

APPLIED TECHNOLOGY 45 0114 - BASIC DRAFTING SKILLS – Fall 2017 - M/W 9:00am-11:30am

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Classroom: 1752 Shuhaw Hall

Office: 1773 Shuhaw Hall

Office Hours: T/TH 9:00am-11:30am

COURSE CONTENT

This course will provide the student with basic skills needed to execute professional quality drafting. The student will gain knowledge of the drafting profession and drafting principles that are mandatory for success in both computer-aided drafting and manual drafting fields. The content will stress sketching skills, theory of projection, working drawing conventions, and techniques of producing technical drawings. The instructor will utilize lecture, white board, and the overhead projector for presenting information as well as participation with the class on an individual basis.

AREAS TO BE COVERED IN LECTURE/DEMONSTRATION

1. Equipment and Materials
2. Technical Sketching Techniques
3. Working Drawing Conventions
4. Line Work
5. Lettering
6. Geometry of Technical Drawing
7. Multi-view Projection
8. Introduction to Computer-Aided Drafting

TEXT MATERIALS

Fundamentals of Modern Drafting, Wallach (Recommended)

ASSIGNMENTS

A total of 6 drawings will be required (25 or 15 points each), and 11 exercises (10 or 15 points each). Manually drafted drawings will be evaluated on the following scale:

Lettering	5 points
Neatness	5 points
Linework	5 points
Accuracy	<u>10 points</u>
	25 points total

CAD drawings will be evaluated on geometric accuracy and file organization.

Late work will be penalized 10% of its original total. A final exam (60 pts.) will be given. A final course grade, based on total points will be given on the following scale:

90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
Below 60%	F

ATTENDANCE

Drawing at home or work should not be a substitute for drawing during course hours. Continual monitoring by the instructor and interaction with fellow students is important for establishing an exact and cohesive approach to technical drafting. Each absence will result in **3 points being deducted** from your overall point total.

ASSIGNMENT SCHEDULE

CLASS DATES	ASSIGNMENTS	DUE DATES
8/21, 8/23 & 8/28	Use of Drafting, Equipment and Supplies	8/30
8/30 & 9/6	Sketching, Lettering and use of Scale	9/11
9/11, 9/13 & 9/18	Architectural Drawing	9/20
9/20, 9/25 & 9/27	Geometric Construction	10/2
10/2, 10/4 & 10/9	Multi-View Drawings	10/11
10/11	CAD Exercise	10/16
10/16	CAD Drawing	10/18
10/18	FINAL EXAM	

No class on 9/4 (Labor Day Holiday)

Assignments

Use of Drafting Equipment and Supplies

- DWG #1 – Line Work (25 points)
- Visualization Exercise #1 (10 points)

Sketching, Lettering & use of Scale

- Architectural Scale Work (10 points)
- Sketching #1 (10 points)
- Sketching #2 (10 points)
- Lettering Assignment (15 points)

Architectural Drawing

- DWG #2 – House Floor Plan Drawing (25 points)
- Visualization Exercise #2 (10 points)

Geometric Construction

- Geometric Constructions Exercises (10 points)
- DWG #3 – Roadway Intersection (25 points)
- Visualization Exercise #3 (10 points)

Multi-View Drawings

- Sketching #3 (10 points)
- Sketching #4 (10 points)
- DWG #4 – Multi-view Drawing (25 points)

CAD Exercise #1

- DWG #5 – CAD Exercise (15 points)
- Visualization Exercise #4 (10 points)

CAD Exercise #2

- DWG #6 – CAD drawing (25 points)

ACADEMIC INTEGRITY

- All students should review the SRJC Student Conduct Handbook for rules on academic integrity. Students participating in academic dishonesty (i.e. cheating) will be penalized with zero assignment/test scores, potentially additional sanctions including possible suspension and up to possible expulsion from SRJC.
- See links below for more information.

STUDENT LEARNING OUTCOMES

- Describe drafting/design's role in today's industries.
- Compare manual drafting and computer aided design methods.
- Utilize manual drafting equipment to produce technical drawings.

Links

- Sonoma County Junior College District Board Policy Manual sections on Academic Integrity: <http://www.boarddocs.com/ca/santarosa/Board.nsf/goto?open&id=A63TJQ77A2C8>
<http://www.boarddocs.com/ca/santarosa/Board.nsf/goto?open&id=A63TMC78051C>
- SRJC Studentlife Academic Integrity: <https://studentlife.santarosa.edu/academic-integrity>