COURSE SCHEDULE (v. Nov. 10, 2016)

Week	Date	Day	Topic	Reading[1]	Assignment	Due
1	13 Sep	Tu	Introduction; review	1–7	1. Rankine	
	15	Th	Holiday - Mid-Autumn Festival			
2	20	Tu	Device efficiencies	–		
	22	Th	*Energy Transitions* : intro discussion	–		
3	27	Tu	Vapor power cycles	9		
	29	Th	Gas power cycles	8		1. Part A
4	4 Oct	Tu	Holiday - National Day			
	6	Th	Holiday - National Day			
5	11	Tu	Ideal gas mixtures; Discussion 1	13		
	13	Th	– ; Discussion 2	–		1. Part *B*
6	18	Tu	Combustion; Discussion 3	15	2. Gas turbine	
	20	Th	– ; Discussion 4	–		
7	25	Tu	Reacting sys–1st Law; Discussion 5	15		
	27	Th	– ; Discussion 6	–		2. Part *A*
8	1 Nov	Tu	Reacting sys–2nd Law	15		
	3	Th	Team discussions w instructor			
9	8	Tu	Fuel cells	Notes		
	10	Th	Chemical equilibrium	16		
10	15	Tu	–	–		
	17	Th	Hydrogen production	Notes	3. Hydrogen	2. Part *B*
11	22	Tu	–	–		
	24	Th	– ; Discussion 7	–		Draft research paper
12	29	Tu	Phase equilibrium; Discussion 8	16		
	1 Dec	Th	– ; Discussion 9	–		3. Part *A*
13	6	Tu	Gas/vapor mixture	14		
	8	Th	– ; course review	–		3. Part *B*
14	13	Tu	Quiz			Final research paper
	15	Th	No Class			3. Part *C*

[1]Cengel & Boles, 2011. *Thermodynamics: An Engineering Approach* , 7th ed in SI units (unless noted otherwise)

Reading assignments and in-class discussions based on Smil, 2010. *Energy Transitions: History, Requirements, Prospects* , Praeger