

Bergen Community College
Division of Math, Science and Technology
Department of Industrial & Design Technology

Course Syllabus
DFT 207 Drafting II

Semester and year:
Course Number:
Meeting Times and Locations:

Instructor:
Office Location:
Phone:
Office Hours:
Email Address:

COURSE DESCRIPTION:

DFT 207 Drafting II introduces the student to basic theory and design techniques used in a semester “Reverse Engineering” project in which the student produces dimensioned CAD drawings for manufacture of a product. Topics include working drawings; computer assisted drafting (CAD), tolerancing, assembly, perspectives and advanced isometrics.

2 lectures, 2 labs, 3 credits

Prerequisites: DFT 107 Drafting I

Co-requisites: None

STUDENT LEARNING OBJECTIVES:

As a result of meeting the requirements in this course, students will be able to:

Student performance on these objectives will be measured by:

1. Demonstrate computer aided drafting skills by producing dimensioned multiview drawings.	Hard copy CAD drawings.
2. Develop drawings containing threads and fasteners by interpreting data from standard charts used to identify hardware.	Drawing exercises and exam questions.
3. Recognize various methods of accurate measuring and measurement methods used in mechanical design through hands-on use of such equipment.	Performance necessary to produce accurate CAD drawing assignments.
4. Construct a scaled assembly drawing based upon an assigned project.	CAD drawing assignments.

COURSE CONTENT: Mechanical Drawing Text:

<u>CHAPTER</u>	<u>TOPIC</u>
5	Orthographic Projection
6	2D Drawing Representation
7	Section Views
10	Dimensioning
11	Tolerancing
12	Threads and Fasteners
13	Working DWGS Section 13.1 thru 13.7 - Assembly Drawings
15	Axonometric (Advanced Isometric)
16	Section 16.10 - 2 Point Perspectives

AutoCAD and its Applications:

<u>CHAPTER</u>	<u>TOPIC</u>
1	Intro to Computer Aided Drafting
2	Drawings and Templates
3	Intro to Drawing and Editing
4	Basic Object Commands
5	Lines, Standards and Layers
7	Object Snaps and AutoTrack
8	Construction Tools & Multiview Drawings
9	Text Style and Multiline Text
10	Single Line Text & Additional Text tools
11	Modifying Objects
12	Arranging & Patterning Objects
16	Dimension Standards
23	Section Views and Graphic Patterns

TEXTBOOK: Technical Drawing with Engineering Graphics, 14th edition. Giesecke, Mitchell, Spencer, Hill, Dygdon, Novak and Lockhart.
AutoCAD and Its Application, Basics, Shumaker, Goodheart & Willcox Co., Inc.

EVALUATION:

A.	WORKING DRAWINGS.....	50%
B.	PICTORIAL DRAWINGS.....	20%
C.	WRITTEN EXAM.....	20%
D.	CLASS PARTICIPATION.....	10%
	TOTAL	100%

Drawings are due the class meeting after they are assigned. Drawings submitted after that date will be lowered one full letter grade per class meeting that they are late. Drawings will not be accepted after the final submission date listed in the calendar and will receive a failing grade after that last submission date.

ATTENDANCE POLICY:

Attendance will be taken twice during each class period. The first attendance for the lecture portion of the class will be at the beginning of each class. The second attendance, for the laboratory portion of the class will be taken at 11:30 a.m. for classes beginning in the morning, 5:15 p.m. for classes beginning early afternoon, and 9:45 p.m. for evening classes.

If a student is absent from the lecture portion of the class, it will be recorded as an absence for the entire class period. If a student is absent from the laboratory portion of the class, it will be recorded as an absence from that portion of the class only.

A letter grade will be deducted from the class participation portion of your final grade for each absence beyond three absences from either portion of a class period.

SPECIAL NOTES: A final grade cannot be assigned for the course until all drawings, projects and examinations for the course have been completed.

Make-up examinations will be administered in accordance with the instructor's and division's policy.

FACULTY ABSENCE PROCEDURE: Please note well.

A daily listing will appear in the glass case located in the main hall A bldg. which will indicate all classes which are cancelled. Students can consult this case before going to class. If students find a class cancelled which has not been listed, they should report this to the divisional dean's office (S338) or to the evening/Saturday office (L113).

CALENDAR:

CLASS MEETING	DATE	TOPIC	CHAPTER	ASSIGNMENT DUE
1		2 Point Projected Perspective	16	
2		Open Lab	--	
3		Advanced Isometric Reverse Engineer - Project Announcement	15	2 Point Proj. Perspective
4		Open Lab		
5		COMPUTER AIDED DRAFTING LESSON - 1	CAD Text 1,2,3,4,5,7	Advanced Iso
6		COMPUTER AIDED DRAFTING LESSON - 2 Reverse Engineer - Project Commitment	CAD Text 4,11,16	AutoCad #1
7		COMPUTER AIDED DRAFTING LESSON - 3	CAD Text 9,10,11,23	Reverse Engineer Project – sketches 1 & 2
8		Measuring Devices, Threads & Fasteners	12	3 View AutoCad #2
9		COMPUTER AIDED DRAFTING LESSON - 4	CAD Text 2,11,23	Threads
10		Tolerancing	11	Template Drawing
11		Open Lab	--	
12		Assembly Views	5,6,7,13	CAD Contract #1 Tolerancing Worksheet
13		Open Lab	--	Reverse Engineer Project – Assembly Sketch
14		Written Exam (20% of Final Grade)		CAD Contract #2
15		Last Date to Submit Drawings - Maximum of Two Drawings	--	Assembly Drawing