University of Utah - Department of Mechanical Engineering COURSE OUTLINE (TENTATIVE, NOT FINALIZED, SYLLABUS) Statics and Introduction to Strength of Materials Fall 2012

Catalog description: ME EN 1300 Statics and Strength of Materials (4) Forces, moments, couples, and resultants; static equilibrium and statically equivalent force systems, center of gravity and center of pressure; free body method of analysis; friction; internal forces in members, concept of stress and strain; Hooke's law, application to problems in tension/compression, shear torsion, and bending. PREREQUISITES: "C-" or better in (MATH1210 OR 1250 OR 1270 OR 1310 OR 1311) OR APCalcAB score of 4 OR APCalcBC score of 3. Coreqs: ((MATH1220 OR1260 OR 1280 OR 1320 OR 1321) AND (PHYS2210 OR APPhys C:Mech score of 4).

Essential prerequisites knowledge: Functions, inverses and graphs; geometry and trigonometry, algebra/calculus applications involving polynomial, rational, radical, trigonometric, exponential and logarithmic functions; systems of equations and matrices; basic vector operations (dot and cross product), velocity and acceleration, geometric applications of derivatives; minimization and maximization; integration of simple differential equations [such as y''(x) = 3x] with application of boundary or initial conditions to find integration constants. Physical units. Basic number sense.

Relevant co-requisite topics: Geometric applications of calculus, conic sections, improper integrals, numerical approximation techniques, differential equations, energy, Newtonian forces, vectors, intermediate differential eqs.

Scope: This introductory engineering course covers the subjects of STATICS and an introduction to the study of the behavior of engineering materials under loads, commonly called Strength of Materials or Mechanics of Materials (referred to as STRENGTHS by students even though it actually focuses on elastic behavior with only a cursory introduction to material failure caused by loss of strength). Statics is the study of forces and moments on bodies that don't accelerate. Strengths is the study of the stresses in and deformation of materials (bending, twisting, stretching, buckling, etc.) when forces or moments are applied to them.

Purpose: This course forma a foundation for all of mechanical, civil, material science, mining, industrial and other engineering branches. It is the start of the study of mechanics, which describes and predicts the conditions of rest and motion of rigid and deformable bodies under the action of forces. Recognizing that "all things are made out of something," it is clear that all engineers must understand mechanics!

Course objectives: by the end of this course, you should be able to ...

- Solve problems in structural mechanics involving concentrated and distributed forces and couples, knowing how and when to replace them with equivalent resultant forces and moments.
- Identify conditions of static equilibrium.

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- Compute center of gravity and center of pressure
- Draw and analyze free body diagrams to find reaction forces or moments and to find internal forces in members
- Use the concepts of stress and strain, including orientation change methods (such as Mohr's circle)
- Identify and enforce boundary conditions (e.g., pinned, roller, friction, traction free, moment free, spring, etc.)
- Apply Hooke's law to problems in tension/compression, shear torsion, and bending.
- Apply verification "sanity checks" to your analysis (e.g., units, order of magnitude, sign, upper bounds, etc.)
- Know and test for the limits of applicability of the governing equations

Texts: The following two <u>required</u> books can be purchased at the bookstore as a package at substantial savings (1) Vector Mechanics for Engineers/Statics, 10th Ed., Beer, Johnston, and Mazurek, McGraw-Hill (2) Mechanics of Materials, 6th ed, Beer, Johnston, DeWolf, and Mazurek, McGraw-Hill

Class Location and Time: WEB L105, MTWHF 7:30am - 8:20am

Wednesday lectures are held only as in the schedule, or when announced in class, or if when something (e.g., campus shutdown from snow or building blockage from fire drill) causes the preceeding M,T, H, or F class to be cancelled. Otherwise, Wednesdays are reserved for the course TA to hold problem solving sessions.

