

Bergen Community College
Division of Math, Science and Technology
Computer Science, Engineering & Information Technologies

Course Syllabus
MFG-219 Pro/CREO® Design II

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

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

COURSE DESCRIPTION:

MFG-219 Pro/CREO® 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, 2 lab, 3 credits
Prerequisites: MFG-119 Pro/CREO® 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. Implement the fundamentals of customizing Pro/CREO interface	Graded modeling assignments.
3. Utilize advanced modeling techniques	Graded modeling assignments.
4. Recognize the capabilities of Pro/CREO 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 Tutorial (Wildfire) – A Click-by-Click Primer Roger Toogood
– Schroff Development Corporation, Shawnee-Mission
Kansas (www.schroff.com) ISBN #978-1-58503-415-4

Creo/Parametric Advanced Tutorial (Wildfire)

Roger Toogood – Schroff Development Corporation, Shawnee-Mission
Kansas (www.schroff.com) ISBN #978-1-58503-380-5

EVALUATION: A. MODELING EXERCISES 40% B.
MIDTERM EXAM 15%
C. FINAL EXAM 25%
D. CLASS PARTICIPATION 20%
Total: 100%

Attendance policy:

BCC Attendance Policy: “All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.”

MFG-219 Pro/CREO® Design II

Class

Meeting Date Topic Chapter 1 Review of Pro/Engineer – Assembly Operations 9 2

Assembly Operations / Sweeps 10/11 3 Sweep & Blends 11 4 Sweeps & Blends

(Continued) 11 5 Pro/CREO Customization Tools, Helical Sweeps 1,2

6 Helical Sweeps/Var. Section Sweeps / Review 2 7 Advanced Rounds, Drafts, and

Tweaks 3 8 **Midterm Examination**

9 Advanced Patterns & Family Tables 4 10 Advanced Patterns & Family Tables

(Continued) 4 11 User Defined Features (UDFs) 5 12 Review

13 Open Lab

14 Final Examination

15 Last Date to Finish Exercises and Review of Final Exam

Civility/Classroom Conduct

As a college of choice, Bergen Community College provides a comfort level that enables students of all abilities to mature as learners and engaged citizens. Therefore, it is important that this class provide a stimulating, rigorous, and inclusive learning environment. To that end, students must demonstrate respect to others and to ideas and opinions expressed in the class. Use of cell phones and laptops is prohibited, unless special permission is granted. Anyone not following these standard procedures may be asked to remove him/herself from the class.

Services for Students with Disabilities:

A wide variety of services are available for students with documented disabilities through the Office of Special Services (OSS) [Room S – 131, (201) 612-5270]. OSS is dedicated to serving students with physical, visual, learning, hearing, and emotional disabilities. If a student has been classified in high school or had a 504 plan, it is highly recommended that the student contact OSS during the college application process. A more detailed explanation can be found on the College web site, www.bergen.edu. Personal information is kept confidential. Examples of the types of accommodations and services include: Extended test taking time Organizational strategies.