ENGR 201: STATICS
Spring 2009

Instructor: Dr. Joel K. Ness
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Website: http://acmech.me.und.nodak.edu/Class.html
Lecture: On campus - MWF, 8 AM, Harrington 324
Text: Engineering Mechanics: Statics by R. C. Hibbeler (11th Edition)
Help Session: TBA

GRADING: Your grade in the course will be based on the following components:

Three one-hour exams	45%
Weekly10-minute quizzes	20% (will drop lowest grade)
Homework	10%
Final Exam	25%

Tests and Final Exam will be Closed book. You are allowed a 8.5"x11" crib sheet of formulas with **NO** worked out problems for the Exams. Quizzes will be closed book and notes. Quizzes will be given on Friday and are generally announced.

The range for letter grades for this course will be as follows:

A	90 100%
B	80 90%
C	70 80%
D	60 70%
F	59% and below

The above range is your guaranteed grade. Any adjustments ("curving") are considered a bonus and will be made at the discretion of the professor based on class performance and course expectations. This will not be done until final grades are due. Makeup exams will only be allowed under exceptional circumstances and only if arrangements are made **in advance.**

Course Info

This is a problem-solving course with daily homework homework and weekly quizzes. It is important to start the problems early and not put them off until the day before they are due. The quizzes will cover the assigned homework that is due.

The previous week's assigned homework problems are due at the beginning of class on the following **Friday**. It will be collected at the beginning of class. Late submission will be given 50% credit on a permission basis. No credit will be given on homework submitted late if that assignment has been graded and returned to the rest of the class. Use **engineering** ruled paper (graph type).

The daily homework problems are assigned to assist you in learning the material. Working in groups can be helpful and is encouraged but it is emphasized that the work you turn in must be your own. If it is clear that the work you

turn in is a copy of someone elses, the original and copy be given no credit with copies of the work placed on file.

Homework problems must be done neatly. Each of you is an "engineer-in-training" so part of the exercise is developing work habits and skills in submitting clear and concise work. With that in mind, sloppy work will **not** be graded.

Accurate sketches and correct **free body diagrams** are a must and are emphasized in all work. The **FBD** is the single most important tool for the solution of mechanics problems. The important elements of a good problem-solving technique are:

- correct problem set-up with the assumptions and what is sought,
- correct analysis with appropriate diagrams,
- correct numbers and units, and
- proper interpretation of the solution in both units and directions.

For successful completion of this course, the student must achieve the following objectives:

- be able to transform a system of forces to an equivalent force-couple system,
- be able to perform equilibrium analysis on rigid bodies,
- be able to locate the centroid of a body or structure,
- be able to analyze forces in trusses and frames,
- be able to solve equilibrium problems with a frictional force component,
- be able to calculate second moments for various bodies and structural members.

Attendance

Treat your engineering educational experience like you would your first engineering job. If you expect to pass this course I expect a minimum of a 90% attendance from you. Do not miss quizzes and not do your homework. As an example, during Fall Semester 2003, Spring 2004, and Fall 2006 and 2007, **those students who didn't achieve 50% on homework and 50% on the quizzes** ended up with a **D or an F**. In each case (65 total) attendance was a serious problem. This doesn't count those who dropped the course. If any of those students were actually working for me in a professional setting they would have been fired from their jobs.

Those who regularly attended class, asked questions, came by my office for assistance, diligently worked on their homework and took the quizzes **passed** the course. In order to be admitted into a degree program (Ch. E, CE, EE, GE, or ME) you need a C or better.

In light of the above statements:

1. **If you have a habit of not turning in homework or taking quizzes, I will not grade your Exam.**
2. **If your previous Exam is still uncollected, I will not grade your next Exam.**

The formula for succeediing in Statics is simple: **Come to class, do your homework, take the quizzes, ask questions!**

Take it seriously and the rewards (GPA, future coursework, job prospects, letters of recommendation from faculty, etc.) in the end will be worth it.

Disability Support Services

If you need accommodations in this course because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My office location and telephone number are listed on the first page of this syllabus.