

4.440/1.056 SYLLABUS

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OFFICE HOURS: BY APPOINTMENT

LEC: MW 9:30-11:00 AM, ROOM 3-333

LAB: F 10:00 AM - 12:00 PM, ROOM 5-233

	DATE	SUBJECT
FEBRUARY ↑ ↓	Mon 3	Introduction
	Wed 5	Compression structures
	Fri 7	LAB: Cables and arches
	Mon 10	Tension structures
	Wed 12	Designing for axial forces (Equilibrium HW due)
	Fri 14	LAB: Buckling and column project
	Mon 17	No Class: Presidents Day
	Tue 18	Truss design (Monday schedule)
	Wed 19	Forces and forms in beams
	Fri 21	LAB: Truss design/column project
	Mon 24	Beam design (Truss HW due)
	Wed 26	Forces and forms in frames
	Fri 28	LAB: Column testing (Built column due for testing)
	MARCH ↑ ↓	Mon 3
Wed 5		Structural failures
Fri 7		LAB: Beams and frames (Column report due)
Mon 10		Stability and indeterminacy
Wed 12		Indeterminate beams and frames (Beam HW due)
Fri 14		LAB: Review
Mon 17		Mid Review
Wed 19	Mid Project	

	DATE	SUBJECT	
MARCH	Fri 21	LAB: Beam project	
	M-F 24-28	SPRING BREAK	
	Mon 31	Indeterminate frames	
APRIL	Wed 2	Lateral load systems	
	Fri 4	LAB: Beam testing	
	Mon 7	Final project overview	
	Wed 9	Structural computation by Prof. Caitlin Mueller	
	Fri 11	LAB: Design project	
	Mon 14	Reinforced concrete design	
	Wed 16	Steel and timber design	
	Fri 18	LAB: Design project (Beam report due)	
	Mon 21	No class: Patriot's Day	
	Wed 23	Sustainable materials	
	Fri 25	LAB: Design project (Project proposal due)	
	Mon 28	Sustainable structures	
	Wed 30	Designing for the unexpected	
	MAY	Fri 2	LAB: Final project (Project preliminary calculations due)
		Mon 5	Design for strength and serviceability
Wed 7		Course overview	
Fri 9		LAB: Final project	
Mon 12		**FINAL REVIEW**	

Final grades will be calculated as follows:

Participation	5% (reduced for more than 3 unexcused absences)
Homework	20%
Lab reports	30%
Mid Project	15%
Final Project	30%

Required Text:

Allen, E. and Zalewski, W., *Form and Forces* (Wiley, 2009)