

## 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 6	Introduction
	Wed 8	Compression structures
	Fri 10	LAB: Cables and arches
	Mon 13	Tension structures
	Wed 15	Designing for axial forces (Equilibrium HW due)
	Fri 17	LAB: Buckling and column project
	Tues 21	Truss design (Monday schedule)
	Wed 22	Forces and forms in beams
	Fri 24	LAB: Truss design/column project
	Mon 27	Beam design (Truss HW due)
MARCH	Wed 1	Forces and forms in frames
	Fri 3	LAB: Column testing (Built column due for testing)
	Mon 6	Frame design
	Wed 8	Structural failures
	Fri 10	LAB: Beams and frames (Column report due)
	Mon 13	Stability and indeterminacy
	Wed 15	Indeterminate beams and frames (Beam HW due)
	Fri 17	LAB: Review
	Mon 20	Mid Review
	Wed 22	Mid Project

	<b>DATE</b>	<b>SUBJECT</b>	
MARCH	Fri 24	LAB: Beam project	
	M-F 27-31	SPRING BREAK	
APRIL	Mon 3	Indeterminate frames	
	Wed 5	Lateral load systems	
	Fri 7	LAB: Beam design	
	Mon 10	Final project overview	
	Wed 12	Structural computation	
	Fri 14	LAB: Beam testing (built beam due) (CPW)	
	Mon 17	No class: Patriot's Day	
	Wed 19	Guest Lecture	
	Fri 21	LAB: Design project (Beam report due)	
	Mon 24	Reinforced concrete design	
	Wed 26	Steel and timber design	
	Fri 28	LAB: Design project (Project proposal due)	
	MAY	Mon 1	Sustainable materials
		Wed 3	Sustainable structures
		Fri 5	LAB: Final project (Project preliminary calculations due)
Mon 8		Design for strength and serviceability	
Wed 10		Course overview	
Fri 12		LAB: Final project	
Mon 15	<b>**FINAL REVIEW**</b>		

Final grades will be calculated as follows:

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

Required Text:

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