACTIVITIES ARE EMPLOYED?**

(USE A SCALE OF 1-5 TO SHOW EMPHASIS OF THE LEARNING OUTCOMES WITHIN THE CONTEXT OF THIS )

### **STUDENT LEARNING OUTCOMES**

List subcategories and activities as needed for Category

— 5 - Essential-always

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first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Medical Assistant 054, Medical Insurance and Billing Forms  
(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Medical Assistant	
Course Number	054	
Course Title	Medical Insurance and Billing Forms	
Former Title	Preparation of Medical Insurance Forms	
Units	3	
Lecture Hours	48	
Laboratory Hours	None	
Arranged Hours	None	
Total Semester Contact Hours	<del>None</del>	<u>48</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)**

~~Prerequisite-None~~  
MA 051A with a minimum grade of C

**CATALOG DESCRIPTION**

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-9-CM.

<b>Budget Unit</b>	<u>16630</u>	
<b>Classification Code</b>	Y	
<b>Transfer Code</b>	C-Not transferable	
<b>Method of Instruction</b>	-	<u>10</u>
<b>SAM Priority Code</b>	C - Occupational	
<b>Repeatability</b>	-	<u>NR - Non-Repeatable: D, F, NC, W</u>
<b>TOPS Code</b>	120820 - Administrative Medical Assstng	
<b>Topics Course</b>	No	
<b>Open Entry/Exit</b>	No	
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>	

Curriculum Office Use Only.

Department Chair Approval Date: 04/09/12 by: Catherine Emley

Divison Chair Approval Date: 05/07/12 by: Phil Hughes  
 Curriculum and Instruction Council Chair Approval Date:

## COURSE CONTENT

(Include major topics of the course, time required, and what the student is expected to learn.)

- + 1. Career as an Insurance Billing specialist (3 hours)
- a. Role of the Insurance Billing Specialist: Job titles and responsibilities
  - b. Educational and Training requirements
  - c. Personal and professional qualifications
  - d. Medical etiquette
  - e. Medical ethics
  - f. ~~Confidential communications: Privileged and non-privileged information~~ Privileged & non-privileged information
  - g. Professional liability: ~~fraud, abuse, compliance programs, embezzlement~~
- embezzlement
2. Fundamentals of Health Insurance Coverage (3 hours)
- a. Health insurance contracts: group, individual, and prepaid health plans ~~b~~
  - b. Legal principles of insurance
    - 1) Insurance policy
    - 2) Case management requirements
  - c. Policy terms and financial obligations: premium, deductible, ~~coinsurance~~ coinsurance and copayment, guarantor, coordination of benefits
  - d. Insurance coverage and benefits
  - e. Physician/Patient contract
    - 1) private and managed care patients
    - 2) Assignment of benefits
    - 3) Employment and disability examinations
    - 4) Workers' compensation patients
    - 5) Termination of physician/patient contract
  - f. Types of health insurance programs
    - 1) Government plans: CHAMPVA, Medicaid, Medicare, TRICARE
    - 2) Managed care contracts
    - 3) Private Insurance
    - 4) Workers' compensation
    - 5) Disability income insurance
    - 6) Unemployment compensation ~~disability~~
- disability
3. Source Documents and the Insurance Claim Cycle (3 hours)
- a. The reimbursement cycle
  - b. Source documents
    - 1) Patient registration form
    - 2) Insurance identification card
    - 3) Encounter form ~~4~~
    - 4) Patient account/ledger ~~5~~



#17

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

**SANTA ANA COLLEGE COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: Physics 279, College Physics I

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Discipline	Physics	
Course Number	279	
Course Title	College Physics I	
Former Title	General Mechanics, Heat and Sound	
Units	4	
Lecture Hours	48	
Laboratory Hours	48	
Arranged Hours	None	
Total Semester Contact Hours	None	<u>96</u>

**COURSE IDENTIFICATION NUMBER(S) (C-ID)****PREREQUISITE(S)****Prerequisite**Mathematics 160 with a grade of C or better. ~~Mathematics 160, (May be taken concurrently).~~**CATALOG DESCRIPTION**

A trigonometry-based physics course. Topics include: mechanics, thermodynamics, fluids, oscillatory motion, and sound.