Instructor: Dr. Rebecca M. Brannon

Office: 2254 MEB, Telephone 801-581-6623 (Cell: 801-662-8340), email: strictly via Canvas Office Hours: half hour immediately after class or at other times by appointment (or drop-in *if instructor is available <u>and</u> if you bring evidence that you have first consulted with the course TA and/or grader*)

TA: <u>Greg.Scott@utah.edu</u>, Rm. TBA Grader: TBA

Grading:

			weight (ME 1300)	weight (MechMat indep. study students)			
H	=	Homework	120	60 Course score formula (below)			
Q	=	pop quizzes	80	45 is modified by replacing			
M_1	=	Midterm #1	100	0 weights in that formula with			
M_2	=	Midterm #2	100	$\mid 0 \mid$ the weights shown here			
M_3	=	Midterm #3	100	50 First HW for these students is			
F	=	Final	200	100 HW#0 and then HW#16			
L_1	=	lowest from above	-50	-20			
L_2	=	second lowest	-50	-20			
$120H + 80Q + 100M_1 + 100M_2 + 100M_3 + 200F - 50L_1 - 50L_2$							
cou	irse s	$core = \frac{120 + 75}{120 + 75}$	+100 +100 +100	+200 -50 -50			

The six main grades in this formula (H, Q, M_1 , M_2 , M_3 , and F) are each on a scale from 0 to 100. Of these, the two lowest values are reduced in weight by 50. Exception: academic misconduct will result in a zero score that does not count as L_1 or L_2 and might result in failing the entire course. The course score is assigned a letter grade according to the following table.

0-59 60-62 63-66 67-69 70-72 73-76 77-79 80-82 83-86 87-89 90-92 93-96 97-100 E D- D D+ C- C C+ B- B B+ A- A A

The instructor reserves the right to lower the score required for any letter grade. There is no curve in the course score. Homework and quiz scores (H and Q) are graded using a 10% shift. Specifically, if E is the number of points earned and A

is the number of points available (for *H* or *Q*), then the score with a 10% shift is $100 \times \min\left(1, \frac{E}{0.9A}\right)$. The divisor of 0.9 in

this formula allows you to completely miss 10% of the homework (and 10% of the pop quizzes) without hurting your grade. In other words, you only have to earn 90% of those available points to get a perfect score of 100%. This policy accommodates unforeseeable personal crises and obstacles such as illness, dog eating your homework, bad weather, death in the family, or car trouble preventing you from making it to class. Accordingly, late homework is not accepted, and make-up pop quizzes are not available. *Please do not ask for an exception to this policy*.

Pop Quizzes: A total of 10 to 20 (0, 1 or 2 per wk). These very short quizzes will be given at any time during class, and may not be made up. Bad weather days will be avoided. Quiz problems will test on pre-reading for the day, or they might be similar to HW problems for that day or previous days. Pre-reading is defined to be the reading *two days ahead* of the date shown in the schedule (see table below).

Homework Policies: There is only one way to learn Mechanics: doing it! Accordingly, extensive homework is assigned. To pass the course, at least 60% of homework must be worked and handed in. Problems with an asterisk (*) are to be worked with the AID OF A COMPUTER, and <u>all</u> of them must be handed in to pass the course. Graders are limited and moderately paid. To assist them, homework must conform to the following policies or else it will be given a zero grade.

