ME 200 Statics
Spring 2014, TTh 9:30-10:45 pm, Room WC-220, 3 units

Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151.

Textbook: Statics, 13th edition by R.C. Hibbeler, 2012 (Required)
MasteringEngineering Account Access (Recommended)

Instructor: Dr. Karen D. May-Newman, Professor of Mechanical Engineering,
Office: E323E
Office Hours: TTh 11am-12:30 pm
Phone: 619-594-5652, Fax: 619-594-3599, email: kmaynewm@mail.sdsu.edu
Teaching Assistant: Vi Vu, graduate student; email available through Blackboard

Course ID: ME200S14MAYNEWMAN

Course Description
Force systems, equilibrium, structures, distributed forces, friction, virtual work, moments of inertia, vector algebra.

Student Learning Outcomes

SLO#1: Represent physical quantities using vector notation, compute magnitude and direction of a vector, add vector quantities and resolve vectors into components.
SLO#2: Compute moments caused by planar and 3-D forces acting on rigid bodies
SLO#3: Compute equivalent forces and couples that can replace given system of loading
SLO#4: Draw a correct and complete free body diagram (FBD) of forces and moments acting on a structure.
SLO#5: Compute support reactions of planar and 3D structures under static loading
SLO#6: Analyze truss structures using method of joints and the method of sections.
SLO#7: Calculate the internal forces in frame structures, and mechanisms.
SLO#8: Compute and sketch shear and bending moment distribution diagrams for beams.
SLO#9: Calculate static equilibrium conditions for rigid bodies with friction forces included.
SLO#10: Calculate the centroid and the moment of inertia of lines, areas, and 3D objects using integrations (for continuum shapes) and summation methods (composite shapes)

ABET Program Outcomes

PO# 1: An understanding of physics, chemistry and mathematics and how to apply this knowledge in the solution of engineering problems.
PO# 5: An ability to identify, formulate, and solve engineering problems.
PO# 6: An understanding of professional and ethical responsibility.
PO# 7: Good oral, written and graphical communication skills.

Evaluation Policy

Exams (20% each, no make-ups) 80%
Thursday, Feb. 13
Thursday, March 13
Thursday, April 17
Thursday, May 8
Homework-Based Blackboard Quizzes - best 8 out of 10 (25 pts each) 20%

Selected homework problems with solutions are given within MasteringEngineering and are considered important preparation for the Quizzes, which are given in Blackboard. Quizzes are available only until midnight before the next midterm exam and will be unavailable after that date.

Grades will be assigned on a standard scale: 90% A- or above; 80% B- or above; 70% C- or above; <70% D or below.
ME200 COURSE POLICIES AGREEMENT

Exams
Exams are given in-class and are closed book, but one single-sided 8.5 x 11 inch sheet of paper will be allowed, which will be collected with the exam. This sheet must be hand-written, and only include equations and text, and no electronically generated or photocopied materials are allowed. Failure to comply with this policy will result in a grade of “0” on the exam. There are four exams as scheduled, no final exam will be given in this section.

During the exam:
- Place your backpack in the front of the room.
- You may have a calculator and pens/pencils ONLY. No headphones or cell phone calculators.
- Keep your eyes on your own paper.
- Raise your hand if you have a question.
- Attach all papers together when finished.

Course Policies
1. You may not use cell phones, iPods, laptops or any other electronic equipment during class. If you have an emergency situation, put your phone on vibrate and take any calls outside in the hallway. During an exam you must relinquish your phone before you leave the room to use the restroom.
2. You are expected to read the text and pay attention in class. Sleeping or talking in class will not be tolerated.
3. It is expected that you have basic math skills, including how to integrate and differentiate, as these skills will be needed to do the homework and exams. Expect to spend 8-10 hours/week outside of class on homework, quizzes, and studying for exams.
4. You will need access to and familiarity with the SDSU Blackboard website, http://blackboard.sdsu.edu, as it will be used to organize this course. You should check it often for announcements, grades, lecture notes and other documents which will be posted to the site.
5. Do not expect an email response from your professors on weekends or late in the evening, or to emails that are not professional in their tone. For example, do not assume that you are on a first name basis with your professor.
6. Only University approved excuses for absences will be approved. The exam schedule for the entire semester is given on the first day of class, so students should plan accordingly. Attendance will be taken randomly during the semester and 3 points added to your total each time. If you wish to request an excused absence on an exam date, please provide your request to be excused in writing along with any required documentation in advance, or immediately upon your return in a medical emergency.

University Policy on Academic Dishonesty
Cheating of any form including plagiarism (defined by the University in the 2013/2014 General Catalog) constitutes a serious offence. Cheating will not be tolerated, and evidence of cheating by a student will result in an automatic “F” as the student's grade and reported to the Judicial Procedures Office.
It is expected that you will study collaboratively, working through problem solutions and discussing concepts. However, you must complete the quizzes and exams on your own and not with others.

I, _______________________________ (name) agree to abide by the policies listed above and on the syllabus for the Spring 2014 course ME200 taught by Professor May-Newman.

Signature _____________________________ Red ID __________ Date __________