<b>Budget Unit</b>	<u>16435</u>
<b>Classification Code</b>	Y
<b>Transfer Code</b>	A-Transferable to both UC and CSU
<b>Method of Instruction</b>	30
<b>SAM Priority Code</b>	E - Non-Occupational
<b>Repeatability</b>	NR - Non-Repeatable: D, F, NC, W
<b>TOPS Code</b>	190200 - Physics, General
<b>Topics Course</b>	No
<b>Open Entry/Exit</b>	No
<b>Grading Options</b>	<u>Letter Grade or P/NP</u>

Curriculum Office Use Only.

Department Chair Approval Date: 05/01/12 by: John KalkoDivison Chair Approval Date: 05/07/12 by: Phil Hughes

Curriculum and Instruction Council Chair Approval Date:

### **COURSE CONTENT**

(Include major topics of the course, time required, and what the student is expected to learn.)

Lecture, class discussion, demonstrations, problem solving, reading and problem assignments, and laboratory.

Lecture Content:

Introductory Material (Units, Scientific Notation, Significant Figures, Dimensional Analysis, Vectors, Unit Vectors, Component Forms, Addition and Subtraction of Vectors) - 3 hours

Motion in One and Two Dimensions (Displacement, Velocity, Acceleration, Kinematics, Free Fall, Projectile Motion, Uniform Circular Motion, Relative Motion) - 6 hours

Newton's Laws of Motion (Inertia, Forces, Weight, Normal Force, Applications of Newton's 2nd Law, Action-Reaction Pairs, Newton's Third Law, Static and Kinetic Friction, Centripetal Force) - 6 hours

Energy (Scalar Products, Work, Work Done by a Varying Force, Power, Kinetic Energy, Work - Kinetic Energy Theorem, Potential Energy, Gravitational and Elastic Potential Energy, Conservation of Energy, Work Done by Non-Conservative Forces, Work-Energy Theorem) - 4.5 hours

Momentum (Momentum, Impulse, Conservation of Linear Momentum in Collisions, Center of Mass, Motion of the Center of Mass of a System of Particles) - 4.5 hours

Rotational Motion (Rotational Kinematics, Rotational Energy, Moment of Inertia, Parallel-Axis Theorem, Torque, Vector Cross Products, Newton's 2nd Law for Rotations, Rolling without Slipping, Angular Momentum, Conservation of Angular Momentum, Static Equilibrium) - 6.0 hours

Gravity (Newton's Law of Gravity, Kepler's Laws, Energy in Orbits) - 1.5 hours

Harmonic and Wave Motion (Harmonic Force, Simple Pendulum, Physical Pendulum, Mechanical Waves, Wave Interference, Sound Waves, Doppler Effect, Harmonic Waves on Strings and in Tubes) - 6.0 hours

Fluids (Density, Pressure, Pascal's Principle, Buoyancy, Flow of Incompressible Fluids) - 3.0 hours

Thermodynamics (Temperature, Ideal Gas Law, Thermal Expansion, Heat, Phase Changes, Thermodynamic Work, Processes, Cycles, 1st Law of Thermodynamics, Heat Engines and Refrigerators, Carnot Cycle, Entropy) - 7.5 hours

48 Lecture Hours Total

Laboratory Content:

1. Introduction to lab procedures and report writing.
2. Data Analysis Techniques.
3. Estimation and propagation of error.
4. A minimum of 12 experiments from the following categories:
  - i. Motion in one dimension

SANTA ANA COLLEGE/Continuing Education COURSE OUTLINE APPROVAL SHEET

DISCIPLINE, NUMBER, TITLE: ENGLISH AS A SECOND LANGUAGE 580, Conversation 2

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

\* NEW REVISION WITH X W/O CATALOG CHANGES
DELETION REVISION WITH X W/O CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

CATALOG ENTRY (60 word limit; underline changes if a revision)

Course Number: ENGLISH AS A SECOND LANGUAGE 580

Course Title: Conversation 2

Credits: 0

Class hours: 72

Prerequisite: None

For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. Further analysis of conversation strategies. Includes verbal and nonverbal communication within large and small groups or between two people. 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.

CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision)

ENGLISH AS A SECOND LANGUAGE 580, Conversation 2. 0 Units.

For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. Further analysis of conversation strategies. Includes verbal and nonverbal communication within large and small groups or between two people. 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.

INFORMATION IN THIS SECTION MUST BE COMPLETED BEFORE SUBMISSION TO A CURRICULUM COMMITTEE

Major Code N/A For this major, is the course Required Elective

Does this course have arranged hours? Yes No N/A X By course

Co/Prerequisite\*? N/A X Approval Code Co/Prerequisite Course Requirement

Co/prerequisite message (10 character limit, (SEE CATALOG)

Is course cross-listed (same as) with another course? Yes No X Subject ID

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes N/A X

List departments notified

Budgetary Unit 18200 Classification Code K Transfer Code 0 SAM Priority Code E

Method of Instruction\*\* 11 Instructor LHE: Lecture X Laboratory

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOP CODE: 4930.86

Proposed by Henry Kim Date: 4-16-12

Division Dean Dr. Sergio R. Sotelo, Ph.D. Date: 4-17-2012

Curriculum Committee Approval Date: 4/17-2012

Curriculum Council Approval Date Subject ID Number ESL-580

DISCIPLINE, NUMBER, TITLE: ENGLISH AS A SECOND LANGUAGE 580, Conversation 2

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

CATALOG ENTRY

Course Number: **ENGLISH AS A SECOND LANGUAGE 580**

Course Title: **Conversation 2**

Credits: 0

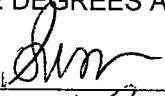
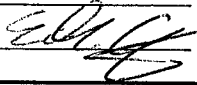
Class hours: 72

Prerequisite: None

For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. 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.

COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES

N/A

Yes	<u>  X  </u>	No	SAC Department Chair	<u>Susan Gaer</u>		Date	<u>4/16/12</u>
Yes	<u>  X  </u>	No	SCC Department Chair	<u>Eden Quimzon</u>		Date	<u>4/18/12</u>

# SANTA ANA COLLEGE COURSE OUTLINE APPROVAL SHEET

DISCIPLINE, NUMBER, TITLE: Secondary Subjects High School Subjects 010, Learning Skills and Strategies

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

* NEW	REVISION WITH	<u>X</u>	W/O	CATALOG CHANGES
DELETION	REVISION WITH	<u>X</u>	W/O	CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

**CATALOG ENTRY** (60 word limit; underline changes if a revision)

Course Number: Secondary Subjects: High School Subjects 010

Course Title: Learning Skills and Strategies

Credits: 5

Class hours: 72

Prerequisite: None

Provides individualized and ~~direct group~~ instruction to improve learning strategies and basic reading, writing, and mathematics skills. ~~Equips~~ 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.

**CLASS SCHEDULE ENTRY** (maximum of four lines; underline changes if a revision)

SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS 010, LEARNING SKILLS AND STRATEGIES. 5 Credits. Provides individualized and ~~direct group~~ instruction to improve learning strategies and basic reading, writing, and mathematics skills. ~~Equips~~ 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.

Major Code N/A For this major, is the course Required \_\_\_\_\_ Elective \_\_\_\_\_

Does this course have arranged hours? Yes No N/A X By course \_\_\_\_\_

Co/Prerequisite\*? N/A X Approval Code \_\_\_\_\_ Co/Prerequisite Course Requirement \_\_\_\_\_

Co/prerequisite message (10 character limit, (SEE CATALOG) \_\_\_\_\_

Is course cross-listed (same as) with another course? Yes \_\_\_ No X Subject ID \_\_\_\_\_

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes \_\_\_\_\_ N/A X

List departments notified \_\_\_\_\_

Budgetary Unit 18200 Classification Code K Transfer Code N/A SAM Priority Code E

Method of Instruction\*\* Instructor LHE: \_\_\_\_\_ Lecture X Laboratory \_\_\_\_\_

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOP Code: 4930.30

Proposed by Mary Stephens & Kristina De La Cerda Date: May 2012

Division Dean Chris Kosko *C. Kosko* Date: May 2012

Curriculum Committee Approval *Galia Russell* Date: May 2012

Curriculum Council Approval Date \_\_\_\_\_ Subject ID Number HSS-010

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code C

DISCIPLINE, NUMBER, TITLE: Secondary Subjects High School Subjects 010, Learning Skills and Strategies

(If the discipline, number or title is being revised, above should reflect the NEW information;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY**

Course Number: Secondary Subjects: High School Subjects 010

Course Title: Learning Skills and Strategies

Credits: 5

Class hours: 72

Prerequisite: None

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.

**COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES**

N/A X

Yes No SAC Department Chair May S. [Signature] Date 5/30/12  
 Yes No SCC Department Chair [Signature] Date \_\_\_\_\_

**COURSE CONTENT**

(Include major topics of the course time required\*, and what the student is expected to learn.)

Major Topics	Time Required	What Students Will Learn
Unit 1: Learning Compensatory Strategies	8 hours	<ul style="list-style-type: none"> <li>Time-management skills (use and maintain a student schedule)</li> <li>Methods to prepare and study for tests effectively</li> <li>Take clear lecture notes in class</li> <li>Identify and develop areas of academic strength</li> </ul>
Unit 2: Assistive Technology	10 hours	<ul style="list-style-type: none"> <li>Independently use various assistive technology programs to compensate for areas of academic weakness</li> </ul>
Unit 3: Goal Setting	10 hours	<ul style="list-style-type: none"> <li>Identify the values, standards, &amp; resources which influence personal goals</li> <li>Define realistic short- and long-term goals</li> <li>Recognize personal benefits and positive affirmations to reinforce goal attainment</li> </ul>
Unit 4: Perceptual & Memory Skills	8 hours	<ul style="list-style-type: none"> <li>Categorize and successfully use memory skills, such as repetition, categorization, graphic organizers, and acronyms to recall information</li> </ul>
Unit 5: Current Events	8 hours	<ul style="list-style-type: none"> <li>Determine key current events within a newspaper</li> <li>Create an outline detailing who, what, when, where, and why self-reflection questions related to a news story</li> <li>Write a clear paragraph (at least five sentences) describing the details of a news story</li> </ul>

SANTA ANA COLLEGE/Continuing Education

COURSE OUTLINE APPROVAL SHEET

DISCIPLINE, NUMBER, TITLE: SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173, Basic Consumer Math 1B

(If the discipline, number or title is being revised, above should reflect the NEW information ;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

\* NEW REVISION WITH X W/O CATALOG CHANGES
DELETION REVISION WITH X W/O CLASS SCHEDULE CHANGES

\* Complete and attach a New Course Proposal Form and Honors Addendum, if applicable

CATALOG ENTRY (60 word limit; underline changes if a revision)

Course Number SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173

Course Title: Basic Consumer Math 1B

Credits: 5

Class hours: 72

Prerequisite: None

Students will use practical computational skills to solve common problems in a consumer's life, buying or renting a car, car insurance, automobile expenses, buying or renting a home, utilities expenses, home improvements, traveling costs, budgeting household expenses, banking and investing, paying taxes, real estate and sales taxes, and preparing for careers. Open entry/open exit

CLASS SCHEDULE ENTRY (maximum of four lines; underline changes if a revision)

SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173, Basic Consumer Math 1B. 5 credits

Students will use practical computational skills to solve common problems in a consumer's life, buying or renting a car, car insurance, automobile expenses, buying or renting a home, utilities expenses, home improvements, traveling costs, budgeting household expenses, banking and investing, paying taxes, real estate and sales taxes, and preparing for careers. Open entry/open exit

INFORMATION IN THIS SECTION MUST BE COMPLETED BEFORE SUBMISSION TO A CURRICULUM COMMITTEE

Major Code N/A For this major, is the course Required Elective

Does this course have arranged hours? Yes No N/A X By course

Co/Prerequisite\*? N/A X Approval Code Co/Prerequisite Course Requirement

Co/prerequisite message (10 character limit, (SEE CATALOG)