- A. If two students have homeworks that are excessively similar (i.e., copied or nearly the same in the instructor's judgment), then both students will receive a zero for the assignment or (if the problem persists) a failing grade for the entire course. You are encouraged to work collaboratively to figure out concepts, but you must ultimately provide the solutions in your own words and your own thought sequence. Make the most of your education!
- B. Homework must be handed in on time. Late homework is not accepted. The homework grading formula allows 10% of the assignments to be missed (for any reason such as illness, death in family, car trouble, etc.) without hurting your homework score. Try to avoid using up your 10% cushion too soon.
- C. Homework must be neat and legible. Answers must be circled or boxed. Use only one side of the paper. Do not turn in pages ripped from a spiral notebook. Staple all pages together in *the correct order*. Put your name at the top left, the class number in the middle, and HW# at the top right. If there is more than one problem on a page, then the problem numbers must be clearly marked and a **heavy line** must be drawn between problems.
- D. Each problem must be formatted with four sections: GIVEN, REQUIRED, SOLUTION, CHECK. An example of this required format is in the first set of lecture slides posted on canvas.
 - a) The "<u>GIVEN</u>" section must summarize problem data (material properties, applied forces, etc.). It must include a sketch of the geometry where appropriate. Do not simply repeat the question verbatim. This section lists only what is known information. If the type of material (e.g., steel) is specified, look up pertinent material properties (from the book appendix), and put the values in this "GIVEN" section.
 - b) The "<u>REQ'D</u>" section must state what is sought.
 - c) The "<u>SOL'N</u>" section presents the solution. If a math identity or a formula is applied, then it must be introduced in words. For example, you might say "using the law of cosines, the unknown length on the triangle is …" All calculations must indicate units of all terms. All final answers must be given with units. Call attention to the final answer by enclosing it in a circle or box. Diagrams must be large enough and legible enough to show all elements clearly. A free body diagram (FBD) must be provided in any solution for which an FBD is possible. Failure to provide an FBD (when possible) results in ZERO score.

- d) The "<u>CHECK</u>" section must have at least one sentence that cites evidence that the answer is right or wrong (other than "got the same as the provided answer" or "got the same as another student"). Examples: the units are right, the direction is reasonable, the magnitude falls between some reasonable expected bounds, an alternative way to solve the same problem (such as by computer, and/or graphically by measuring lengths and angles in a scale drawing). It is okay if your "check" statement indicates that you have a mistake somewhere. In fact, you will earn more points than a student who gets the same wrong answer without seeing that it is wrong. Bonus points will be awarded if you demonstrate that the provided answer (or partial answer) is incorrect.
- E. Getting the right answer for the wrong reasons will result in more points off than simply getting the wrong answer.
- F. Getting the right answer is not sufficient to earn full credit. The "SOLUTION" section must obtain the right answer *using the techniques taught in this course*. For example, we learn how to find so-called "principal stresses" by using a technique called "Mohr's circle." You will earn zero points if your "SOL'N" section evaluates principal stresses in a different way. You should feel free, however, to explore those other techniques (e.g. by an eigenvalue solver on the computer) in your "CHECK" section in fact, solving the same problem in multiple ways it the ideal way to check your answers!

General Policies

As an adult learner, please accept responsibility to adhere to the following policies. Asking for an exception to these policies, no matter how good the reason, is considered to be unfair, improper, and (in some cases) immature.

