University of New Orleans

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University of New Orleans Syllabi

Fall 2015

ENME 1781

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University of New Orleans

Recommended Citation

Catalog Description
ENME 1781   Introduction to Engineering Design and Graphics   Cr. 3

Prerequisite: Credit or co-registration in MATH 2114, MATH 2111, MATH 2107, or consent of department. An introduction to engineering graphics and modeling fundamentals for engineering design: freehand sketching, computer modeling, and generation of engineering drawings. Introduction to the engineering design process: reverse engineering, aesthetic design, functional design, concurrent engineering, multi-disciplinary design teams, and design constraints.

Classroom/Time
Computer Lab EN 411   2:00PM–4:40PM Tu Th

Instructor
Instructor   Jose E. Rubio
                    e-mail: jerubio@uno.edu
                    Office: EN 113
                    Office Hours: Mo We 10:00AM–11:30AM (other time by appointment)

Required Textbooks
Fundamentals of Graphics Communication: Sixth Edition by Bertoline and Wiebe, WCB/McGraw-Hill (ISBN: 0073522635)
Parametric Modeling with SolidWorks 2015 by Shih and Schilling (ISBN: 978-1-58503-921-0)

Topics Covered
Graphics Language and Design	Auxiliary Views
Computer Aided Design using AutoCAD	Dimensioning
Geometric Construction	Tolerancing
Multiview Projection	Working Drawings
Pictorial Drawings – Isometric, Perspective, etc.	Solid Modeling
Sectional Views	Engineering Design Process

Student Learning Outcomes
After completing this course, students will have demonstrated the following:
- Students will have demonstrated an appreciation for the need for graphics communication in the design process.
- Students will have demonstrated an understanding of the need for and use of standards and conventions in engineering graphics.
- Students will have demonstrated an understanding of projection techniques, including orthographic, oblique, and perspective projections.
- Students will have demonstrated the ability to generate and interpret engineering drawings, including multiview drawings, auxiliary view drawings, section drawings, isometric drawings.
- Students will have demonstrated the ability to create and interpret computer-generated solid models.
- Students will have demonstrated an introductory level of competence with a computer-aided graphics software package (AutoCAD 2015 and Solidworks 2015).

Grade Distribution/Tentative Dates
Test 1	20%	Date: Sept 22
Test 2	20%	Date: Oct 20
Lab Assignments/Homework	20%	Lab Assignments due each class/HW as assigned
Project	15%	Date: Nov 24 (2:00 PM)
Final Exam	25%	Date: Dec 03(2:00 PM–4:00 PM)

The overall grading scale is A: 100–90; B: 80–89; C: 70–79; D: 60–69; F: 59–0. However, these cutoff percentages may be revised downward at the discretion of the instructor.

Exams
There will be 3 in-class exams closed book and close notes. These will include normal question-and-answer problems (multiple choice, true/false, etc.); problems requiring drawing with pencil, straight-edge, etc.; and drawings and 3-D models developed on computer. Exams will be scheduled at least 1 week in advance.

Lab Assignments

There will be one lab assignment per lab period consisting on problems requiring drawing with pencil and/or model(s) developed on the computer. *The lab assignment is to be done during the assigned lab period. The lab assignment must be submitted (or checked off) by the end of the lab period or no later than the start of the following class period, unless otherwise required by the instructor. If the assignment is completed outside the assigned lab period, the assignment should be printed and emailed.*

Homework

Additional homework assignments will be given throughout the semester. *Late homework will be penalized with -10% per day after due date. After one week of due date, the homework will not be accepted.*

Essay/Presentation

An essay/presentation will be assigned to each student approximately halfway through the semester. *This assignment is mandatory for all students. Students who do not complete this assignment will receive an incomplete grade*.

Project

A project will be assigned to each student approximately halfway through the semester. Additional instructions for the project will be provided later during the semester. *NO late projects will be accepted.*

Attendance Policy

Attendance is required and will be monitored daily. Excessive absences may adversely affect the final grade or result in the failing of the course. *If the student misses the class period a ZERO grade will be assigned for any assignment(s) due in that period, unless the absence is completely justified and properly documented to the instructor.*

Make-up Test Policy

In order to make up a missing test, the student must present full documentation for the medical or family emergency that he/she has had during the regular test schedule.

Statement on Academic Integrity

Academic integrity is fundamental to the process of learning and evaluating academic performance. Academic dishonesty will not be tolerated. Academic dishonesty includes, but is not limited to, the following: cheating, plagiarism, tampering with academic records and examinations, falsifying identity, and being an accessory to acts of academic dishonesty. Refer to the UNO Judicial Code for further information. The Code is available online at http://www.studentaffairs.uno.edu

Statement on Student Conduct

Students are expected to:
- Attend class on time. Late attendance to class is disruptive for both the instructor and the fellow students.
- Interact with the instructor and their fellow students in a respectful manner.
- Turn off their cellphones. Interruptions in class due to ringing phones or text messaging will not be tolerated. Should the student forget to turn off the cellphone before class and should the cellphone go off during class, immediate silence of the device is required.
- Display in their computer screens content related to the class only. Social networking or other contents not relevant to the class will not be tolerated.
- Listen to the class lecture; followed by the completion of the respective lab assignment.

Recurrent disrespectful attitudes and actions will result in the dismissal of the student(s) involved for the remainder of the period.

Accommodations for Students with Disabilities

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities should contact the Office of Disability Services as well as their instructors to discuss their individual needs for accommodations. For more information, please go to http://www.ods.uno.edu

University Policies

Additional university policies can be found at
http://www.uno.edu/student-affairs-enrollment-management/student-policies/