

ETES 5025 / 7025: Technical Design Graphics
Syllabus – Fall Semester 2002

Location & Schedule

Rivers Crossing 143

Thursdays: 4:30 – 7:15 p.m.; additional lab time tba

Final Examination: Thursday, December 12th, 4:30 p.m. – 6:30 p.m.

Course web site – <http://www.coe.uga.edu/~rhill/etes5025>

Note: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Instructor

Name: Roger B. Hill, Ph.D.

Office: 209 River's Crossing

Office Hours: by appointment

Phone: 542-4100 FAX: (706) 542-4054

Email: rbhill@arches.uga.edu

Required Textbook

Giesecke, F. E., Mitchell, A., Spencer, H. C., Hill, I. L., Loving, R. O., Dygdon, J. T. & Novak, J. E. (2000). *Engineering Graphics* (7th ed.). Upper Saddle River, NJ: Prentice-Hall.

ISBN 0-13-030366-6.

Other Materials Needed

18" x 24" drawing board

21" – 24" T-square

bow compass

friction divider

30-60 triangle – 10"

45 degree triangle – 8"

engineer's scale & metric scale *or* combination scale

protractor

lead holder or mechanical pencil w/ 2H & 4H leads

plastic eraser

drafting tape

Size A (8 ½ x 11) drawing paper, vellum, or polyester film

.25 inch cross section paper for sketching

Description of Course

Conventional practices for graphic representation of three-dimensional shape and size.

Applications of computer assisted drawing and design software, multi-view and pictorial projection, dimensioning, sections, auxiliary views, revolutions, descriptive geometry, and graphical vector analysis. Emphasis on instructional approaches for teaching graphic communication in occupational studies.

Course Objectives

Students who successfully complete this course will be able to:

- Provide instruction in proper use of technical drawing, graphic communication, and computer assisted drawing and design (CADD) techniques.

- Describe the fundamental concepts and theory of graphic communication.
- Define fundamental terminology pertaining to graphic communication.
- Demonstrate fundamental operating procedures for using a microcomputer based CADD system.
- Demonstrate correct and accurate use of technical drawing techniques consistent with standardized industrial practices.
- Develop instructional strategies for graphic communication instruction.
- Apply appropriate learning theory to instruction of graphic communication techniques.
 - Additional graduate level objectives*
 - Explain the various instructional approaches for teaching graphic communication.
 - Identify significant streams of research relevant to graphic communication instruction.
 - Assessment of curriculum models for graphic communication instruction.

Grading / Assessment

Class participation.....	5%
Assigned exercises, laboratory activities.....	40%
Teaching presentations.....	5%
Mid-term examination.....	25%
Final exam.....	25%
Grading Scale: A ----- 90-100	
	B ----- 80-89
	C ----- 70-79
	D ----- 60-69
	F ----- 0-59

Class Participation

Punctuality and attendance are important to successful completion of requirements for this course. For that reason, attendance will be taken at each class meeting. The class participation portion of the course evaluation will be based on punctual attendance to all class meetings, participation in class discussions, and appropriate care of computer equipment.

Note: Students with disabilities who require reasonable accommodations in order to participate in course activities or meet with course requirements should contact the instructor during regular office hours or by appointment.

Exercises, Projects, and Lab Work

Numerous exercises, projects and learning activities will be used throughout the term to provide problem solving experience and opportunities for enriching the content covered in class. Any written text work should be prepared using appropriate word processor and printing technology and should be checked for correct spelling, punctuation, grammar, and usage.

Teaching Presentation

All students will participate in teaching presentations to develop skills in teaching technical design graphics content. These presentations will be critiqued by peers as well as the instructor and will be evaluated on both content and technique.

Examinations

There will be two (2) examinations during the term, a Mid-term (covering material from the first class meeting to the date of the exam) and a Final (a comprehensive exam related to any/all material covered during the term).

Late Assignments

Completed exercises, papers, and assignments should be submitted by the end of the class period on the date they are due. Late assignments are generally penalized 10% for each day they are late unless arrangements are made to submit the materials at a later time.

Dishonesty

All academic work must meet the standards contained in A Culture of Honesty. Each student is responsible to be informed about those standards before performing any academic work.

Dishonesty of any type, related to completion of course assignments, examinations, or other required activities is a serious offense. Should such an instance occur, it will be handled in accord with University regulations as described in the current edition of the Graduate Bulletin.

Drop Policy

The drop policy is described *Schedule of Classes*. If circumstances arise that will prevent a student from adequately fulfilling course requirements, action should be taken to drop the class prior to the mid-point of the term.