

# ENGR 102 – Engineering Statics

## 3 Credits

### COURSE POLICY- SPRING 2002

**Instructor** – Karla Mossi, Ph.D.  
001)

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**Class Hours:** 8:00-8:50a.m, Mon., Wed., Fri., Rm. 103(Section

**Class Hours:**10-10:50a.m,Mon., Wed., Fri., Rm. 103 (Section

**TA Office Hours:** TBA

**Text:** Engineering Mechanics STATICS, R. C. Hibbeler, 9<sup>th</sup> Edition, 2001, (includes Study Pack with a CD and workbook)

1. **Homework.** Assigned weekly on blackboard. Some collaboration among student in preparing the assignments is acceptable. However, the work should be primarily yours and written up individually. For homework up to one week late, the grade is reduced by one half. For homework more than one week late, the grade is zero. **DO NOT FORGET TO STAPLE YOUR HOMEWORK .**
2. **Exams and Quizzes:** There will be three exams, each 50 minutes in length. In addition, **scheduled quizzes** will be given during lecture sessions. Location, dates and times of the exams will be announced later.
3. **Final Examination:** There will be a comprehensive final examination. Location, date and times to be announced later.
4. **Course Grade:**

Attendance:	5%
Homework :	20%
Quizzes:	10%
3 Exams, 15% each:	45%
Final Exam:	20%
5. **Internet Site:** There will be an internet site available for the course, <http://blackboard.vcu.edu>. To login use your e-mail username and password.
6. **Academic Integrity:** Following the recommendation of the administration, I include a statement on the topic of cheating and plagiarism. As is understood by the vast majority of students, our basic relationship is based on trust, and I've rarely seen problems in this area. The Virginia Commonwealth University Honor System defines Academic dishonesty and procedures in response. Please familiarize yourself with this document, (<http://www.vcu.edu/safweb/rg/policies/rg7honor.html>), and note that the penalties can be harsh.
7. **Americans with Disabilities Act:** Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 requires VCU to provide academic adjustments or accommodations for students with documented disabilities. Students seeking academic adjustments or accommodations must self-identify with the coordinator of Services for Students with Disabilities and must provide their instructors with an official memorandum from the Coordinator. Consult the on-line resources: <http://www.vcu.edu/safweb/rg/rglaccess.html>.

### 8. Rules for the class:

- No cell phones on during classes or exams, respect your classmates and your instructor.
- Let your instructor know in advance of any problems you may have with homework, quizzes, attendance, or exams.
- Keep all your graded homework, quizzes or exams. They will be a good reference in the future.
- On written work, always show all your work, even when guessing.

### TENTATIVE SCHEDULE

CLASS	DATE	TOPIC	READING
1	14-Jan	Math Review Exam	
2	16-Jan	Math Review Part I	
3	18-Jan	Math Review Part II	
4	21-Jan	Introduction	1.1-1.6
5	23-Jan	Force Vectors	2.1-2.3
6	25-Jan	Vector Operations	2.4
7	28-Jan	Vector Operations, Position Vectors	2.5-2.6
8	30-Jan	Dot Product	2.7-2.8
9	1-Feb	Equilibrium, Free Body Diagram	2.9
10	4-Feb	Force Systems, 3-D F sys	3.1-3.3
11	6-Feb	Moment, Cross Product	3.4
12	8-Feb	Moment of a Force	4.1-4.2
13	11-Feb	Cross Product, Vector Formulation	4.3
14	13-Feb	<b>EXAM I</b>	<b>Chapters 1-3</b>
15	15-Feb	Principle of Moments	4.4, 4.5
16	18-Feb	Moments, Couples	4.6
17	20-Feb	Equivalent System	4.7, 4.8
18	22-Feb	Distributed Loading	4.9, 4.10
19	25-Feb	Rigid-Body Equilibrium -Free Body Diagrams	5.1-5.2
20	27-Feb	Equations of Equilibrium	5.3
21	1-Mar	3D Equilibrium	5.4
22	4-Mar	Free Body Diagrams	5.5, 5.6
23	6-Mar	Constraints for a Rigid Body	5.7
24	8-Mar	Review	
	<b>9-17 Mar</b>	<b>SPRING BREAK</b>	
25	18-Mar	REVIEW-Questions	
26	20-Mar	<b>EXAM II</b>	<b>Chapters 4-5</b>
27	22-Mar	Trusses	6.1-6.2
28	25-Mar	Trusses – Method of Joints	6.2, 6.3
29	27-Mar	Trusses - Method of Sections	6.4
30	29-Mar	Space Trusses	6.5
31	1-Apr	Frames and Machines	6.6
32	3-Apr	Frames and Machines	6.6
33	5-Apr	Friction	8.1-8.2
34	8-Apr	Friction	8.2
35	10-Apr	Wedges	8.3-8.5

CLASS	DATE	TOPIC	READING
36	12-Apr	Center of Gravity	9.1-9.2
37	15-Apr	Review/Questions	
38	<b>17-Apr</b>	<b>EXAM III</b>	<b>Ch 5 and 6</b>
39	19-Apr	Composite Bodies	9.2-9.3
40	22-Apr	Composite Bodies	9.3
41	24-Apr	Moment of Inertia	10.1-10.2
42	26-Apr	Parallel Axis Theorem	10.3-10.5
43	29-Apr	REVIEW	
44	1-May	REVIEW	
45	3-May	REVIEW	
	<b>6-10 May</b>	<b>FINAL EXAM</b>	

## Blackboard

This software is a tool that enables you to check announcements, homework, and your progress in class. Many other features are available.

To access this website go to:

<http://blackboard.vcu.edu/>

To login: use your e-mail and your e-mail password

Explore and click away



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Welcome to **Blackboard 5**.  
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