- 1. Be on time. If you must arrive late, then minimize the disruption by sitting in the back. If you arrive late, please refrain from asking questions until after the lecture (your question might have been answered in the beginning part of class that you missed).
- 2. Cell phones and big hats should be off. The "Sound Manager" app for Android smart phones is awesome for this.
- 3. Ensure that your official university email address (<u>u123456@utah.edu</u>) will reach you. No alternative email addresses are accepted.
- 4. Know how to access the Canvas course materials. Look for "go to this class" in your CIS homepage.
- 5. Be able to use at least one computer program that can do linear algebra and similar number crunching. Examples include Excel spreadsheet and/or engineering programs such as Matlab, Mathematica, Maple, Python, etc.
- 6. Bring a calculator to every class. Forgetting it will make it tough to pass in-class quizzes.
- 7. Follow the homework format requirements (listed above) or accept the consequence of a zero score.
- 8. Late homework is not accepted even when you have a good reason. Do not ask for an extension. The homework grading formula already accommodates a reasonable number of missed homeworks.
- 9. No makeup homework will be given. The formula used to set the final homework grade already allows you to miss 10% of the homework without hurting your score. Exception: if you are at risk of failing the course because you haven't turned in 60% of the homework, then you may solve and turn in the missing problems; they will count for zero credit towards your homework score. They will merely satisfy the 60% requirement.
- 10. No makeup pop quizzes will be given. The formula used to set the final quiz grade already allows you to miss 10% of these quizzes without hurting your score.
- 11. No part of the grading scheme awards points for effort. All points are awarded exclusively for accomplishments in homework and exams. Please refrain from telling the instructor how hard you are working on the class, as this could be construed as seeking favors that cannot ethically be given by the instructor.
- 12. If you have personal burdens or obstacles that adversely affect your performance, then follow instructions in the "College of Engineering Guidelines," found later in this syllabus, to secure official <u>written</u> university approval for special accommodations. Otherwise, if formal university-sanctioned special-accomodation paperwork is not secured, please refrain from even mentioning personal pressures affecting your academic performance.
- 13. All exams and quizzes are closed book and closed notes. The only allowed electronic aid is a calculator. During an exam, the only features of your calculator that you may use are the basic functions (exponentials, trig functions, logarithms, matrix functions, etc.) that are standard on any scientific calculator. If your calculator has other features (e.g., internet access, ability to store and display formulas, audio, etc.) then those features must not be used. Any student caught using such features during a closed book exam or quiz will fail the entire course.
- 14. Any homework not picked up after being graded will be counted as zero. Reason? The graders might have given you important feedback, which you need to see.
- 15. No makeup midterm exam or final will be given without prior approval to miss the exam. If you miss an exam without prior approval (e.g., your car broke down on the way to school), then no make-up exam will be given, but you can count the missed exam as both L_1 and L_2 in the final course grade formula if you request permission to do so immediately after the missed exam. In this way, the missed exam will not hurt your grade as long as you get good grades on all other parts of the course.
- 16. The instructor reserves the right to administer all or part of a makeup exam as an oral exam.
- 17. If your exam or homework solution shows more than one answer, then points will be marked off for the wrong answers even if the right one is visible. Scratch out anything you don't want to be graded.

18. "Floaters" (i.e., expressions, like scratch calculations, that are written on the page without obvious meaning, or expressions without an equal sign) will result in points lost even if you got the right answer somewhere else on the page.

The class normally meets four days each week, but the students must block off all five days in their schedule. In a regular week, the class meets for lecture on Monday and Tuesday, skips Wednesday lecture (but optionally attends a problemsolving session given by the course TA), and then meets again on Thursday and Friday. The table below has long horizontal lines dividing the weeks. It has a shorter horizontal line in the last two columns to split the week into two pairs of meeting days. The class will meet for lecture on Wednesdays if necessary to stay on schedule for the week (e.g., if lectures are running behind) or as needed to accommodate holidays (note that Labor Day week has a Wednesday meeting time). Wednesday meeting times also might be used to adjust for unforeseen instructor travel, instructor illness, unscheduled campus shutdown, etc. Deviations from the regular "no Wednesday" schedule will be announced at least two lecture periods in advance.

In the table, each week is made up of four rows, corresponding to the four meeting days in that week. The corresponding four meeting dates of each row should be regarded as "try by" dates for the homework problems listed in the same row. The due date for homework is two meeting days later. For example, **hw1** should be attempted by the first day of class (Monday), and it is due two days later (Thursday). This homework must be handed in for grading at the start of class on the "turn-in" date (last column of the table).

The beginning of each class will devote a few minutes to answer questions about upcoming homework. You should have tried the listed homework problems by the "try by" date. Questions about those problems (no others) will be answered at the beginning of lecture on the "try by" date. After answering questions about the homework, a pop quiz might or might not be given. Then the lecture will resume discussion of new material. Lecture topics are roughly two days ahead of the topics listed in the Reading column. You are expected to have done the reading two days in advance so that the material covered in lecture will have been already reviewed by you. To encourage you to read two days ahead, some questions in pop quizzes will cover basic concepts and definitions in the read-ahead material.

