CE 205 Statics (2 units)
2015 Fall Semester — Course Syllabus

Lecture	Monday and Wednesday	10:00 – 10:50 a.m.	SLH102
Discussion Classes	Wednesday 11:00-11:50am THH106		
	Wednesday, 1:00 – 1:50 a.m., KAP 134 Friday, 10:00 – 10:50 p.m., KAP 134		
Professor	Dr. Vincent Lee		
Office	KAP 230B		
Phone	(213) 740-0568		
Email	vlee@usc.edu		
Office Hours	MW 9-10am		
Teaching Assistant	??? to be announced		
Email			
Prerequisite	PHYS 151L Fundamentals of Physics I		
Co-Requisite	Mechanics and Thermodynamics (4 units)		
Textbook	Engineering Mechanics: Statics (12th ed.), R. C. Hibbeler, Prentice-Hall, 2009 ISBN 978-0-13-607790-0 — *or* —		
	Engineering Mechanics: Statics (13th ed.), R. C. Hibbeler, Prentice-Hall, 2012 **ISBN-13: 978-0132915540 ISBN-10: 0132915545**		
	ISBN 558862918 - Hibbleler - Engineering Mechanics: Statics (12th ed.) (soft) paperback copy		
Course Objectives	This course will present the theory and applications of basic engineering mechanics, includinG a review of vectors, the computation of resultant forces, the equations for equilibrium of particles and rigid bodies, the computation and diagramming of internal shear and moment forces, and dry friction.		
Learning Objectives	In this course, students will learn a basic knowledge of forces and moments on and between components of a structure with an emphasis on the fundamental steps (e.g., setup, analysis, solution, discussion) of engineering problems. They will also learn to analyze: forces and moments on a static rigid body, moments on/between multiple static rigid bodies and internal forces/moments in a static rigid body.		
Grading Schema	Best11 Quizzes	30 %	
	Homework	5.75 %	
	Programming	1.25 %	
	MidTerm 1,2	20 % each	
	Final MidTerm 3	23 %	
	Total	100 %	

CE 205 Statics — Fall 2014 Class Schedule

Date		Topics	Friday Quiz	Weekly Posted Homework[1] (Due Next Monday)		Suggested[2] Problems	Section(s) to Read
Mon	Wed						
8/24		Introduction; Force Vector		# 1	1-15,20; 2-33,54	1-10,11; 2-14,19,58	1, 2.1–2.3
	8/26	Force Vector	Quiz 1				
8/31		Force Vector	Quiz 2	# 2	2-78,92,108,118	2-63,79,82,93,106,131	2.4–2.9
	9/2	Particle Equilibrium					
9/7		Labor Day University Holiday					
	9/9	Force Vector; Particle Equilibrium	Quiz 3	# 3	3-4,14,19,61	3-6,20,62,63	3.1-3.4
9/14		Force System Resultants;		# 4	4-65,66,79,86	4-58,75,87,90	4.1–4.4
	9/16	Force System Resultants	Quiz 4				4.5-4.6
9/21		Force System Resultants		# 5	4-124,127,137,140,148	4-121,138,153,158	4.7–4.8
	9/23	Force System Resultants	Quiz 5				4.9-4.10
9/28		Distributed Loads; Rigid Body		#6	5-10,18,29,47,53	5-3,19,43,51	5.1–5.2
	9/30	Rigid Body Equilibrium	Quiz 6				5.3–5.5
10/5		Rigid Body Equilibrium; Review		# 7	5-63,65,79,89		5.5–5.7
10/7		Wed MIDTERM 1: Chapters 1-5	Quiz 7				
10/12		Structural Analysis (Trusses, Joints)		# 8	6-2,22,37,38(use method of joints)	6-3,17,42,45	6.1–6.2
	10/14	Zero-force members	Quiz 8				6.3
10/19		Structural Analysis (Trusses, Sections)		# 9	6-37,38(use method of sections),73,83	6-67,90,118,122	6.4
	10/21	Structural Analysis (Frames, Machines)	Quiz 9				6.6
10/26		Internal Forces		# 10	7-1,10,23,27	7-22,26,30	7.1
	10/28	Internal Forces	Quiz 10				
11/2		Internal forces; Review		# 11	7-13,17,34,35		
	11/4	Wed MIDTERM 2: Chapters 6 and 7.1	No Quiz				
11/9		Shear/Moment Diagrams		#12	7-43,45,47,60	7-46,51,59,61	7.2
	11/11	Shear/Moment Diagrams	Quiz 11				
11/16		Shear/Moment Diagrams		# 13	7-69,78,82,87	7-75,82,83	7.3
	11/18	Shear/Moment Diagrams	Quiz 12				
11/23		Shear/Moment Diagrams , Dry Friction		# 14	7-88; 8-15,23,54	7-87; 8-6,27	7.3, 8.1,2
	11/25	Wed PreThanksgiving USC Holiday	*Turkey Quiz 13*				
		Programming Example		Programming HW due Wed Dec 01			
		11/25 - 11/27 Thanksgiving Holiday					
11/30		Dry friction					8.1–8.2
	12/02	Review of Final MIDTERM 3	NoQuiz	Emphasis on Ch 6-8			
12/14		Mon Fri 8-10am					
		Christmas Holidays					

[1] **This will be posted Weekly on Blackboard. <Note: They are NOT problems from the Textbook>**
[2] Additional suggested multiple-choice problems from Prentice-Hall's Hibbeler Website

2

STATEMENT ON ACADEMIC INTEGRITY

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own.

All students are expected to understand and abide by these principles. *SCampus,* the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: http://www.usc.edu/dept/publications/SCAMPUS/gov/. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/.

STATEMENT FOR STUDENTS WITH DISABILITIES

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible.

DSP Contact Information

OFFICE LOCATION	HOURS OF OPERATION	PHONE NUMBER
STU 301	8:30 a.m. until 5:00 p.m., Monday through Friday	(213) 740-0776