COURSE OUTLINE

COURSE: EGT 151  
EFFECTIVE DATE: August 2015  
NEXT REVIEW DATE: August 2017

TITLE: Introduction to CAD  
CREDITS: 3  
CLASS - LAB - TOTAL: 3 - 0 - 3

PREREQUISITES: At least one traditional drafting course, Blue Print Reading course or permission of instructor.

DESCRIPTION: This course covers the operation of a computer-aided drafting system. The course includes interaction with a CAD station to produce technical drawings.

General principles and kinds of equipment are discussed, while the major part of the course is a "hands-on" exposure to simple CAD systems.


MATERIALS (specifying those to be purchased by student): None


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 purposed. 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. Academic dishonesty includes, but is not limited to cheating, plagiarism, collusion, and falsification of information. Refer to the "Student Code Book" on "Academic Dishonesty".

**Absences:** No more than 10% (or 4.5 class 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 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 Dean for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Dean for Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See College Catalog)

**RESOURCES (A-V, PERSONS, TOOL/EQUIPMENT):** Handouts—drawings, videos
COURSE TOPICAL OUTLINE (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TEXT</th>
<th>TOPIC</th>
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| 1-4  | Chapter 1 | Basic Drawing Creation Tools  
Getting Started with AutoCAD |
| 5-6  | Chapter 2 | Drawing Setup and Organization |
| 7-8  | Chapter 3 | AutoCAD Display and Basic Selection Operations |
| 9-13 | Chapter 4 | Modifying Your Drawing |
| 14-15 | PROJECT DRAWINGS PROVIDED BY INSTRUCTOR |

NOTE: Drawing assignments will be provided by instructor each week. Drawing assignments may be revised by instructor, if appropriate.

OBJECTIVES OF COURSE:

This course is designed to introduce a student to the utilization of Computer Aided Design tools to create drawings. A combination of sketching skills and CAD drafting applications will be integrated into several chapters. Skill development in the 3D solids area, with emphasis in creation, editing and output is also a focus since industry moving from a 2D based drawing environment to a 3D solids design environment.

Included in the objectives will be:

1. Initializing a drawing, including disk preparation and drawing parameter selection.
2. Drawing preparation involving straight and curved lines.
3. Drawing preparation involving absolute, relative and popular coordinates.
4. Drawing preparation involving varying line types.
5. Dimensioning techniques.
6. Other necessary drafting techniques.
INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:
Lecture/discussions on system and operating commands of the AutoCAD system.

EVALUATIVE METHODS TO APPRAISE OBJECTIVES:

1. Ten (10%) percent of final average is based on the instructor's subjective evaluation of effort, techniques, care of equipment, and work habits. Satisfactory performance in AutoCAD requires the attainment of speed (productivity) as well as accuracy.

2. Thirty (30%) percent of final average is based on the instructor's evaluation of drawings completed as assigned within the allotted time frames.

3. Forty (40%) percent of final average is based on quiz results (2 or more quizzes will be given).

4. Twenty (20%) percent of final average is based on the final exam.

GRADING SCALE:

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