EXAMPLE: Aug. 27 proceeds as follows:

- \bullet The hour begins with students turning in problem set #2.
- Five or ten minutes will be used to answer questions about homework problem set #3, which is due two meeting days later.
- ✤ A pop quiz might be given, which will be *either* a problem similar those in problem set #2 or it will be a basic question (such as a definition) that determines if you did the required reading for the lecture (namely "Equilibrium of a particle 2d, Chapter 3.1-3, found two lines PAST the Aug. 27 line). *Read-ahead assignments are always TWO days farther down the list.*
- ★ A lecture will be given about the read-ahead material (Chapters 3.1-3)
- ✤ The hour ends with everyone standing and cheering about how exciting it is to learn mechanics. ☺

Late homework is not accepted for credit

At least 60% of the homework must be worked and turned in in order to pass this class (see grading policies).

Problems marked with asterisk (*) – all of them – must be solved with a score of 70% or better to pass the class.

Date	Торіс	Reading	Homework assignments. (download from Canvas)	Problem Set No. & Turn-In Date
Aug 20 (w1)	Introduction, Units, Solution	Chapter 1	1-a (prerequisite refresher questions)	#1*
Aug 21	Force vectors	2.1, 2, 3, 4,	1-b	Aug 23
Aug 23	More vector operations	2.5, 6	2-a	#2
Aug 24	Cartesian vectors	2.7, 8, 9	2-b	Aug 27
Aug. 27 (w2)	Position vectors	2.7, 12	3-a	#3
Aug 28	Vector along a line and dot prod	2.13-15	3-b	Aug. 30
Aug 30	Equilibrium of a particle (2d)	2.9-11	4-a	#4*
Aug 31	Equilibrium of a particle (3d)	2.14-15	4-b	Sep. 3
Sep 3 (w3)	Labor day holiday	Labor day	Labor day holiday	Labor day
Sep 4	Equivalent forces/transmissibility	3.1-3	5-a	#5

Sep 5	Vector products and Moments	3.4-7	5-b	Sep. 6
Sep 6	Dot product & vector components	3.9-11	6-a	#6
Sep 7	Couples and Equiv. Force Sys.	3.12-16,17	6-b	Sep. 11
Sep. 10 (w4)	EXAM #1 (Sept. 13)		material through assignment #5	#7
Sep. 11	Equilibrium of rigid bodies	4.1-3	7-b	Sep. 13
Sep. 13	More Equilibrium	4.4-6	8-a	#8
Sep. 14	Equilibrium in 3D	4.7-9	8-b	Sep. 17
Sep. 17 (w5)	Centroids and ctr. of gravity	5.1-3,10-12	9-a	#9*
Sep 18	Distributed loads	5.4,6,8	9-b	Sep. 20
Sep 20	Trusses (method of joints)	6.1-4	10-a	#10
Sep 21	Trusses (method of Sections)	6.6,7	10-b	Sep. 24
Sep. 24 (w6)	Frames and Machines	6.9-11	11-a	#11
Sep. 25	Machines	6.12	11-b	Sep. 27
Sep. 27	Shear & Bending Mom. Diag.	7.1-5	12-a	#12
Sep. 28	More of the same	7.6	12-b	Oct. 1
Oct. 1 (w7)	Friction	8.1-4	13-a	#13
Oct. 2	Wedges	8.5-6	13-b	Oct. 4
Oct. 4	Clutch, Thrust bearings, Belts	8.8,9	14-a	#14
Oct. 5	EXAM #2 (Oct. 8)	· · · · ·	material through assignment #12	Oct. 15
Oct. 8 (*)	Fall break	Fall break	Fall break	Fall break
Oct. 9	Fall break	Fall break	Fall break	Fall break
Oct. 11	Fall break	Fall break	Fall break	Fall break
Oct. 12	Fall break	Fall break	Fall break	Fall break
Oct. 15 (w8)	Moment of inertia	9.1-5	15-a	#15
Oct. 16	Summary of Statics		15-b	Oct. 18
Oct. 18	Mech. MaterialsStresses	1.1-5	16-a	#16
Oct. 19	Stress	1.6-7	16-b	Oct. 22
Oct. 22 (w9)	Strain	2.1-2	17-a	#17
Oct. 23	Mechanical Properties of Mat'ls	3.1-7	17-ь	Oct. 25
Oct. 25	Axial loads	4.1-4	18-a	#18
Oct. 26	Torsion (stresses)	5.1-2	18-b	Oct. 29
Oct. 29 (10)	Torsion (deflection)	5.4, 8	19-a	#19
Oct. 30	V & M Diagram (again!)	6.1-2	19-ь	Nov. 1
Nov. 1	Bending stress	6.3-4	20-a	#20
Nov. 2	Shear Stresses in Beams	7.1-2	20-b	Nov. 5
Nov. 5 (11)	Stress Transformation	9.1-2	21-a	#21
Nov. 6	Principal Stresses	9.3	21-b	Nov. 8
Nov. 8	Mohr's Circle	9.4-5	22-a	#22
Nov. 9	EXAM #3 (Nov. 12)		material through assignment #20	Nov. 12
Nov. 12 (12)	Strain Transformation	10.1-3	23-а	#23
Nov. 13	Strain Gages	10.4-6	23-b	Nov. 15
Nov. 15	Combined Loadings	8.2	24-a	#24
Nov. 16	More		24-b	Nov. 19
Nov. 19 (13)	Beam Deflection	12.1-2	25-a	#25
Nov. 20	more about beams		25-b	Nov. 26
Nov. 22	Thanksgiving break			
Nov. 23	Thanksgiving break			
Nov. 26 (14)	even more about beams	12.5 & app.C	26-a	#26
Nov. 27	Buckling of Columns	13.1-3	26-b	Nov. 29
Nov. 29	,,	13.6	27-а	#27
Nov. 30	Intro continuum mechanics		27-b	Dec. 3
Dec. 3-7 (15)	Review - Typical Problems on		TBA	#28
	statics and SToM from the FE (i.e. the 1 st Exam. for licensure)			

