

**The University of Texas at Tyler**

**College of Business and Technology  
Department of Technology  
Course Syllabus**

**TECH 1303  
Engineering Graphics  
Spring 2009**

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**Course Description:**

An introduction to basic engineering graphics using the latest version of AutoCAD. Basic AutoCAD commands will be introduced and emphasized throughout this course. Development of technical drawing skills including: freehand sketching, text, orthographic projection, dimensioning, sectional views, and other viewing conventions. The course will proceed from the basics of sketching and CAD to their applications in preparing detail and working drawings.

**Textbook:**

AutoCAD and its Applications - Basics - 2009, Shumaker/Madsen, Goodheart-Willcox Publishing Company, 2008, ISBN 978-1-59070-988-7

**Supplies:**

USB Memory Storage Device – 32MB Minimum Capacity  
Notebook and sketching paper  
Pens, Pencils, and other standard student supplies

**Course Objectives:**

1. To gain skill using the AutoCAD system
2. To gain skill in ANSI standard drafting practices
3. To gain skill preparing working drawings

**Course Competencies:**

1. Computer-Based Skills—the student will complete the drafting assignments with skill in formatting, command use, and data manipulation.
2. Communication Skills—the student will exhibit mastery in communicating in a graphic manner according to accepted standards.
3. Interpersonal Skills—the student will give and receive help when the need arises.
4. Problem Solving (Critical Thinking)—the student will use lecture and demonstration to foster conceptual thinking quantitative/statistical skills, in making drawings according to specifications.
5. Ethical Issues in Decision Making and Behavior—the student will understand and exhibit the ethical decision making in the use of software and in working with other students.
6. Personal Accountability for Achievement—the student will complete the assigned projects at the time designated by the instructor and will demonstrate on both exercises and exams that he has learned the material presented.
7. Competence in Technology Principles
  - a. Competence in major field and grounding in other technology major core areas—the student will be able to contrast the drafting principles learned to other manufacturing processes and practices.
  - b. Exposure to and appreciation for industrial experiences such as industrial tours, work-study options and cooperative education, senior seminars—the student will be exposed to actual industrial drawings that will reinforce the principles taught in this class

### **Evaluation and Grading:**

Weekly Drawing Assignments -	60%
Participation and Attendance -	10%
Midterm and Final Exams -	30%

All lab problems must be turned in the following week after they are assigned.

### **IDEA statement:**

If you have a disability, including a learning disability, for which you request disability support services/accommodation(s), please contact Ida MacDonald in the Disability Support Services office so that the appropriate arrangements may be made. In accordance with federal law, a student requesting disability support services/accommodation(s) must provide appropriate documentation of his/her disability to the Disability Support Services counselor. For more information, call or visit the Student Services Center located in the University Center, Room 282. The telephone number is 566-7079 (TDD 565-5579)." Additional information may also be obtained at the following UT Tyler Web address: <http://www.uttyler.edu/disabilityservices>.

### **Notes:**

1. Attendance: Students are expected to attend all class meetings. It is the student's responsibility to obtain any missed class notes, handouts, assignment due dates and any other information missed for any reason. Failure to attend class does not constitute withdrawal from class. All material covered in lecture, on homework, in the text or in any handout (including the syllabus) is considered to be testable material.
2. Late Work: Late homework and take-home assignments are subject to a 10% per week penalty except in the case of an excused absence.
3. Lab Policy: No food or drinks allowed in computer labs. Users shall be responsible for messages they transmit through the Internet and shall obey the acceptable use policies of the Internet and any rules of discussion forums in which they participate. Fraudulent, harassing, or obscene message and/or material as defined by contemporary court decisions are not to be sent or stored.
4. Academic integrity is expected and required of all students. Plagiarism, theft, lying or any other form of disreputable or disruptive behavior will not be tolerated. A student who submits the work of another student as her/his own or deliberately fails to properly credit words or ideas borrowed from another source is guilty of plagiarism.
5. Placing your name on assignments and turning them in for a grade acknowledges that you claim all of the work presented as your own. A student who uses notes without permission, takes an exam for another student, copies answers from another student's exam, copies drawings in any manner, or engages in any other similar conduct aimed at making false representation with respect to a student's academic performance is guilty of cheating.

### **REFERENCES FOR TECH 1303**

#### **Books:**

Bethune, James D. *Engineering Graphics with AutoCAD 2008*. Upper Saddle River, NJ: Prentice Hall.

Earle, James H. *Engineering Design Graphics*. Upper River, NJ: Prentice Hall

#### **Software:**

AutoCAD 2009

**TECH 1303 ENGINEERING GRAPHICS**  
**Spring 2009**

**TENTATIVE SCHEDULE OF TOPICS**  
**Sect. - 2**

<b>WEEK</b>	<b>TOPIC</b>	<b>TEXT CHAPTERS</b>
1	Course Introduction Engineering Graphics Overview	
2	Sketching, Lettering and Visualization Multiview Sketching	1 - 2
3	Starting AutoCAD Command Entry and Cartesian Coordinate System Basic Draw and Modify Commands	3-4 12-13
4	Layers Osnap View Control	5-6-7
5	Placing Text Titleblocks and Plotting	9-10
6	Array	13
7	Information and Inquiry Grips	14-15-17
8	<b>Test #1</b>	
	<b>Spring Break</b> March 9-14	
9	Basic Dimensioning	18-19
10	More Dimensioning	20, 21, &22
11	Symbols	26
12	Sectional Views and Graphic Patterns Semester Project	24
13	Working Drawings	
14	Project Drawings	
15	Project Drawings	
16	<b>Final Exam</b>	