

# ENGR 250 - STATICS

INSTRUCTOR: Jeff Jones, Eltahry Elghandour  
OFFICE HRS: email us  
EMAIL: <http://blackboard.cuesta.edu/>

OFFICE: email us      PHONE: email us  
Grades : <http://blackboard.cuesta.edu/>

## COURSE DESCRIPTION:

Analyzes forces on structures in equilibrium, properties of forces, moments, couples and resultants, condition of equilibrium, friction, centroids, and area moments of inertia. Introduces mathematical modeling and problem-solving techniques utilizing vector mathematics. Acceptable for credit, UC, CSU, and for ME211 Cal Poly.

**TEXT:**            ENGINEERING MECHANICS- STATICS, 12th Edition, by Hibbeler (I have also placed a copy of this on reserve in the library).  
[www.yourotherteacher.com/download/StaticsCompanion.pdf](http://www.yourotherteacher.com/download/StaticsCompanion.pdf) (Free download), by Jeffrey E. Jones, PE

**ONLINE:**        Current video lectures can be viewed online at [www.YourOtherTeacher.com](http://www.YourOtherTeacher.com)

**TUTORS:**        Tutors are available for free through Tutorial Services located in building 3300.

<b>GRADES:</b> Chapter Tests (4) (85%, equally weighted)	90-100	A (-)
Quizzes and Homework (15%)	80-89	B (+/-)
	70-79	C (+)
+/- grades break at 3 and 7 (ex. 83 and 87)	60-69	D (+/-)
(I am firm on the break down, 79.99 is a C+, etc. !).	<60	F

**TEST and QUIZ/ HOMEWORK FORMAT:** Each problem must:

- be neat, clear, and organized
- contain a Free-body Diagram (FBD) (if appropriate)
- state the equations used
- have the answer double underlined using a straight edge
- all pages must contain at the top: Test#, ENGR 250, NAME, DATE, PAGE##
- tests and hw are to be done on engineering calc paper. Quizzes: Write on the quiz itself.
- Always use pencil and never write on the back.
- all lines must be drawn with a straight edge
- print using uppercase letters
- use 3 significant figures at each step in the calc (be consistent)
- don't crowd work (one problem per page)
- include units in answers

**TESTS/ HW/ QUIZZES:** NO makeup's will be permitted. Problems may come from the textbook, suggested homework problems, and the Statics Companion. All tests are closed book, and only basic trigonometric calculators may be used. All work must be shown in order to receive credit and adhere to the format stated above. Online quizzes are open book and you are not to use any other resources.

**RESPONSIBILITY:** It is the student's responsibility to drop (if necessary). It is also the student's responsibility to keep up with the material.

## CORRECTIONS:

The instructor reserves the right to make corrections to the syllabus. Other modifications may be made with the agreement between the instructor and the student.

**TEST SCHEDULE (subject to change)** (approximately 90 minutes allowed per test)

TEST NO.	CHAPTER	DATE	Format
Test 1	1, 2, 3	Thursday 9/9	Proctored in class
Test 2	4, 5	Tuesday 10/12	Proctored in class
Test 3	6, 7	Thursday 11/4	Proctored in class
Test 4	8, 9, 10	Thursday 12/16	Proctored in class

- Online Students: Bring a Self Addressed Stamped Envelope (SASE) if you want me to mail you the test back. I **highly** suggest that you bring a SASE to the final as unclaimed finals will be recycled immediately after I grade the final.
- Online Students: Proctored tests will take place in rm 3406 (SLO) at 10:30 am with the exception of the final (Test 4) which is at 7:30 am.
- Quizzes and due dates can be found at <http://blackboard.cuesta.edu/> and are due by 9 pm PT (Pacific Time). Typically quizzes are due on Wednesdays and Sundays.
- Homework is due at the start of each test.

**QUESTIONS? MESSAGES**

Please refer to the Blackboard web site as we have posted FAQ's there. If you still have a question then please post a message in the Discussion Forum on Blackboard. If you have a private message then please email us using the email system within Blackboard and not the Cuesta email system. Also get in the habit to check <http://blackboard.cuesta.edu/> everyday as we will post important messages there about the class. Refer to the FAQ's for instructions on how to log on to Blackboard (<http://academic.cuesta.edu/jjones/faq.htm>).

**ERRORS?**

If you find any error or a discrepancy, please let Jeff Jones know. Do not assume you know what we want. We may give extra credit to the first person who reports it.

## TENTATIVE SCHEDULE

WEEK#	TEXTBOOK SECTION By Hibbeler	STATICS COMPANION By Jeff Jones (ONLINE STUDENTS: minimum video lessons to watch)	HOMEWORK Textbook By Hibbeler
1	1.1 to 1.6 2.1 to 2.4	1-1 to 1-3 2-2 to 2-16	Chapter 2: 2, 7, 19, 27, 34, 38, 42, 46
2	2.5 to 2.9	2-27 to 2-35 3-27 to 3-28, 3-33 to 3-34	Chapter 2: 62, 70, 78, 87, 91, 98, 103, 107, 113, 123
3	3.1 to 3.4	2-17 to 2-22 2-37 to 2-40	Chapter 3: 2, 10, 18, 24, 34, 39, 43, 47, 57, 62
4	Review <b>Test 1</b>		
5	4.1 to 4.4	3-2 to 3-6 3-17 to 3-22	Chapter 4: 5, 9, 14, 18, 23, 25, 29, 33, 35, 43
6	4.5 to 4.7, 4.9	3-38 to 3-58 5-39 to 5-41	Chapter 4: 51, 55, 59, 63, 73, 75, 79, 87, 105, 110, 142, 144
7	5.1 to 5.4	4-1 to 4-11 4-21 to 4-25	Chapter 5: 1, 21, 26, 31, 35, 41, 46, 58, 59
8	5.5 to 5.7 Review	4-28 to 4-33	Chapter 5: 70, 74, 78, 90, 93, 95
9	<b>Test 2</b> 6.1 to 6.3	6-1 to 6-12	Chapter 6: 3, 9, 14, 21, 27
10	6.4 and 6.6	6-20 to 6-23 6-29 to 6-33	Chapter 6: 33, 43, 49, 67, 73, 74, 82, 91, 106
11	7.1 to 7.3	7-1 to 7-13	Chapter 7: 1, 4, 7, 43, 51, 59, 61, 66, 69, 75, 81
12	Review <b>Test 3</b>		
13	8.1 to 8.4	8-1 to 8-7 8-16 to 8-20	Chapter 8: 1, 2, 9, 13, 27, 33, 65, 75, 78
14	9.1 to 9.2	5-18 to 5-22, 5-1 to 5-10, 5-13 to 5-16, 5-52 to 5-54	Chapter 9: 1, 9, 15, 46, 51, 53, 57
15		Thanksgiving	
16	10.1 to 10.4	9-1 to 9-6 9-11 to 9-14	Chapter 10: 2, 5, 11, 33, 54, 55
17	9.5 Review	5-44 to 5-47	Chapter 9: 105, 106, 114
Final		<b>Test 4</b>	