RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

Santiago Canyon College
8045 E. Chapman Ave.
Orange, CA 92869

Santa Ana College
1530 W. 17th Street
Santa Ana, CA 92706

ARTICULATION AGREEMENT

College: Santa Ana College	Secondary Partner: Valley High School
Contact: Craig Takahashi	Address: 1801 S Greenville St Santa Ana, CA 92704
Phone #: (714) 564-6750	Contact: William Ungar
Fax #:	Phone #: (714) 241-6410
	Fax#:

RSCCD Course	High School / ROP Course
ENG 051- Basic Technical Drawing	298063 – CAD

Articulation Agreement Effective Dates

2012 - 2013	2013 - 2014	2014 - 2015
Signature, RSCCD Instructor Craig Takahashi Print Name 8/22/2013 Date	Signature, RSCCD Instructor Craig Takahashi Print Name 8/22/2013 Date	Signature, RSCCD Instructor Print Name Date
Signature, RSCCD Division Dean Simon B. Hoffman Print Name 8/28/13 Date	Signature, RSCCD Division Dean Simon B. Hofman Print Name 8/28/13 Date	Signature, RSCCD Division Dean Print Name Date
Signature, HS/ROP Instructor William Ungar Print Name 05/28/13 Date	Signature, HS/ROP Instructor William Ungar Print Name 05/28/13 Date	Signature, HS/ROP Instructor Print Name Date
Signature, HS/ROP Administrator Jean Gaudreau Print Name 6-7-13 Date	Signature, HS/ROP Administrator Jean Gaudreau Print Name 6-7-13 Date	Signature, HS/ROP Administrator Print Name Date

NAME OF STATEWIDE ACADEMIC SENATE TEMPLATE FOLLOWS:	
#	TITLE:

College Course Title Basic Technical Drawing **Course #:** ENG 051	**HS/ROP Course Title CAD – COMPUTER AIDED DESIGN** **Course # 299062**
General Course Description: Principles of mechanical drawing including projections, views, dimensions, and conventions, utilizing sketches and computer drafting program. Designed for students with no prior mechanical drawing experience. Suggested preparation: Engineering 183 (may be taken concurrently).	**General Course Description:** Students will develop a solid foundation of drafting skills and techniques that will enable them to draw and design using CAD software. They will learn fundamental concepts of creating, editing, dimensioning, viewing and plotting 2D drawings. 3D modeling concepts will also be introduced and students will produce a portfolio of selected projects for presentation to teachers, peers and community professionals. This is an introductory course in the pathway that prepares students for future study in careers related to various fields of engineering and design
College Units: 3	**HS/ROP Hours: 90**
College Prerequisite(s): None	**HS/ROP Prerequisite(s): NONE**
College Advisories/Recommendations:	**HS/ROP Advisories/Recommendations:**

REQUIRED CONTENT FOR ARTICULATION

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

1. Hand lettering, sketching (lines, arcs, basic shapes) (3 hours)
2. Drawing basics - basic layout, scale, sheet formats, line types (3 hours)
3. Geometry & shape description - rules for drawing lines, surface types, projection theory (3 hours)
4. Orthographic views - orthographic projection, 1st/3rd angle projection, foreshortening, practice (3 hours)
5. CAD basics (3 hours)
6. Basics of dimensioning/tolerancing (3 hours)
7. Manufacturing processes - mill, lathe, molding, casting (2 hours)
8. Other views - auxiliary, sections (2 hrs)
9. Dimensioning - complete dimensioning rules, dimension layout (baseline, chain, direct) (2

hours)
10. Tolerancing/assemblies - tolerance forms, fits, assembly drawings, bill of materials (2 hours)
11. Annotations/features - centerlines, breaks, symbols, notes (2 hours)
12. Threads - thread types, callouts, fasteners (2 hours)
13. Project - design project/drawing (2 hours)

(Note: all topics include instruction in related computer drafting skills)

Plus 48 hours of directed assignments on computer and hand drafting.

INITIALS

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COMPETENCIES AND SKILL REQUIREMENTS REQUIRED FOR ARTICULATION

(Use additional pages as necessary) Where appropriate, please incorporate standards being used (e.g. CTE standards). At the conclusion of this course, the student should be able to:

MEASUREMENT METHODS

(Includes any industry certification or licensure):

Case Studies
Class Discussions
Electronic Delivery
Group Study & Exercises
Handouts
Lecture
Reading Assignments
Visual Aids
Writing Projects & Reports

TEXTBOOKS OR OTHER SUPPORT MATERIALS (Including Software):

College	High School / ROP
COURSE MATERIALS Required texts and/or materials.(Include price and date of publication.) **Recommended readings and/or materials:** None **Other:** **None**	

COMMENTS:

College	High School / ROP

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