

# ME2560 STATICS

## Course outline and grading policy

Course: ME2560 Statics

Semester: Fall 2009

**Lecture:** MWF 3:30 pm – 4:20 pm  
Room D0202, Parkview Campus.

**Office Hours:** TWRf 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, 12<sup>th</sup> edition, Prentice Hall.

### TEST AND GRADING POLICIES

<u>Grading Scale</u>	<u>Test, Homework &amp; Attendance</u>	<u>Tentative Test Dates</u>
A: above 90%	1 <sup>st</sup> midterm test: 20%	1 <sup>st</sup> midterm test: 10–05
BA: 85% - 89%	2 <sup>nd</sup> midterm test: 20%	2 <sup>nd</sup> midterm test: 11–18
B: 80% - 84%	3 <sup>rd</sup> midterm test: 20%	3 <sup>rd</sup> midterm test: 12- 07&09
CB: 75% - 79%	Final Exam: 20%	Test I: Chap. I,II &III.
C: 70% - 74%	HW 15%	Test II. Chap. IV,V & VI.
DC: 65% - 69%	Attendance 5%	Test III. Chap. VII & VIII.
D: 50% - 64%		
E: below 50%		

**Final Exam:** Class starting 8.30 a.m.:MWF : Tuesday Dec 15. 2009 at 10.15-12.15 noon.  
Class starting 3.30 pm.:MWF: Tuesday Dec.15.2009 at 12.30- 2.30 p.m..  
Class starting 4.30 pm.:MW: Monday Dec.14.2009 at 5.00-7.00 p.m..

### List of Topics

- |  |                                 |
|--|---------------------------------|
| 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%+20%=40% 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. If indeed you have the flu and need to miss more than one lecture, you need to provide the instructor a doctor's statement specifying the dates you needed to stay at 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 problems are due at the **beginning** of each class and **no credit** will be given for late homework (except under the circumstances described in 2). Please prepare your homework solutions in engineering paper and **STAPLE** them. Attendance will be checked with homework. If you did not prepare homework you can turn in a sheet with your name for checking attendance.**

4. 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. Three 10% extra-credit group assignments will be given during the semester (1 per test) without previous notification. The extra-credit will be added directly to your test grade. No make-up problems will be provided for extra-credit under any circumstance.
6. There will be **NO curving** of the grades.
7. 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](http://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.
8. **The use of laptops during lecture is forbidden** unless the instructor explicitly allows it.
9. The use of the solutions manual for solving homework, extra-credit or exam problems is forbidden.
  - a) Homework copied from the solutions manual will be graded as ZERO (the entire set).
  - b) Extra-credit problems copied from the solutions manual will be graded as ZERO (the entire set of problems assigned for extra-credit)
  - c) Turning in a problem copied from the solution manual during an exam will be considered cheating and the corresponding policies will be applied.