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)

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Teaching Assistant: TBA

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

Student Learning Outcomes
SLO#1: Represent of 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 3D 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 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 (15% each, 150 points, no make-ups) 60%
Exam 1 Friday, Feb. 13
Exam 2 Friday, March 13
Exam 3 Friday, April 17
Exam 4 Wednesday, May 6
Homework-Based Quizzes - best 8 out of 10 (5% each, 50 points each) 40%

Selected homework problems with solutions are given within MasteringEngineering and are considered preparation for the Quizzes. Quizzes may be given either in-class or through blackboard, the quizzes given on blackboard will be announced in class and an email will be sent. For online quizzes, 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; 60% D- or above; <60% F or below. *Check lecture 0 on black board for more clarification*
ME 200 Course Policies Agreement

Exams
Exams are given in-class and are closed book, but one single-sided 8.5x11 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.
  - Absolutely no sharing a calculator.
- 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 the 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. Only University approved excuses for absences will be approved. The schedule for the entire semester is given on the first day of class, so students should plan accordingly. 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 2012/2013 General Catalog, page 478) constitutes a serious offense. 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 homework solutions and discussing concepts. However, you must complete the quizzes and exams on your own and not with your friends.

I, ____________________________ (name) agree to abide by the policies listed above and on the syllabus for the Spring 2015 course ME 200 taught by instructor Julian Espinoza.