

ME2560 STATICS

Course outline and grading policy

Course: ME2560 Statics

Semester: Spring 2010

Lecture: MWF 12:30 pm – 1:20 pm
Room **D0 115**, Parkview Campus.

Office Hours: M: 2.00-3.00 p.m.
WF: 10.00 ...10.50 a.m.

Instructor: Roman Rabiej Office: G-252, Parkview Campus. Email: roman.rabiej@wmich.edu
Website: <http://homepages.wmich.edu/~rabiej/> phone (269) 276-3298

Textbook: *Statics*, R. C. Hibbeler, 12th edition, Prentice Hall. Along with the textbook must come the access code to Mastering Engineering. (www.masteringengineering.com). Course ID **MERABIEJ98797**

Course Title: ME 25600 Statics

TEST AND GRADING POLICIES

Grading Scale

A: above 90%
BA: 85% - 89%
B: 80% - 84%
CB: 75% - 79%
C: 70% - 74%
DC: 65% - 69%
D: 50% - 64%
E: below 50%

Test, Homework & Attendance

1st midterm test: 20%
2nd midterm test: 20%
3rd midterm test: 20%
Final Exam: 25%
HW 10%
Attendance 5%

Tentative Test Dates

1st midterm test: 02.08
2nd midterm test: 04.05
3rd midterm test: 04.23
Test I: Chap. I, II & III.
Test II: Chap. IV, V & VI.
Test III: Chap. VII & VIII.

Final Exam: Thursday April: 29th 2010 at 12.30-2.30 p.m.

List of Topics

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|---|--|
| I. General Principles | VI. Equilibrium of a rigid body |
| II. Vectors | VII. Structural analysis |
| III. Equilibrium of a particle | VIII. Internal Forces |
| IV. Resultant of a system of forces | IX. Friction |
| V. Center of gravity, centroid and Moment of inertia | |

COURSE OBJECTIVES:

Upon satisfactory completion of this course, the student will be able to:

1. Develop 2- and 3- dimensions Free Body Diagrams of structures and/or structural components
2. Perform equilibrium analyses of rigid bodies in two- and three-dimensions.
3. Determine the forces acting on the elements of frames and trusses.
4. Determine the centroid of volumes, areas and rods and moment of inertia of areas.
5. Obtain mathematical and graphic representation of the shear force and bending moment on beams subjected to concentrated and/or distributed loading.

GENERAL CLASS POLICY

1. Make-up tests will not be provided, and the missed test will be graded as "ZERO". If a student misses a midterm test for a medical reason, the student must provide a doctor's statement. In that case the missed test will be transferred and credited toward the Final Examination: (For example, if you missed the second test for a medical reason, the final examination will be counted as 20%+25%=45% of the total grade). Every student must take the final examination and no make-up exam will be offered.

2. In case you think you have been infected with flu, do not attend to class and inform the instructor immediately by phone (269-276-3298) or email (roman.rabiej@wmich.edu). **No penalization will be taken for that particular lecture and you will be allowed to turn in your homework the following lecture, you need to provide the instructor a doctor's statement specifying the dates you needed to stay home. In this case you will be allowed to submit homework assignments comprising the dates you were sick without penalization. If you missed a test the policy in the previous point will be applied. In case the instructor contracts the flu, you will be notified through email and the MAE Department will provide a supplemental instructor thus no class will be cancelled.**

3. Homework will be assigned to be solved using Mastering Engineering (on-line software). You will need to register using code contained in the textbook you purchased.

Answers to all homework assignments must be entered using Mastering Engineering (www.masteringengineering.com). Mastering Engineering will allow you up to 6 attempts to enter the correct answer before grading as incorrect the problem you were worked on. Once you have entered the

correct answer the software will notify you immediately. Use 3 significant digits after decimal point throughout your calculations. There will **not** be partial credit for erroneous answers.

4. Attendance (a signature list) will be provided-checked on every lecture. You can miss up to **three** lectures during the semester without penalization. After that, every lecture you miss will decrease your final grade by 1% up to a maximum of 5%, according to the grading policy.

5. There will be **NO curving** of the grades.

6. You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate and Graduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at www.wmich.edu/catalog under Academic Policies, Student Rights and Responsibilities.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with me if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

7. **The use of laptops during lecture is forbidden** unless the instructor explicitly allows it.

8. The use of the solutions manual for solving homework or exam problems is forbidden.

a) Turning in a problem copied from the solution manual during an exam will be considered cheating and the corresponding policies will be applied.

b) Turning in a problem copied from the solution manual during an extra-credit exercise will result in a score of zero for the whole exercise.