

ENGR 183 – Engineering Computer Graphics
Section 002/302 Thursday
Spring 2009
Instructor: David Donahue
Email: ddonahu2@gmu.edu

SYLLABUS

Welcome to Engineering Computer Graphics Section 001/301. This course may be challenging at times, but is part of the foundation upon which your future as an engineer will be built. Graphics is all about communicating your ideas and designs to others. Whether these “others” are instructors, professors, plan reviewers, peers, clients or contractors it is important to convey your ideas in a common and clear language to help ensure the project comes out as planned. A bad design with a good drawing is doomed eventually. A good design with a bad presentation is doomed immediately.

There are many techniques and commands you will learn in this class. The immediate use and application of them during lectures, recitations and in the homework assignments are the key to becoming skilled in this subject.

Required material:

Text book Recitation: “Discovering AutoCAD® 2009” by Mark Dix and Paul Riley, Engineering Scale

Optional material:

Textbook Lecture: “Fundamental of Graphics Communication” Fifth Edition by Gary R. Bertoline and Eric N. Wiebe (B&W)
“A Tutorial Guide to AutoCAD® 2008” by Shawna Lockhart,

Others: Protractor, One 45°/90° triangle (4” or 6”) and one 30°/60° triangle (4” or 6”)
Portable USB Drive

Lectures, Recitation and Homework (see assignment sheet for details)

Lecture topics: Drawn from B & W, AutoCAD® 2009 & 2008

Recitation: Tutorials from AutoCAD® 2009

Homework: To be assigned weekly

UPDATE: 1/27/2009

ENGR 183 – Engineering Computer Graphics
Section 002/302 Thursday
Spring 2009
Instructor: David Donahue
Email: ddonahu2@gmu.edu

SYLLABUS

Important Dates

February 26, 2009, Exam
March 12, 2009, Spring Break
April 9, 2009, Exam
April 30, 2009, Project Presentations
May 6, 2009, NO FINAL EXAM

Disability Services

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 703-993-2474. All academic accommodations must be arranged through the ODS.

Contact:

Christopher Moy
Director, Office of Disability Services
Student Union Building 1 Rm 211
Phone: 703-993-2474
Fax: 703-993-4306
<http://ods.gmu.edu/>

Honor Code (available at <http://honorcode.gmu.edu/#TOP>)

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this

Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

Homework and Grading

- 1) **File Format:** Most homework assignments in this course will take the form of AutoCAD drawing files (with the “.dwg” file extension). The CAD software for this class is AutoCAD version 2009. Hand-drawn homework assignments should be completed **neatly**. Follow all directions carefully and use graph paper for all hand drawings. Your name, the problem number, the drawing name, the scale and the date must appear on anything handed in on paper - exams, homeworks, projects.
- 2) **Handing in Homeworks Due:** Homework will be assigned in class and assignments may be handed in during the recitation. If you don't finish your homework in the recitation you may a.) email it to me or b.) turn in printed copies at the beginning of class the day the assignment is due, which is usually the week after the assignment is given. Homework handed in or e-mailed after the beginning of class the day the assignment is due, will have an automatic 20% deducted from the grade for that assignment. Take the time to check the scale of your drawings. You will lose points if your work is not to scale.
- 3) **Naming Convention:** All assignments will be named with the following convention: ENGR183-<StudentLastName-HomeworkSet-AssignmentNumber>.dwg. So a student named Nancy Jones who is working on the first problem in homework set “HW2” would name her drawing ‘ENGR183-jones-hw2-1.dwg’ (no spaces). ***These naming conventions are mandatory.***
- 4) **Backup:** Disks crash. Viruses strike. Things happen. Make multiple copies of your homework assignments and save often. Consider e-mailing it yourself. Computers in the lab have USB ports. It is suggested that each student have a portable USB Drive to keep backups of all their drawing files for the semester. **Do NOT assume** you can keep any files on the local hard-drives in the lab.
- 5) **Homework Grading:** Homework handed in or e-mailed after the start of the class will have an automatic 20% deducted from the grade for that assignment. Homework will be graded based on the following rubric with partial credit given where appropriate:

Drawn to scale	30%
Object drawn correctly	30%
Proper naming convention	20%
Neatness and readability	20%

The policy in this class is that the two lowest homework grades will be thrown out at the end of the semester.

ENGR 183 – Engineering Computer Graphics
Section 002/302 Thursday
Spring 2009
Instructor: David Donahue
Email: ddonahu2@gmu.edu

SYLLABUS

- 6) **Recitation and Lab Hours:** The recitation is scheduled to end at 9:00 PM. There is a public computer lab with Autocad available in Science & Tech II - Room 137. For lab schedules please reference <http://labs.ite.gmu.edu/>
- 7) **Office Hours:** The instructor teaching assistant will be available during lab hours, at the end of classes and via e-mail for consultation.
- 8) **Free Limited Duration Copy of AutoCAD:** Free copies of AutoCAD Civil 3D are available for students at <http://students8.autodesk.com/?lbon=1>
- 9) **Grade:** Grade distribution for the course is as follows:

Homework Assignments	60%
Exam 1	10%
Exam 2	10%
<u>Final Project</u>	<u>20%</u>
Total	100%

Grade Scale: A- >= 90%; B->=80%; C->=70%; D->=60%