

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

Course Syllabus
MFG-219 Pro/Engineer® Design II

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

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

COURSE DESCRIPTION:

MFG-219 Pro/Engineer® Design II is a study of the intermediate to advanced functionality of Parametric Technology Corp.'s Pro/Creo® 3D solid modeling software. Emphasis will be placed on the technology as well as the various design techniques in relation to this advanced tool. Lecture and lab will be used to teach not only how to use specific features of the software but also how to use it in design.

2 lecture, 3 lab, 3 credits

Prerequisites: MFG-119 Pro/Engineer® Design I

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. Realize the value of design within assembly	Graded modeling assignments and exams.
2. Learn the fundamentals of customizing ProEngineer interface	Graded modeling assignments.
3. Utilize advanced modeling techniques	Graded modeling assignments.
4. Realize the capabilities of Pro/Engineer as a Mechanical Engineering tool	Graded modeling assignments and exams.

COURSE CONTENT:

CHAPTER

TOPIC

- 10. Assembly Operations
- 11. Sweeps
- 11. Blends

Advanced Textbook

- 1. The Pro/E Interface and Customization
- 2. Helical and Variable Section Sweeps
- 3. Advanced Rounds and Tweaks
- 4. Patterns and Family Tables

TEXTBOOK:

Creo Parametric 2.0 Tutorial– A Click-by-Click Primer

Roger Toogood – Schroff Development Corporation, Shawnee-Mission
Kansas (www.schroff.com) ISBN (Book + Software on Disk): 978-1-
58503-730-8

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

EVALUATION:

- A. MODELING EXERCISES 40%
 - B. MIDTERM EXAM 15%
 - C. FINAL EXAM 25%
 - 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 12:45 p.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-219 Pro/Engineer® Design II

<u>Class Meeting</u>	<u>Date</u>	<u>Topic</u>	<u>Chapter</u>
1		Review of Pro/Engineer – Assembly Operations	9
2		Assembly Operations / Sweeps	10/11
3		Sweep	11
4		Blends	11
5		Pro/E Customization/ Tools	1
6		Helical Sweeps	2
7		Helical Sweeps/Var. Section Sweeps /	2
8		Midterm Examination	
9		Advanced Rounds, Drafts, and Tweaks	3
10		Advanced Patterns	4
11		Advanced Patterns (Cont.)& Family Tables	4
12		Family Tables	4
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>.

