

**Syllabus
IT 111
9:00-10:50 MW
Spring 2008**

Instructor:

Mr. James Stutts

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Phone: Office: (985) 549-3794

Office Hours: 11:00 – 12:00 & 3:00 – 5:00 MW

10:00 – 12:00 TTH

At other times by appointment

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This course will be taught using AutoCAD 2004 with Electronic Learning Technologies.

Course Description: The basic elements of drafting utilizing CAD software including: freehand sketching, applied geometry, orthographic projection, sectioning, dimensioning, and isometrics. Two hours of lecture and four hours of laboratory a week.

Course Text: Engineering Graphics with AutoCAD 2004 by James D. Bethune; Prentice Hall, Columbus Ohio.

Course Objectives: To introduce the students to drafting terminology, CAD skills, industrial standards and career opportunities in the field of drafting.

1. To introduce the student to the fundamentals of engineering drawing.
2. To develop basic computer skills in AutoCAD 2004 for use in geometric construction.
3. To develop basic computer skills in AutoCAD 2004 for the construction of detailed engineering drawings via orthographic projection.

Assessment : The students performance level will be evaluated according to the following criteria:

Students will develop a portfolio of sketches, approximately 15 assignments, which will be assigned a grade at the end of the semester. The criterion for grading is dependent upon:

- a. Completeness
- b. Accuracy
- c. Technique
- d. Proportion
- e. Neatness

Students will develop an electronic portfolio of drawings, approximately 30 assignments, which will be evaluated at the completion of each assignment. The criterion for grading is dependent upon:

- a. Completeness
- b. Accuracy
- c. Drafting standards which are appropriate to the assignment
- d. Correct visual interpretation
- e. Submission of a completed portfolio at the end of the semester

Students will complete a mid-term exam and a final examination.

- a. Midterm exam
- b. Final exam

Grades:

1. Grades will be assigned according with the departmental scale.

93-100 = A, Superior
85-92 = B, Very Good
77-84 = C, Average
69-76 = D, Below Average
0-68 = F, Failure

Note: Students **MUST** score a “C” or above in all courses within their major. Otherwise, they must repeat the course.

2. Basis for assigning grades:

- a.) Tests (2)
200 Points

Note: **ALL** students are to take tests on the **SPECIFIED** date and time. Students with unexcused absences will **NOT** be able to make-up tests, quizzes and lab assignments! A grade of **Zero** (0) will be assigned!

- b.) Electronic portfolio
300-400 Points
- c.) Sketch portfolio
150- 200 Points

NOTE: A 10% Grade penalty for each day an assignment is late. A zero will be given after 10 days.

Important Dates and Notes:

1. Students will **NOT** automatically be dropped from class. Students who choose to drop must do so by the semester deadline! **Friday, March 14, 2008** is the last day to **withdraw** from classes.
2. The **final exam** for this class will be on **Wednesday, May 14, 2008 from 10:15-12:15**
3. **Monday, March 17, through Thursday, March 20, 2008** is **early registration** for the **Summer, 2008** Semester.
4. **Monday, March 31, through Friday, April 4, 2008** is **early registration** for the **Fall, 2008** Semester.
5. If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to **self-identify** with the office of Disability Services, Room 203, Student Union. No accommodations will be granted without documentation from the Office of Disability Services.
6. **Student behavior/Classroom decorum:** "Free discussion, inquiry, and expression is encouraged in this class. Classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Examples may include routinely **entering class late or departing early**; use of beepers, cellular telephones' or other electronic devices; repeatedly talking in class without being recognized; talking while others are speaking; or arguing in a way that is crossing the civility line." In the event of a situation where a student legitimately needs to carry a beeper/cellular telephone to class, prior notice and **approval by the instructor is required.** Otherwise,

ALL BEEPERS, CELLULAR TELEPHONES' AND OTHER ELECTRONIC DEVICES ARE TO BE TURNED OFF BEFORE YOU ENTER THE CLASSROOM.

Classroom behavior that is deemed inappropriate and cannot be resolved by the student and the faculty member may be referred to the Office of Judicial Affairs for administrative or disciplinary review as per the Code of Student Conduct which may be found at <http://WWW.SELU.EDU/Student Affairs/Handbook/>.

7. Academic Integrity: Students should note that repercussions of academic integrity are discussed in the university catalogue. “Cheating on examinations, plagiarism, improper acknowledgment of sources in essays and the use of a single essay or paper in more than one course without permission are considered very serious offenses and shall be grounds for disciplinary action”.
8. The students Southeastern Louisiana University e-mail address **MUST** be used for all e-mail communication between students and faculty/administration/staff. Students are encouraged to check their Southeastern e-mail frequently for important communications from the university.
9. University policy states that the lab is not a place for children. Students are not to bring their children to the lab.

Course Requirements:

Adherence to Departmental policies and procedures, a copy of which you were provided.

Regular and punctual class attendance. Students who have unexcused absences will receive the grade of zero ("0") for all tests, quizzes, and/or lab experiments missed.

Students are to complete lab assignments in a timely fashion. Students are to turn in the study questions of each lab experiment completed by the beginning of the next class period. Students are to begin and end labwork according to the class schedule. Students, who fail to utilize their time effectively, perform incomplete experiments, who begin their work late, who leave the lab early or who submit their experiments late will have their lab grade penalized.

Course Outline (Major Topics):

The Graphic Language and Design

- Introduction
- Historical review
- Drafting standards
- Electronic learning technologies

Drafting Equipment: traditional board drafting and CAD

- Standards in Drafting
 - Objectives in drafting
 - Accuracy
 - Speed
 - Readability
 - Neatness
 - Modification and variation
- Demonstrate use of CAD
- Demonstrate drafting techniques
- Review alphabet of lines
- Review terminology

CAD introduction

- Display area
- Graphics area
- Command line
- Toolbars
- Coordinate display and status line
- Basic Commands
- Draw commands
- Modify commands
- File and edit commands
- Polar commands---Cartesian coordinate system
- Object Snap

Geometric Construction

- Introduction
- Points and lines
- Angles
- Quadrilaterals
- Polygons
- Circles and arcs
- Bisecting a line or an arc

- Bisecting an angle
- Transfer an angle
- Parallel lines
- Dividing a line into equal parts
- Drawing polygons
- Ellipse templates

Sketching

- Introduction
- Sketching materials
- Types of sketches/projection
- Scale
- Technique of lines
- Drawing lines, circles, arcs, and ellipses
- Proportions
- Views of an object/projection rules refer to section V
 - Horizontal
 - Frontal
 - Profile
- Choice of views
- Alignment of views
- Use of hidden lines and center lines

Multiview Projection

- Introduction
- Rules for multiview projection
- Three views/planes/fold lines/principle dimensions/"glass box"
- Arrangement of views
- Fillets, rounds, and runouts

Dimensioning

- Introduction
- Lines used in dimensioning
- Placement of dimension and extension lines
- Arrowheads
- Leaders
- Fractional and decimal dimensions
- Dimension figures
- Direction of dimension figures
 - Unidirectional system
 - Aligned system
- Feet and inches
- Standard dimensioning practices and techniques

- Miscellaneous shapes
 - Holes
 - Curves
 - Rounded-end shapes
 - Chamfers
 - Keyways
- Notes
- Standards
- Dimensioning for numerical control
- Do's and don'ts of dimensioning

Sectional Views

- Conventions and symbols
- Cutting plane
- Full sections and Half sections
- Broken-out sections
- Revolved sections and Removed sections
- Offset sections
- Ribs in section
- Aligned sections
- Partial views