

COURSE SYLLABUS
LEXINGTON COMMUNITY COLLEGE
Kentucky Community and Technical College System
CAD 100 -001
Intro. to Computer-Aided Design

Spring 2005

INSTRUCTOR: Kimberly Chapman **OFFICE HOURS:** By appointment
PHONE: 859.271.6099 **EMAIL:** kimberlylcc@hotmail.com
DIVISION PHONE: 257-4872 ext. 4004 (leave messages)
AREA COORDINATOR: Mike Binzer, 125 MB, 257-4872 ext. 4109

COURSE DESCRIPTION:

An emphasis will be placed on techniques of computer drafting; construction of straight and curved lines; orthographic and axonometric views and sections; dimensions, tolerances, and notes; as well as an introduction to the terminology associated with CAD. Basic computer operations involving move, copy, delete, and save are included along with drawing manipulation involving translation, rotation, zooming, panning, and windowing. Lecture: 2 hours, laboratory: 3 hours. Prerequisite: ME 105 or ET 102 or consent of instructor.

COURSE OBJECTIVES:

The basic objectives of this course are to present a brief overview of computer-aided design and to impart a general knowledge of current drafting/design practices, standards and techniques. Upon successful completion of this course, each student will have developed:

1. A familiarity with the verbal and graphic language of the drafting/design industry.
2. A facility for utilizing principles, problem solving techniques, and conventions of graphic communications as applicable to various industrial activities.
3. The ability to visualize special relationships.
4. The ability to wisely select, utilize and maintain drawings, drawing equipment, computer files and related materials.
5. The ability to create a computer-aided drawing/design with a reasonable amount of skill, accuracy and time.

TEXT:

AutoCAD 2004 Tutorial, 1st level: 2D Fundamentals, 2004; Shih & Zecher, Schroff
Development

GUIDELINES, POLICIES, and CLASS STRUCTURE:

In order to make the most of each class, come prepared. This class will not only be a learning environment, but a platform for developing a good work ethic. CAD is a skill that is commonly used in an office environment, and as such the class room will be treated as our office.

In order to utilize class time most efficiently, it is recommended that the student study references, plan drawings and execute sketches outside of class and allow maximum time for drawing during the class period. Reading assignments are expected to be completed outside of the laboratory period. Be prepared for short quizzes.

It is highly recommended that the student maintain **good class notes**, along with sketches, drawings, etc. to form a notebook for future reference. A notebook is not required, although it is very helpful.

Lab time is provided for students to work on class assignments. In addition to regular class time, the computer lab in MB 131 and the computer lab in MB 225 will be available as posted.

The students' text, notebook/documentation, and diskettes must be available at each and every class meeting. Students are warned to exercise diligence in protecting their diskettes by labeling them for identification purposes including a phone number where you can be contacted and/or this course number and section. Diskettes should be transported in a protective container and care taken to keep them away from harmful sources such as heat and magnetic fields. You are solely responsible for the data stored on your computer disks. Loss of computer data, regardless of cause, will be viewed as failure to submit. It is highly advisable to backup all assignments on a second diskette.

It is expected that the student will execute optimum care in the use of the classroom facilities and especially in the environment of their particular work area.

Food, Drink, and Tobacco Products are PROHIBITED in the classroom.

ATTENDANCE:

Students are expected to attend all class meetings. Because success in this course is dependent upon continuous practice and constant direction from the instructor, regular attendance is essential. If unexcused absences exceed two, students may be asked to withdraw. In any case, the combination of excused and unexcused absences cannot exceed one-fifth of the class contact hours. If a student misses more than one-fifth of the class, the instructor may require the student to withdraw. If the student is tardy three times, they will receive one unexcused absence; there is a grace period... but don't consider this to be extra time to get to class.

If you are not going to be present in class, make all necessary arrangements with the instructor **PRIOR** to the date of absence. You should contact the instructor at the noted phone number on the top of this document. Any failure to make such arrangements will result in not being able to make up the missed work.

WITHDRAWAL:

After **March 11th**, the instructor's permission will be given only if the student has a passing grade and has not exceeded the maximum number of absences. Exceptions will be made only in extreme emergencies and at the instructor's discretion. In all cases it is the student's responsibility to seek official withdrawal from the course; the instructor is not allowed to assign a "W" grade unless the student requests it. Students who simply stop attending will receive a failing grade.

REASONABLE ACCOMMODATION AND MEDICAL CONDITIONS:

If you have a special need that may require an accommodation or assistance, please inform the instructor as soon as possible and no later than the end of the second class meeting. Special accommodations are

EOA:

The Lexington Community College is an Equal Opportunity Institution. Respect for all people, verbally and physically is the foundation for a positive learning environment.

GRADING SCALE: A = 100 - 94
B = 93 - 85
C = 84 - 75
D = 74 - 65
E = below 65 (failure)

There will be at least three (3) major exams plus multiple graded classroom assignments. A Final Project may be enacted which will count as a major exam. Grades will be calculated on the basis of total points accumulated divided by total possible for the semester. There will be no grade point curve for this class. Extra credit work is an option after mutual agreement of content between student and instructor is confirmed.

Daily Work: Throughout the duration of class, assignments will be given. These will be graded at random. Please, keep them in your notebook, in case needed.

Make-up Work: Make up work will be assigned pending an excused absence. **Tests cannot be made-up unless notice was given prior to the test.** Exceptions can be made pending circumstances and instructor approval. The time and date of any make-up work will be determined by both the instructor and the student.

EQUIPMENT AND SUPPLIES:

Four (4) diskettes 3 1/2" DS/HD (or another form of computer storage for saving work i.e. USB memory card, or CD-RW), 8.5"x11" paper for taking notes during class.

TENTATIVE COURSE OUTLINE:

Week	Topic
1	Introduction
2	Getting Started, Drawing Set-up and Organization
3-5	Display and Selection Operations, Modify Commands
6	Performing Geometric Constructions
7	Adding Text
8	Object Grips and Changing the Properties
9-10	Multiview Projection
11-12	Plotting, Dimensioning
13	Auxiliary Views, Isometric Drawings
14	Blocks, External References, 3-D Solid Design
15	Independent Projects