

COE 2001 - STATICS

Text: Engineering Mechanics: Statics by D. McGill & W. King, 4th Ed.

MTWTH 2:15 pm - 3:10 pm

GTL-Blue

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Chapter #	Title	Suggested Problems
1	INTRODUCTION	
2	FORCES AND PART. EQUI.	
2.1-2	Forces & Lines of Action	2.26, 2.31
3	MOMENT OF A FORCE	
3.2	Moment of a Force about a Point	3.7, 3.14
3.3	Moment of a Force about a line	3.19, 3.25, 3.35, 3.36
3.4	The Couple	3.47, 3.51, 3.54
3.6	Equipollence of Force Systems	3.61, 3.63, 3.64
3.7	Force-&-Couple Resultant	3.82, 3.86, 3.89
3.8	Simplest Resultant of a F. S.	3.98, 3.104, 3.106, 3.115, 3.117
3.9	Distributed Force Systems	3.149, 3.155
4	ANAL. OF GENERAL EQUIL. PROBLEMS	
4.2	FREE-BODY DIAGRAM	4.1 - 4.11
4.3	Fund. Appls. of the Equil. Eqns.	
	Equil. of a Particle	2.48, 2.50, 2.58
	Equil. Sys. Particles	2.75, 2.90
	Rigid Body Equil.	4.13, 4.21, 4.34, 4.36, 4.39, 4.44, 4.46, 4.75, 4.95, 4.116, 4.121
4.4	Applications of the Equations of Equilibrium to Interacting Bodies or Parts of Structure	4.153, 4.158, 4.175, 4.219, 4.254
5	STRUCTURAL APPLICATIONS	
I	TRUSSES	
5.3	Method of Joints	5.7, 5.14
5.4	Shortcuts and Rigidity	5.27, 5.28, 5.29
5.5	Method of Sections	5.48, 5.49, 5.61, 5.68
5.6	Space Trusses	5.79
II	SYSTEMS CONT. MULTIFORCE MEMS.	
5.8	Axial, Shear Forces and Bending Moments	5.131, 5.141, 5.144, 5.149
5.9	Beams/Shear Moment Distributions	5.155, 5.162, 5.164, 5.177

6	FRICITION	
6.1	Laws,Coefficients & Basic Appl. of Coulomb Friction	6.6, 6.9, 6.34, 6.41, 6.54
7	CENTROIDS & MASS CENTERS	
7.1	Centroids: Lines,Areas & Volumes	7.12, 7.23
7.2	Method of Composite Parts	7.44, 7.51, 7.54
7.3	Center of Mass	7.100, 7.104, 7.109

Policy on Quizzes, Tests and Grades

1. Upon completion of every Section of the Syllabus, you are expected to work out all the suggested problems from that Section. Every Thursday, you may be asked to submit one problem (Instructor's discretion) from this set of suggested problems for the purposes of assessment of your performance. You may be given few challenging problems for an additional bonus towards your final grade.
2. The purpose of the homeworks and bonus problems is to (1) enhance your understanding of the theoretical principles through a wide range of applications (2) determine the concepts you need to master, (3) prepare you for your tests and (4) provide an opportunity to demonstrate your understanding.
Your dedication to learning and focused work decide your grade.
3. Two tests, each counting 30% and a final (40%) will be given to determine your course grade.

Reading: You are expected to read the assigned sections in your textbook and encouraged to check other sections and references. Learning is the ultimate goal.

Homeworks: The work you turn in is a product, with your name on it: it must represent your very best effort. It is expected to be completed on time, because you will plan your effort.
All work submitted must be done by you, and any help you get from your study group must be acknowledged. Refer to the Institute Honor Code when in doubt.

Exams: An imperfect means to evaluate your understanding not to punish you for your mistakes. I am always open to suggestions for improvement.

Special Note from your Instructor:

Be assured that I am your best fan. I applaud as you progress, and brag about your achievements at every opportunity.

**Test dates: First test : Thursday June 9
Second test : Thursday June 30
Final exam : Thursday July 21.**