

Perspectives on the Evolution of Structures - Syllabus

Spring 2013

JHU

Wk	Day	Meeting	Reading due	Assignment due
T	29-Jan	The Washington Monument and the Eiffel Tower		
R	31-Jan	The Eiffel Tower and the St. Louis Gateway Arch	1	
T	5-Feb	Telford, Brunel and British Metal Forms	2,3,4	hw1 (writing 1)
R	7-Feb	Eads, Eiffel and the Forth Bridge	4,8	
T	12-Feb	John Roebling and the Brooklyn Bridge	5,6,8	hw2 (analysis 1 Eiffel)
R	14-Feb	History and aesthetics in suspension bridges	Incan bridges	
T	19-Feb	Covered Bridges	Burr paper	hw3 (analysis 2 GWB)
R	21-Feb	Modeling workshop (bring laptop www.mastan2.com installed)	7,13	
T	26-Feb	Chicago and the Skyscraper	7,13	hw 4 (writing 2 peer edit)
R	28-Feb	New York and the Skyscraper	Citicorp	
T	5-Mar	Robert Maillart and the origins of Reinforced Concrete	9	hw 5 (analysis mastan)
R	7-Mar	Freyssinet, Finsterwalder and the Origins of Prestressed Concrete	11, Fallingwater	
T	12-Mar	Cable-Stayed Bridges	IABSE article	hw 6 (writing 2 final)
R	14-Mar	Field Work		
T	19-Mar	<i>spring break</i>		
R	21-Mar	<i>spring break</i>		
T	26-Mar	Roof Vaults and National Styles	10,12	hw 7 (field report)
R	28-Mar	The Swiss Tradition of Bridge Design		
T	2-Apr	Exam 1		
R	4-Apr	New Bridge Forms: Maillart & Menn	13	
T	9-Apr	New Building Forms: Maillart & Isler		hw 8 (case study)
R	11-Apr	Baltimore structures / Project Workshop	Bollman paper	hw 8b (team and topic)
T	16-Apr	Arch. and Eng.: Schlaich, Calatrava, Gehry, and Virlogeux	Schlaich, Holgate 1,2	hw 9 (outline)
R	18-Apr	Exam 2		
T	23-Apr	Green Buildings from Fathy to Yeang	Yeang	
R	25-Apr	High, wide and far, structural engineering today		
T	30-Apr	Project presentations		hw 10 (presentation)
R	2-May	Project presentations		hw 10 (presentation)
R	9-May	Paper in lieu of final exam, due at 2pm		hw 11 (final paper)