Syllabus for MAE 205
Visualization and Graphics
Fall Semester 2004
M, W
2:00PM-5:00PM
Room EGC 225A (lecture)
Room EGC 216A (computer lab)

Instructor: Hodge Jenkins, Ph.D., P.E.
Assistant Professor
Department of Mechanical and Industrial Engineering

Office: Suite 101-D, School of Engineering
Hours: As posted, drop by, or by appointment

Phone: 478-301-2831 (w)
770-474-3522 (h) (before 9PM)

Email: jenkins_he@mercer.edu

Textbooks and Supplies:

Web Sites: http://faculty.mercer.edu/jenkins_he/MAE205.htm
http://www.ptc.com/community/proewf2/newtools/index.htm
http://www.autodesk.com

Catalog Description:
An introduction to engineering graphics and component visualization. Sketching, line drawing, computer assisted drafting, solid modeling including parametric modeling. Development of drawings and requirements for drawings in a manufacturing environment.

Course Objectives:
Upon successful completion of this course, you should be able to do the following:
- Prepare isometric and multi-view sketches which will communicate your designs and ideas to others.
- Prepare hand sketches and manual drawings using drafting tools.
- Use professional CAD tools for development of two-dimensional figures and drawings.
- Use professional CAD for development of solid models and drawings.
- Prepare orthographic projections using hand sketches, two-dimensional CAD, and solid modeling approaches.
- Create detail component and assembly drawings using two-dimensional CAD and solid modeling approaches.
**Course Content:**
Hand sketching and drafting, Autocad LT 2002, and Pro/Engineer Wildfire 2.

**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>40%</td>
</tr>
<tr>
<td>Project (3)</td>
<td>20% each</td>
</tr>
</tbody>
</table>

Grade Averages: A (90-100), B (80-89), C (70-79), D (60-69), F(<60)

**Homework:**
Homework will be assigned and will be collected at the beginning of class on the due date. Often, there will be sufficient time in the regularly schedule lab time to complete the assignments. Late homework will not be accepted. The lowest homework grade will be discarded.

CAD homework submissions will be submitted via e-mail using the naming formats (in this case for homework 1).

- **E-mail subject format:** ‘MAE205 HW1’
- **File formats:** ‘lastname-hw1.ext’

You are responsible for creation of your own backup files.

**Projects:**
There will be a project at the end of each visualization method (manual, 2-D CAD, solid modeling CAD). Students will form into two-person teams to work on each project. Each student on the team will receive the same grade on the project. Late projects will not be accepted.
Course Standards:

1. **Assignments are due at the beginning of the class period on the date due.** In an exceptional circumstance you may petition to hand in an assignment late. If granted, the grade will be reduced one letter grade per day late.

2. **Attendance is required** due to the large amount of in-class work and team activities we will be doing. You can’t “make up” experiential learning. More than three absences will result in grade penalties. If you miss a class, it is your responsibility to obtain the notes, handouts, homework, and announcements from a classmate.

3. **Grading** encompasses every aspect of the course, from participation through final products. You can assume that every task requested directly or indirectly factors into your grade. For example, having your work prepared for your group is as important as having it ready for me. Regular feedback will be given on documents handed in.

4. You are encouraged to schedule a **conference** at any point that you need it. If you need to see me, catch me after class to schedule a time or call Ms. Dee Ryburn, the MAE Secretary, at 301-2223 to get on my calendar.

5. Please turn off cell phones and pagers before entering the classroom.

6. The **honor code** provisions as outlined in the *Bulletin* and in the student handbook, *The Lair*, will be assumed for everyone. It should be clear from class discussion which projects will be collaborative and which ones must be individual. When in doubt, please ask to avoid potentially embarrassing situations. Plagiarism is a violation of the honor code and is prohibited.

7. This syllabus is subject to change.

Electronic Communication:

Electronic communication is an important adjunct to face-to-face communication, including from professor to students, students to professor, and students to students. You must have regular access to your e-mail. If you do not have an active e-mail address on the first day of class, please secure one. Access to the Web and to the Internet is also integral to the class work. A number of laboratories on campus will provide access, in addition to EGC 102 and ECG 216A.

Subscribe to the class listserv within 24 hours of the first class meeting.

File-naming conventions will be prescribed in order to avoid needless confusion about electronically submitted documents. Set your e-mail so as to assure that you get a time-and-date confirmation of any assignments submitted electronically. You are responsible for using the correct mailing address either to me individually, or to the class listserv.
LISTSERV INSTRUCTIONS

Note that entries are not case sensitive.

To subscribe, enter the following on email:

To: mailserv@mercer.edu
Subject: (Do not type anything here)

Body of message: sub HJenkins3-L
end

You will get a return email message confirming that you have been added to the mailing list. *Make sure the email message does not contain text.*

To send mail to listserv, enter the following on email:

To: HJenkins3-L @mercer.edu
Subject: Descriptive title of email content

Note: make sure to include EGR-232 in the subject line

To unsubscribe, enter the following on email:

To: mailserv@mercer.edu
Subject: (Do not type anything here)

Body of message: unsub HJenkins3-L
end

To get a list of everyone who has subscribed to the listserv:

To: mailserv@mercer.edu
Subject: (do not type anything here)

Body of message: Send/list listserv name (i.e., send/list HJenkins3-L)

Important Additional Information:

Students with a documented disability should inform the instructor at the close of the first class meeting. The instructor will refer you to the office of Student Support Services (SSS) for consultation regarding evaluation, documentation of your disability, and recommendations for accommodation, if needed. Students will receive from SSS the *Faculty Accommodation Form.* On this form SSS will identify reasonable accommodations for this class. The form must be given to the course instructor for signature and then returned to SSS.

To take full advantage of disability services, it is recommended that students contact the Office of Student Support Services, immediately. The office is located on the third floor of the Connell Student Center.