Is course cross-listed (same as) with another course? Yes No X Subject ID

Number of times repeatable for credit N/A (Maximum 3 without prior approval of VPAA)

Have all other departments that list this course for a degree/certificate requirement, elective or recommendation, been advised of the changes? Yes N/A X

List departments notified

Budgetary Unit 18200 Classification Code K Transfer Code N/A SAM Priority Code E

Method of Instruction\*\* 11 Instructor LHE: Lecture X Laboratory

If necessary, complete and attach a \*Co/Prerequisite Approval Form and/or a \*\*TMI Form. TOPS CODE 4930.62

Proposed by Elaine Pham Date: April 30, 2012

Division Dean Christine Kosko Date: April 30, 2012

Curriculum Committee Approval Date: April 30, 2012

Curriculum Council Approval Date Subject ID Number HSMTH-173

(Signatures indicate review and approval of any advisory co/prerequisites as per Board Policy) Noncredit Category Code C

**SANTA ANA COLLEGE/Continuing Education COURSE OUTLINE**

DISCIPLINE, NUMBER, TITLE: SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173, Basic Consumer Math 1B

(If the discipline, number or title is being revised, above should reflect the NEW information ;) AND, the complete former course name MUST be included in the CATALOG ENTRY below.)

**CATALOG ENTRY:**

Course Number: SECONDARY SUBJECTS HIGH SCHOOL SUBJECTS – MATH 173

Course Title: Basic Consumer Math 1B

Credits: 5

Class hours: 72

Prerequisite: None

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

**COURSE AGREEMENT BETWEEN RSCCD COLLEGES FOR ASSOCIATE DEGREES AND CERTIFICATES**

N/A x

Yes	No	SAC Department Chair	<u>Susan Garnett</u> <i>Susan Garnett</i>	Date	<u>04/30/2012</u>
Yes	No	SCC Department Chair	_____	Date	_____



#21

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

PROGRAM OF STUDY			
Pharmacy Technology Degree (sac.phar.as) and Advanced Certificate Option (sac.phar.ca) A.S. Degree			
<p>The associate degree and Advanced Certificate options include the full-spectrum training required for employment in all pharmacy practice settings. Upon completion of the associate degree or 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.</p> <p>The major course requirements for the associate degree and the Advanced Certificate option consist of the <del>same 15</del> <u>same 16.5</u> 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 associate degree or 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 may be required prior to externship placement. Any required investigations are done at the student's expense.</p> <p>The associate degree and Advanced Certificate options are accredited by the American Society of Health-System Pharmacists (ASHP). <del>With the exception of Pharmacy Technology 061, students</del> <u>Students must complete each required course with a grade of "C" or better (PHAR 061 and externship with a grade of "CR") to qualify for the associate degree or the Advanced Certificate.</u></p>			
Major requirements for the associate degree and the Advanced Certificate			
Required Course			
			-
			: 26 units
			Units
PHAR 048	Introduction to Pharmacy Technology	2	
PHAR 051	Body Systems I	3.5	
PHAR 052	Body Systems II	3.5	
PHAR 054	Pharmacy Calculations	2	
PHAR 056	Pharmacy Operations	4.5	
PHAR 057	Inpatient Pharmacy Services	1.5	
PHAR 060	Sterile Products	4.5	
PHAR 061	Pharmacy Technology Skills Lab	0.5	
PHAR 072	Pharmacy Technology Externship	0.5 - 4	

		26	
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 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 064	New Drug Update	1	
PHAR 080	Pharmacy Calculations Review	2	
	and		
PHAR 084	Sterile Products Update	4.5	
SPCH CMST 097	American English Conversational Skills	3	
CMST 101	Introduction to Interpersonal Communication	3	
	or		
SPCH CMST 101H	Honors Introduction to Interpersonal Communication	3	
-	or		
SPCH CMST 102	Public Speaking	3	
-	or		
SPCH CMST 107	Communication for the Health Care Professional	1.5 - 0	
Total Units		54 - 61	26
PID 162351			

#22

first *Click on the changed parts for a detailed description. Use the left and right arrow keys to walk through the modifications.* last

