## SICHUAN UNIVERSITY - PITTSBURGH INSTITUTE

# Statics and Mechanics of Materials 2

Spring Term 2019

#### Text

W. F. Riley, L. D. Sturges, and D. H. Morris Statics and Mechanics of Materials: An Integrated Approach, 2<sup>rd</sup> Edition Mechanics of Materials, 6<sup>th</sup> Edition (abridged) John Wiley & Sons, Inc.

ISBN 9781118950531

#### Instructor

### Lecture Hours

Tuesday: 10:15-11: 50 A.M. Thursday: 18:30-

Prof. HoChen Chien 20:10 P.M.

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## Administrative Policy

- •All the course information including homework assignments, solution sets for homework assignments and midterm examinations, lecture notes will be transmitted to each member of the class by the teaching assistants of the class.
- •There are weekly homework assignments that are normally due each Tuesday. *All the problems on each assignment will be graded.* Copies of solutions to all assigned problems will be made available.
- •The two mid-term tests and the final exam will be closed book, closed notes. An official formula sheet will be provided during the examination.
- There will be problem workout and bonus problems given in the class randomly. Participation, professionalism and performance in these problems is the key factor of the Discretional Score.

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•The date, location and time for the final examination will be determined on a later date.

• Final grade will be determined based on the following contributions:

Assessment Method	Percent of Final Grade
Homework Assignments	20%
Discretional	10%
2 Term Tests	40% (20% each)
Final Examination	30%

• Letter grades for the course will be assigned as follows:

Final Score	Letter Grade	
98 – 100	A+	
92-98	А	
90-92	A-	
88-90	B+	
82-88	В	

80-82	B-
78-80	C+
72-78	С
70-72	C-
68 - 70	D+
62-68	D
60-62	D-
0-60	F

# **Class Schedule**

Week	Date	Topics	Reading	Nistas
No.			Assignments	Notes
1	2/26/2019	Review of Stress and Strain	Sections 4.1 - 4.5	
	2/28/2019	Flexure: Strains and Stresses Second Moment of Areas	Sections 8.1 - 8.5	
2	3/5/2019	Flexure: Shear Force and Bending Moment Diagrams	Sections 8.6 - 8.7	
	3/7/2019	Flexure: Composite Beams		
3	3/ 12/ 2019	Flexure: Shearing Stresses	Sections 8.8	
	3/ 14/ 2019	Flexure: Design of Strength Flexure: Beam Deflection	Sections 8.9 - 8.10	
4	3/ 19/ 2019	Flexure: Beam Deflection	Sections 9.1 - 9.3	
4	3/21/2019	Flexure: Beam Deflection	Sections 9.4 - 9.6	
5	3/26/2019	First Mid Term Exam		
	3/28/2019	Flexure: Beam Deflection	Sections 9.7 - 9.8	
6	4/2/2019	Flexure: Beam Deflection	Sections 9.9 - 9.10	
	4/4/2018	Flexure: Beam Deflection		
7	4/9/2019	Castigliano's Method		Will be Assigned later

	4/ 11/ 2019	Combined Static Loading	Sections 10.1 - 10.3	
8	4/16/2019	Combine Static Loading	Sections 10.4 - 10.5	
	4/ 18/ 2019	Combine Static Loading	Sections 10.6	
9	4/23/2019	Combine Static Loading	Sections 10.7 -	
			10.10	
	4/25/2019	Combine Static Loading	Sections 10.11 -	
			10.14	
10	4/30/2019	Second Mid Term Exam		
	5/2/2019	Columns	Sections 11.1 - 11.4	
11	5/7/2019	Columns	Sections 11.5 - 11.6	
	5/9/2019	Review for Final Exam		
12	5/14/2019	Review for Final Exam		
	5/16/2019	Final Exam		