ME 323 - MECHANICS OF MATERIALS
Schedule for Summer 2023

PER	DATE	TOPIC	READING*	HOMEWORK DUE**
1 M	12-Jun	Introduction; Static equilibrium; Stress	Section 1	
2 T	13-Jun	Strain; Mechanical properties	Section 2	
3 W	14-Jun	Shear stress and strain – direct shear	Section 3	H01
4 Th	15-Jun	Stress – introduction to design of deformable bodies	Section 4	H02
5 F	16-Jun	Stress and strain – general definitions	Section 5	H03
6 M	19-Jun	Axial members – determinate structures	Section 6	H04
7 T	20-Jun	Axial members – indeterminate structures	Section 6	H05
8 W	21-Jun	Axial members – planar trusses	Section 6	H06
9 Th	22-Jun	Axial members – thermal effects	Section 7	H07
10 F	23-Jun	Torsion members – circular shafts	Section 8	H08
11 M	26-Jun	Torsion members – statically determinate structures	Section 8	H09
12 T	27-Jun	Torsion members – statically indeterminate structures	Section 8	H10
13 W	28-Jun	Beams – shear and moment diagrams	Section 9	H11
14 Th	29-Jun	Beams – flexural stresses	Section 10	H12
15 F	30-Jun	Beams – shear stresses	Section 10	H13
16 M	3-Jul	*Midterm Examination #1*		
	4-Jul	*University holiday – no class*		
17 W	5-Jul	Beams – deflections of determinate structures	Section 11	H14
18 Th	6-Jul	Beams – deflections of indeterminate structures	Section 11	H15
19 F	7-Jul	Beams – deflections using superposition	Section 11	H16
20 M	10-Jul	Energy methods – Castigliano's theorems	Section 16	H17
21 T	11-Jul	Energy methods – Castigliano's theorems	Section 16	H18
22 W	12-Jul	Energy methods – introduction to finite element methods	Section 17	H19
23 Th	13-Jul	Energy methods – introduction to finite element methods	Section 17	H20
24 F	14-Jul	Thin-walled pressure vessels – axial and hoop stresses	Section 12	H21
25 M	17-Jul	Stress transformation – principal /maximum shear stresses	Section 13	H22
26 T	18-Jul	Stress transformation – Mohr's circle	Section 13	H23
27 W	19-Jul	Stress transformation – absolute maximum shear stress	Section 13	H24
28 Th	20-Jul	Stresses – combined loading	Section 14	H25
29 F	21-Jul	Stresses – combined loading	Section 14	H26
30 M	24-Jul	*Midterm Examination #2*		
31 T	25-Jul	Failure analysis – stress theories	Section 15	H27
32 W	26-Jul	Failure analysis – stress theories	Section 15	H28
33 Th	27-Jul	Failure analysis – buckling of columns	Section 18	H29
34 F	28-Jul	Failure analysis – buckling of columns	Section 18	H30
35 M	31-Jul	Open period – activities to be announced		
36 T	1-Aug	Open period – activities to be announced		

* Reading assignments are from the course lecture book. It is expected that you will have read this material before viewing the lecture video for the day.

** Homework is to be submitted by 11:59PM on Gradescope on the due date. No late homework can be accepted.