<b>PROGRAM OF STUDY</b>		
Pharmacy Technology Basic Certificate Option (sac. pharb.cert) Certificate of Proficiency (Untranscribed)		
<p>The Basic Certificate option prepares students for entry-level employment as a pharmacy technician 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.</p> <p>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 may be required prior to externship placement. Any required investigations are done at the student's expense.</p> <p>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.</p> <p>Students must complete each required course with a grade of "C" or better (Externship with a grade of "CR") to qualify for the Basic Certificate</p>		
Major requirements for the Basic Certificate option:		
Course		
		-
Required Courses: 16.5 units		<u>Units</u>
PHAR 048	Introduction to Pharmacy Technology	2
PHAR 051	Body Systems I	3.5
PHAR 052	Body Systems II	3.5
PHAR 054	Pharmacy Calculations	2
PHAR 056	Pharmacy Operations	4.5
PHAR 072	Pharmacy Technology Externship	0.5 - 4
		<u>16.5</u>
-		
Recommended electives		-
		<u>Units</u>
BIOL 139	Health Microbiology	4
BA 038	Telephone Techniques	0.5
BA 110	Computer Keyboarding Skills	1 - 2
BA 115	Computer Keyboarding Speed and Accuracy 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 061	Pharmacy Technology Skills Lab	0.5
PHAR 064	New Drug Update	1
	and	
PHAR 080	Pharmacy Calculations Review	2
SPCH CMST 101	Introduction to Interpersonal Communication	3
	or	
SPCH CMST 101H	Honors Introduction to Interpersonal Communication	3
-	and	
SPCH CMST 102	Public Speaking	3
CMST 107	Communication for the Health Care Professional	1.5
Total Units		41 - 48
		PID 161
16.5		
		PID 350

**Table 7. MIS Data Element Dictionary with Examples**

DED #	Data Element Name	Values / Examples
CB01	Course Department and Number	Example: ENGL100
CB02	Course Title	Limited to 68 characters, including punctuation and spaces
CB03	Course TOP Code	Format: xxxxxx Examples: 010300; 490310
CB04	Course Credit Status	D = Credit - Degree Applicable C = Credit - Not Degree Applicable
CB05	Course Transfer Status	A = Transferable to both UC and CSU B = Transferable to CSU only C = Not transferable
CB06	Maximum Course Units	The maximum number of units of academic credit a student may earn from enrolling in a single section of this course. Example: 03.50; 04.00
CB07	Minimum Course Units	The minimum number of units of academic credit a student may earn from enrolling in a single section of this course. This value must be greater than zero. Example: 00.50; 01.00
CB08	Course Basic Skills Status	B = Yes N = No
CB09	Course SAM Priority Code	A = Apprenticeship B = Advanced Occupational C = Clearly Occupational D = Possibly Occupational E = Non-occupational
CB10	Course Cooperative Work Experience Education Status	N = Is not part of a cooperative work experience education program C = Is part of a cooperative work experience education program
CB11	Course Classification Code	<u>Credit:</u> Y = Credit Course <u>Noncredit:</u> J = Workforce Preparation Enhanced Funding K = Other Noncredit Enhanced Funding L = Non-Enhanced Funding

Please provide us "A, B, C" instead of "0,1,2, or 3". Thank you!!!

The CB11 has changed. Please provide us only "Y" instead of from A to I. Thank you!!!

<b>CB13</b>	Course Special Class Status	S = Yes N = No
<b>CB21</b>	Course Prior to College Level	A = English, writing, ESL, reading, or mathematics course one level below the transferable level of a corresponding English, writing, ESL, reading, or mathematics course. B = English, writing, ESL, reading, or mathematics course two levels below the transferable level of a corresponding English, writing, ESL, reading, or mathematics course. C = English, writing, ESL, reading, or mathematics course three levels below the transferable level of a corresponding English, writing, ESL, reading, or mathematics course. Y = Not applicable
<b>CB23</b>	Funding Agency Category	A = This course was primarily developed using Economic Development funds. B = This course was partially developed using Economic Development funds. (Economic Development funds exceed 40% of total development costs). Y = Not Applicable
<b>CB24</b>	Course Program Status	1 = Program-applicable 2 = Stand-alone