

Perspectives on the Evolution of Structures - Spring 2012 - Syllabus

Spring 2012 UMass		Spring 2012 JHU		Meeting	Reading due	Assignment due
Wk	Day	Wk	Day			
T	24-Jan	T	31-Jan	The Washington Monument and the Eiffel Tower		
R	26-Jan	R	2-Feb	The Eiffel Tower and the St. Louis Gateway Arch	1	
T	31-Jan			In class exercise		
R	2-Feb	T	7-Feb	Telford, Brunel and British Metal Forms	2,3,4	hw1 (writing 1)
T	7-Feb			Western Mass structures / demonstrations		
R	9-Feb	R	9-Feb	Eads, Eiffel and the Forth Bridge	4,8	
T	14-Feb	T	14-Feb	Covered Bridges	Burr paper	hw2 (analysis 1 Eiffel)
R	16-Feb	R	16-Feb	John Roebling and the Brooklyn Bridge	5,6,8	
T	21-Feb	T	21-Feb	History and aesthetics in suspension bridges	Incan bridges	hw3 (analysis 2 GWB)
R	23-Feb	R	23-Feb	Chicago and the Skyscraper	7,13	
T	28-Feb	T	28-Feb	New York and the Skyscraper	Citicorp	hw 4 (writing 2 peer edit)
R	1-Mar	R	1-Mar	Modeling workshop (bring laptop www.mastan2.com installed)		
T	6-Mar	T	6-Mar	Robert Maillart and the origins of Reinforced Concrete	9	hw 5 (analysis mastan)
R	8-Mar	R	8-Mar	Freyssinet, Finsterwalder and the Origins of Prestressed Concrete	11, Fallingwater	
T	13-Mar	T	13-Mar	Cable-Stayed Bridges	IABSE article	hw 6 (writing 2 final)
R	15-Mar	R	15-Mar	Field Work		
T	27-Mar	T	27-Mar	Roof Vaults and National Styles	10,12	hw 7 (field report)
R	29-Mar	R	29-Mar	The Swiss Tradition of Bridge Design		
T	3-Apr	T	3-Apr	Exam 1		
R	5-Apr	R	5-Apr	New Bridge Forms: Maillart & Menn	13	
T	10-Apr	T	10-Apr	New Building Forms: Maillart & Isler		hw 8 (case study)
		R	12-Apr	Baltimore structures / Project Workshop	Bollman paper	hw 8b (team and topic)
R	12-Apr	T	17-Apr	Architecture and Engineering: Schlaich, Calatrava, Gehry, and Virlogeux	Schlaich, Holgate 1,2	hw 9 (outline)
R	19-Apr	R	19-Apr	Exam 2		
T	24-Apr	T	24-Apr	Green Buildings from Fathy to Yeang	Yeang	
R	26-Apr	R	26-Apr	High, wide and far, structural engineering today		
T	1-May	T	1-May	Project presentations		hw 10 (presentation)
		R	3-May	Project presentations		hw 10 (presentation)
xx		xx	xx	Paper in lieu of final exam		hw 11 (final paper)