NORTHEASTERN TECHNICAL COLLEGE
COURSE OUTLINE

COURSE: PREFIX NO.	EFFECTIVE DATE	NEXT REVIEW DATE
EGT 280	August 2009	August 2011

TITLE:	CREDITS	CONTACTS		
		CLASS	LAB	TOTAL
Introduction to Rapid Prototyping	1	3	0	1

PREREQUISITES: EGT 255 with a grade of "C" or better

DESCRIPTION: This course provides an overview of rapid prototyping technologies and applications.

TEXTBOOK(S) OR ALTERNATIVE: Learning Solidworks, Second Edition, by Richard M. Lueptow & Michael Minbiole

MATERIALS (specifying those to be purchased by student):

COLLATERAL READING:

CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):

Academic Honesty: During a test, as well as on any written assignment, paper, or project, anyone determined to be exchanging information or copying someone else's work will be given a grade of "F" on that work and face further disciplinary action. Please refer to the "Student Code Book" on "Academic Dishonesty" section.

Computer User Responsibilities: **NETC Computers are for Educational Purposes Only!**

Software: Software is protected by copyright and licensed for use by NETC only. Software may not be removed, transferred, copied or modified in any way.

Hardware: Computers are available for use only during scheduled or assigned hours. Student users have priority. Users may not abuse or alter any computer capabilities or settings.

Web Access: NETC provides access to the Internet for educational and research purposes. The College prohibits use of computer facilities for hacking accounts at NETC or any other location, games, chatting, personal e-mailing, downloading programs, changing settings, browsing offensive

sites or transmitting illegal, unlawful or immoral information. NETC computers may not be used for personal gain or profit. Access to personal e-mail accounts without specific permission is prohibited due to e-mail delivery of viruses.

The NETC Computer Center monitors computer use with capabilities to track violations of computer user responsibilities. The College will impose disciplinary action for violations.

Absences: No more than 10% (or 4.5 hours) of the scheduled class may be missed.

Tardies: A student is tardy if he/she arrives for class after the instructor has checked the class roll. Three tardies will count as one absence. Any student who shows up for class more than ten minutes late will be counted as absent for that class.

Classroom Etiquette: An integral part of an education is developing a sense of integrity and responsibility not only toward ourselves but also toward others. In the classroom, as on the job or in your home, exhibiting appropriate behavior reflects on your maturity. Arriving late to class, being unprepared, inappropriate talking while class is in session, etc. negatively reflect on you and your fellow students. Please be considerate.

No food, drink or cell phones are permitted in the classroom.

Assigned Work: If an assignment is given to the class while a student is absent, he/she is required to turn in the work or make the work up on the first day back in class.

Student ID: It is mandatory that every student wear his or her student ID at all times when on the Cheraw campus. During the first week of classes, the instructor will issue a reminder to wear the ID. This reminder is a warning. After the first week of classes, instructors are required to dismiss students without ID from class. The student may get his/her ID (or a new one in Student Services for $3.00) and return to class before the midpoint of the class. If the student cannot get an ID and return to class by the midpoint, the instructor will record the absence.

Disabilities Statement: Students with disabilities are encouraged

to contact the Vice President for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Vice President for Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See *College Catalog*)

COURSE TOPICAL OUTLINE (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.

TENATIVE

WEEK(S)	TOPIC
1-2	Draw a Simple 3-D object in SolidWorks or AutoCAD
3-4	Print 3-D Simple object on the BST 3-D Plotter

COURSE TOPICAL OUTLINE: (continued)

WEEK(S)	TOPIC
5-6	Construct a more complex object from SolidWorks as provided by instructor
7-8	Print the more complex 3-D object on the BST 3-D Plotter
9-12	Draw several Complex Parts to be assembled into a Working Prototype
13-15	Plot and Assemble the Working Prototype

OBJECTIVES OF COURSE: Upon successful completion, the student will be able to:

1. Answer questions concerning the overall operation and nature of SolidWorks;
2. Boot up the system and originate a drawing;
3. Perform the various functions by using proper command syntax;
4. Construct simple mechanical drawings using SolidWorks;

5. Modify, dimension, store and recall drawings.

INSTRUCTIONAL MEHTODS TO COMPLETE OBJECTIVES:

1. Lecture

2. Demonstration

3. "Hands-on" operation of the system

4. Instructor will provide drawing projects (exercises) for students to draw and plot for evaluation.

EVALUATIVE METHODS TO APPRAISE OBJECTIVES:

75% - Instructor's evaluation of Manual end-of-chapter tests/activities

25% - Instructor's evaluation of work habits, technique, drawing efficiency, effort, and care of laboratory materials and equipment.

GRADING SCALE:

100 – 90 = A
89 – 80 = B
79 – 70 = C
69 – 60 = D
BELOW 60 = F