

SINCLAIR COMMUNITY COLLEGE

Syllabus for course in

Principles of Manufacturing

COURSE#      CAM 1107    3 Credit Hours

DAY/TIME:        \_\_\_\_\_    Spring 2013

ROOM:            11-222

INSTRUCTOR:        \_\_\_\_\_    Email: \_\_\_\_\_

PHONE:            \_\_\_\_\_

COURSE DESCRIPTION:

The course focuses on the study and interpretation of the graphic language used in manufacturing and engineering. To include principles of: shape description, axonometric projection, specifications, symbology and spatial relationships. The student will apply problem solving and critical thinking skills using both standard and automated communication methods.

OBJECTIVES OF THE COURSE

1. Apply graphic communication principles and basic computer skills to create CAD drawings.
2. Create specifications for manufactured products.
3. Read and interpret engineering drawings for problem solving.
4. Communicate by means of a three-view or pictorial sketch, ideas and concepts.
5. Read and interpret engineering drawing symbology.

TEXT:    Packet supplied by instructor on Angel  
Optional Text: Technical Design and Drafting Text Book - AutoCAD

SUGGESTED EQUIPMENT: Electronic Storage Device. English scale (6"). Basic drafting equipment - 45 deg. triangle, 30,60,90 deg. triangle, 6" English rule, compass, protractor, divider and 2H pencil.

### STUDENT EVALUATION:

Attendance and class participation (see policy 4)	
Design/Drawing Assignments	50%
Midterm	20%
Quizzes	10%
Final	20%

### GRADING:

90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
59% and below	F

### POLICIES:

1. The instructor reserves the right to make changes in the schedule, policies and assignments as necessary.
2. Turn all cellular phones on vibrate mode. Uses of cellular phones are not permitted in the class or laboratory. MP3 players, radio or any sound emitting devices are prohibited.
3. No make-up quizzes will be allowed. All homework must be turned in on time to receive full credit – 50% reduction for late work up to the midterm. After the midterm all work turned in late will not receive credit. All assignments after the midterm are due week 15 or no credit will be given.

NOTE: If you miss a class it is the responsibility of the student to make arrangements with the instructor before the class meets again, otherwise any work turned in will be subject to late penalties.

4. I reserve the right to raise or lower your final numerical average by up to three points (3) based on my evaluation of your performance including but not limited to lateness, attendance, answers to questions, classroom conduct and general class participation.
5. Plagiarism and cheating are not acceptable. This behavior may fail you from the course (see student handbook).
6. Eating in class is prohibited. However, I will allow students to drink soda, coffee ect. in the room.

### OFFICE HOURS:

OUTLINE:                      Spring Semester 2013                      DRAFT COPY

Week 1	Orthographic Projection and Sketching
Week 2	Orthographic Projection and Sketching – Line Types – Line Weights
Week 3	Isometric Sketching
Week 4	Orthographic Projection/Introduction to CAD
Week 5	Orthographic Projection/CAD
Week 6	Sectional Views/CAD
Week 7	Sectional Views/CAD
Week 8	Midterm Exam
Week 9	CAD Drawings Borders and Titleblocks
Week 10	Dimensioning and Tolerancing - CAD
Week 11	Dimensioning and Tolerancing - CAD
Week 12	GDT - CAD
Week 13	GDT - CAD
Week 14	Symbols and Surface Finish - CAD
Week 15	All Drawings Complete
Week 16	Final Exam

NOTES :

- |    |                                    |                        |
|----|------------------------------------|------------------------|
|    | A-Size                             | B-Size Full Scale      |
| 1. | CAD Drawings (1, 2, 3, 4, 5, 6, 7) | (8, 9, 10, 11, 12, 13) |
2. (Sketching Assignments) The first 10-15 minutes of each class will be used for Orthographic Sketching and Isometric Sketching. You will submit your sketches (10 minimum) at the final exam for grade. This assignment will be worth (2) graded assignments.