

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

Course Syllabus
MFG-220 Pro/Engineer® Design III

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

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

COURSE DESCRIPTION:

MFG-220 Pro/Engineer® Design III includes advanced techniques for the design and analysis using Pro/Creo, Pro/Sheetmetal and Pro/Mechanica. Emphasis will be placed on the technology as well as utilizing advanced techniques in relation to both lab exercises as well as a practical design. Lecture, lab and a comprehensive project will be used to teach how to use specific features of the software in relation to product design.

2 lecture, 3 lab, 3 credits

Prerequisites: MFG-219 Pro/Engineer® Design II

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 the ability to copy common features from model to model	Graded modeling assignments and exams.
2. Identify the advanced techniques necessary to document detailed drawings	Graded modeling assignments and exams.
3. Examine the ability to design within large assemblies	Graded modeling assignments.
4. Identify with the basics of Sheetmetal design	Graded modeling assignments.

COURSE CONTENT:

<u>CHAPTER</u>	<u>TOPIC</u>
5.	User Defined Features (UDF's)
6.	Pro/Program and Layers
7.	Advanced Drawing Functions
8.	Assemblies

** Subsequent material will be in the form of hand-outs

TEXTBOOK: Advanced Tutorial for Creo Parametric Releases 1.0 & 2.0
 Roger Toogood – Schroff Development Corporation, Shawnee-Mission
 Kansas (www.schroff.com) ISBN #978-1-58503-756-8

** Subsequent material will be in the form of hand-outs

EVALUATION:	A. MODELING EXERCISES	40%
	B. MIDTERM EXAM	15%
	C. FINAL EXAM25%
	D. CLASS PARTICIPATION	20%
		Total: 100%

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 12:30 a.m. for classes beginning in the morning, 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.

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 (A325) or to the evening/Saturday office (L113).

MFG-220 Pro/Engineer® Design III

Class Meeting	Date	Topic	Chapter
1	_____	Review of Pro/Engineer	-
2	_____	User Defined Features	5
3	_____	User Defined Features (cont.)	5
4	_____	Pro/Program & Layers	6
5	_____	Layers / Advanced Drawing Functionality	7
6	_____	Advanced Drawing Functionality	8
7	_____	Assembly Functionality	8
8	_____	Assembly Functionality / Review	8
9	_____	Midterm Examination	
10	_____	Adv. Assembly Techniques - Top Down Design, Simplified Reprs, and Skeleton Parts	Handout
11	_____	Pro/Sheetmetal	Handout
12	_____	Pro/Sheetmetal	Handout
13	_____	Open Lab	-
14	_____	Review	-
15	_____	Final Examination	

All BCC students enrolled in credit courses are entitled to a WebAdvisor account. With WebAdvisor, you may register online, check your schedule, room assignments, GPA, and find out what courses you need to take. To find out more about WebAdvisor or to sign up online, visit <http://go.bergen.edu>! While there, please make sure you give us your preferred email address. You'll find directions how to do this at <http://go.bergen.edu/email>.