Chemical Engineering 641 Spring 2013

Class	Day	Date	Topic		Assignments	Reading
1	W	May 1	Introduction, Discussion of Content for Course	THF		
		_	Equilibrium Concepts			
2	F	3	More Equilibrium Concepts	THF	Proposal Due	Equilibrium
			Lab - Equilibrium program demos			Hints
3	М	6	Intro to ChemKin/Cantera	DOL		
			Lab - Work on equilibrium projects			
4	W	8	Equilibrium presentations	DOL		
			Lab - Cantera			
5	F	10	PSR/Premixed Theory	DOL	Proposal Due	
			Numerical Methods, Sensitivity Analysis			
6	М	13	Full & Reduced Mechanisms, Sensitivity Analysis	THF		
			Lab - Cantera			
7	W	15	PaSr	THF		
			Lab -Cantera			
8	F	17	Cantera presentations	Both		
		0.0	Exam review			
	M	20			Combustion Inst Mtg	
	۱۸/	20				
	W	22				
9	Th	23	EXAM (oral)	Both		
9	111	23	EXAM (Oral)	БОШ		
10	F	24	Intro to Multi-Dimensional CFD	THF		
10	'	24	Gridding, TEACH	1111		
12	М	27			_	
12	М	27	Memorial Day			
12		27	Memorial Day	DOL	Proposal Due	Ch. 10*
	Tu			DOL	Proposal Due	Ch. 10*
			Memorial Day SIMPLE, Turbulence-CFD	DOL	Proposal Due	Ch. 10*
11	Tu	28	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+?		Proposal Due	
11	Tu	28	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+?		Proposal Due	11.1-3*
11	Tu	28 29	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry	DOL	Proposal Due	11.1-3*
11	Tu	28 29 31	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+?	DOL	Proposal Due	11.1-3*
11 13 14	Tu W F	28 29 31 Jun 3	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+? Lab - Fluent/StarCCM+? Turbulent Gaseous Combustion Presentations	DOL Both		11.1-3* 11.4-8*
11	Tu W	28 29 31	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+? Lab - Fluent/StarCCM+? Turbulent Gaseous Combustion Presentations Particle Flow	DOL Both	Proposal Due Turbo Expo Mtg	11.1-3*
11 13 14	Tu W F M	28 29 31 Jun 3	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+? Lab - Fluent/StarCCM+? Turbulent Gaseous Combustion Presentations Particle Flow Demo - Fluent	Both DOL		11.1-3* 11.4-8* Ch.9, Ch.12*
11 13 14	Tu W F	28 29 31 Jun 3	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+? Lab - Fluent/StarCCM+? Turbulent Gaseous Combustion Presentations Particle Flow Demo - Fluent Solid Phase Reactions	DOL Both	Turbo Expo Mtg	11.1-3* 11.4-8*
11 13 14 15 16	Tu W F M W	28 29 31 Jun 3 5	Memorial Day SIMPLE, Turbulence-CFD Lab - Fluent/StarCCM+? Turbulence - Chemistry Turbulence - Chemistry Lab - Fluent/StarCCM+? Lab - Fluent/StarCCM+? Turbulent Gaseous Combustion Presentations Particle Flow Demo - Fluent Solid Phase Reactions Lab - Fluent	Both DOL THF		11.1-3* 11.4-8* Ch.9, Ch.12*
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