

Bergen Community College
Division of Math, Science and Technology
Computer Science, Engineering & Information Technologies
Course Syllabus
MFG-119 Pro/Creo® Design I

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

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

COURSE DESCRIPTION:

MFG-119 Pro/Creo® Design I is a study of the basic functionality and use of Parametric Technology's (PTC's) **Pro/Engineer® Wildfire** 3D solid modeling software. Emphasis will be placed on the technology as well as the terminology 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: 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 the basics of solid modeling	Graded modeling assignments and exams
2. Implement the fundamentals of the Pro/Creo interface	Graded modeling assignments
3. Demonstrate the ability to create and understand the value of a parametric model	Graded modeling assignments and exams
4. Recognize the capabilities of utilizing Pro/Creo as a Mechanical Engineering tool	Graded modeling assignments and exams

TEXTBOOK: Tutorial (Wildfire) – A Click-by-Click Primer

Roger Toogood – Schroff Development Corporation, Shawnee-Mission
Kansas (www.schroff.com) ISBN #978-1-58503-415-4

EVALUATION: A. MODELING EXERCISES	50%	B.
MIDTERM EXAM	10%	
C. FINAL EXAM	20%	
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 119 Pro/CREO® Design I Calendar

Class

Meeting Date Topic Chapter 1 _____ Introduction to CREO/Parametric Intro

2 _____ Lesson 1: Introducing Pro/E and Creating a
Simple Object using Sketcher 1

3 _____ Lesson 2: Creating Holes and Cuts, the Model 2 Tree, and Feature
Relations

4 _____ Lesson 2: Creating Holes and Cuts.... 2 5 _____ Lesson 3: Shafts,

Rounds, Chamfers, and Slots 3 6 _____ Lesson 4: Sketcher Tools and

Datum Planes 4

7 _____ Lesson 5: Revolved Features, Patterns,
and Copies 5

8 _____ **Midterm Examination**

9 _____ Lesson 6: Sweeps and Blends 6

10 _____ Lesson 7: Modeling Utilities, Parent/Child
Relations, and the 3R's 7

11 _____ Lesson 8: Creating Engineering Drawings 8 12 _____ Lesson 9:

Assembly Fundamentals 9 13 _____ Lesson 10: Assembly Operations 10 14

_____ **Final Examination**

15 _____ Last Date to Finish Exercises and Review of the
Final Examination

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.