Final: Friday, Dec. 14, 2012, 8:00-10:00AM (comprehensive)

Important dates (these are unofficial for your convenience – for official dates see http://registrar.utah.edu/academic-calendars/final-exams-fall2012.php)

Classes begin	
Last day to drop (delete) classes	
Labor Day Holiday	Monday, Sept 3
Tuition payment due	Tues., Sept. 4
Last day to elect CR/NC/audit	Tues., Sept 4
Fall break	Mon-Fri, Oct. 8-12
Last day to withdraw	Friday, Oct. 19
Thanksgiving break	Thurs-Fri, Nov 22-23
Last day to reverse CR/NC option	Friday, Nov. 30
Last class	Friday, Dec. 7
Final exam	Friday, Dec. 14, 2012, 8:00-10:00AM
Holiday Recess	Sat. Dec. 15-Sun. Jan. 6
Grades available to students	Wednesday, Dec 26

The Fall 2012 COE guidelines will be later available at the COE website, http://www.coe.utah.edu/current-undergrad/policies_appeals.php. Until they become available, here is a copy of the 2010 guidelines:

COLLEGE OF ENGINEERING GUIDELINES Fall Semester 2010

http://www.coe.utah.edu

Appeals Procedures

See the Code of Student Rights and Responsibilities, located in the Class Schedule or on the UofU Web site for more details

Appeals of Grades and other Academic Actions If a student believes that an academic action is arbitrary or capricious he/she should discuss the action with the involved faculty member and attempt to resolve. If unable to resolve, the student may appeal the action in accordance with the following procedure:

- 1. Appeal to Department Chair (in writing) within 40 business days; chair must notify student of a decision within 15 days. If faculty member or student disagrees with decision, then,
- 2. Appeal to Academic Appeals Committee (see http://www.coe.utah.edu/current-undergrad/appeal.php for members of committee). See II Section D, Code of Student Rights and Responsibilities for details on Academic Appeals Committee hearings.

