COURSE: Prefix No. | Effective Date | Next Review Date
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EGT 152 | August 2010 | August 2012

<table>
<thead>
<tr>
<th>Title:</th>
<th>Credits</th>
<th>Contacts</th>
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<tbody>
<tr>
<td>Fundamentals of CAD</td>
<td>3</td>
<td>Class - Lab - Total</td>
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</table>

PREREQUISITES: EGT 151 with a grade of “C” or better.

DESCRIPTION: LEVEL I: This course includes a related series of problems and exercises utilizing the computer graphics station as a drafting tool.

LEVEL II: AutoCAD is a computer assisted drafting system based on the industrial system produced by Autodesk. This course introduces the student to this command-driven CAD system and provides instruction on procedures used to produce mechanical drawings.


MATERIALS (specifying those to be purchased by student):

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

Attention!

NETC Computers are for Educational Purposes Only!

Computer User Responsibilities:

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.

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

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.

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.
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)

**RESOURCES (A-V, persons, tools/equipment):**

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

**TENTATIVE**

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
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<tbody>
<tr>
<td>1-4</td>
<td>CHAPTER 5 Performing Geometric Constructions</td>
</tr>
<tr>
<td></td>
<td>Creating objects using basic drawing commands</td>
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<tr>
<td></td>
<td>Using editing tools to create geometric constructions</td>
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<td></td>
<td>Draw Figures 5.1-10 (10) Drawings</td>
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<td></td>
<td>CHAPTER 6 Adding Text to your Drawings</td>
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<tr>
<td></td>
<td>▪ Creating single line dynamic text</td>
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<td>▪ Creating multi-line text (paragraph style)</td>
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<td></td>
<td>▪ Changing text style (fonts, height)</td>
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<td>▪ Using text justification options</td>
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<td></td>
<td>▪ Using special text characters</td>
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<td></td>
<td>▪ Editing existing text in a drawing</td>
</tr>
<tr>
<td></td>
<td>▪ Finding and replacing text in a drawing</td>
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<tr>
<td></td>
<td>Create Titleblock (A,B,C,D) per Handout (4) Drawings</td>
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</table>
5-7 CHAPTER 7 Object Grips and Changing The Properties Of Objects

- Using Object Grips
- Understanding and Using Object Grip Modes
- Activating the Grip Shortcut Menu
- Modifying the Properties of Objects
- Using the Layer Control Box to Modify Object Properties
- Matching the Properties of Objects

Draw Multiview Drawing with Isometric view & Titleblock

8-10 CHAPTER 8 Shape Description / Multiview Projection

- Identifying where drawing views originate from
- Applying the relationships between the views
- Choosing the most appropriate view and the number of views needed to describe a part
- 3 view drawings
- Using basic linetypes in drawings
- Applying runouts to linear / circular surface intersections

COURSE TOPICAL OUTLINE (Continued)

WEEK TOPIC
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11-12 CHAPTER 9 Section Views

- Applying section views to drawings
- Creating drawings using various types of section views

Page 491-497 (5) Drawings

13-14 CHAPTER 10 Auxiliary Views

- Creating an auxiliary view in a primary multiview drawing
- Setting up snap to assist in the development of Auxiliary views
- Understanding the relationship between orthographic
views and auxiliary views

Pages 516-522 (5) Drawings

15 REVIEW AND DRAW ASSIGNED DRAWINGS BY INSTRUCTOR

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

1. answer questions concerning the overall operation and nature of AutoCAD;
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 AutoCAD;
5. modify, dimension, store and recall drawings.

INSTRUCTIONAL METHODS 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:

40% - Instructor's evaluation of Manual end-of-chapter tests/activities
10% - Instructor's evaluation of work habits, technique, drawing efficiency, effort, and care of laboratory materials and equipment
30% - Drawing Exercises (Minimum of 43 Drawings)
20% - Final Exam
Course Outline
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GRADING SCALE:
A = 90 - 100
B = 80 - 89
C = 70 - 79
D = 60 - 69
F = BELOW 60