Americans with Disabilities Act (ADA)

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you need accommodations in a class, reasonable prior notice needs to be given to the instructor and to the Center for Disability Services, 162 Olpin Union, 581-5020 (V/TDD) to make arrangements for accommodations. All written information in a course can be made available in alternative format with prior notification to the Center for Disability Services.

Repeating Courses

When a College of Engineering class is taken more than once, only the grade for the second attempt is counted. Grades of W, I, or V on the student's record count as having taken the class. Some departments enforce these guidelines for other courses as well (e.g., calculus, physics). See an advisor or departmental handbook. Students should note that anyone who takes a required class twice and does not have a satisfactory grade the second time may not be able to graduate.

Withdrawal Procedures

See the Class Schedule or web for more details ** Please note the difference between the terms "drop" and "withdraw". Drop implies that the student will not be held financially responsible and a "W" will not be listed on the transcript. Withdraw means that a "W" will appear on the student's transcript and tuition will be charged. **

Drop Period – No Penalty

Students may DROP any class without penalty or permission during the FIRST TEN calendar days of the term (Wednesday, September 1, 2010).

Withdrawal from Full Term Length Classes Students may WITHDRAW from classes without professor's permission until Friday, October 22, 2010. Please note that a "W" will appear on the transcript and tuition will be charged. Refer to Class Schedule, Tuition and Fees for tuition information.

Withdrawal from Session I and Session II See the web page, for details: www.sa.utah.edu/regist/calendar/datesDeadlines/Fall2010.htm

Withdrawals after October 22nd will only be granted due to compelling, nonacademic emergencies. A petition and supporting documentation must be submitted to the Dean's Office, 1610 Warnock Engineering Building or University College (450 SSB) if you are a pre-major. Petitions must be received before the last day of classes (before finals week.).

Adding Classes

Please read carefully: All classes must be added within two weeks of the beginning of the semester (deadline: September 7th). Late adds will be allowed September 8th to September 10th, requiring only the instructor's signature. Any request to add a class after September 10th will require signatures from the instructor, department, and dean, and need to be accompanied by a petition letter to the Dean's office.

A \$50 FEE WILL BE ASSESSED BY THE **REGISTRAR'S OFFICE FOR ADDING** CLASSES AFTER September 10, 2010. ***

ME EN 1300 (STATICS AND INTRODUCTION TO STRENGTH OF MATERIALS) Student information/affirmation sheet TURN THIS IN WITH THE FIRST HOMEWORK SET

I certify that ...

☐ I have been given the course information (syllabus), which includes the instructor's name/contact info/office hours, prerequisite requirements, course objectives, evaluation methods, grading policy, course description, important dates, topics list, and College of Engineering Guidelines. I further understand that the instructor retains the right to revise the syllabus, with the proviso that students retain a right to reasonable notice of changes.

I have been given the course policies (homework, general, and grading).

□ I will accept a homework score of zero if my homework fails to conform to the homework format requirements, if it violates any of the other homework policies, or if I fail to pick it up within four weeks of when the graded assignments are returned to the students.

I understand the course objectives that are listed in the syllabus.

I have satisfied the pre-requisites for taking this course as they are listed in the syllabus.

I understand that in-class quizzes might test material covered only in the reading, and not yet introduced in lecture.

I understand that retaking a course means that the second grade (whether higher or lower) will be the one that counts permanently on my transcripts.

☐ I understand that the first Homework assignment, which covers only pre-requisite knowledge for this course, must be turned in with a grade of 70% or better to pass this class.

□ I understand that there are some *non-optional* homework problems (marked with asterisk in the assignment sheet) that require me to know how to use computer software such as Excel spreadsheets or Matlab, and I accept the responsibility to independently learn how to use such software to solve elementary tasks such as inverting a matrix, solving equations, and making graphs.

Name

Signature

Date

OPTIONAL message to the instructor: