

CBE 450 Schedule for Fall Semester 2011

		DATE	TOPIC	ASSIGN	DUE	CHAP.	OBJ.
1	Wed	17-Aug-11	Atomic and Molar Balances Review	HW1		HSF1	
2	Fri	19-Aug-11	Molecular Description of Reaction Equilibrium			DJK1	
3	Mon	22-Aug-11	Continuum Description of Reaction Equilibrium			DJK2	
4	Wed	24-Aug-11	Molecular Description of Reaction Kinetics	HW2	HW1	DJK3	
5	Fri	26-Aug-11	Continuum Description of Reaction Kinetics			HSF3	
6	Mon	29-Aug-11	Numerical Solution of Systems of Algebraic Eqns			DJK4	
7	Wed	31-Aug-11	Numerical Solution of Systems of ODEs	HW3	HW2	DJK5	
8	Fri	2-Sep-11	Isothermal Batch Reactor Balances: Theory			HSF4	2,6,7
9	Mon	5-Sep-11	Labor Day - No Class				
10	Wed	7-Sep-11	Isothermal Batch Reactor Balances: Design Equations	HW4	HW3	HSF2	1
11	Fri	9-Sep-11	Isothermal Batch Reactor Balances: Numerical Solution				2,6,7
12	Mon	12-Sep-11	Isothermal CSTR Balances: Theory			HSF4	2,6,7
13	Wed	14-Sep-11	Isothermal CSTR Balances: Design Equations		HW4	HSF2	1
14	Fri	16-Sep-11	Isothermal CSTR Balances: Numerical Solution				2,6,7
15	Mon	19-Sep-11	Midterm Exam 1: HW 1-4				
16	Wed	21-Sep-11	Isothermal PFR Balances: Theory	HW5		HSF4	2,6,7
17	Fri	23-Sep-11	Isothermal PFR Balances: Design Equations			HSF2	1
18	Mon	26-Sep-11	Isothermal PFR Balances: Numerical Solution				2,6,7
19	Wed	28-Sep-11	Reactors in Series and Parallel	HW6	HW5	HSF4	3
20	Fri	30-Sep-11	Fall Break				
21	Mon	3-Oct-11	Forms of the Energy Balance			DJK	
22	Wed	5-Oct-11	Incorporating Heat of Reaction in the Energy Balance			DJK	
23	Fri	7-Oct-11	Nonisothermal Batch Reactors: Theory			HSF8	10
24	Mon	10-Oct-11	Nonisothermal Batch Reactors: Numerical Solution			HSF8	10
25	Wed	12-Oct-11	Nonisothermal CSTRs: Theory	HW7	HW6	HSF8	10
26	Fri	14-Oct-11	Nonisothermal CSTRs: Numerical Solution			HSF8	10

27	Mon	17-Oct-11	Nonisothermal PFRs: Theory			HSF8	10
28	Wed	19-Oct-11	Nonisothermal PFRs: Numerical Solution	HW8	HW7	HSF8	10
29	Fri	21-Oct-11	Experimental Determination of Reaction Properties: differential			HSF5	4
30	Mon	24-Oct-11	Experimental Determination of Reaction Properties: integral			HSF5	4
31	Wed	26-Oct-11	Experimental Determination of Reaction Properties: energy	HW9	HW8	DJK	4
32	Fri	28-Oct-11	Project Description	PROJECT			14, 16
33	Mon	31-Oct-11	Transient Behavior: Approach to Steady State			HSF9	11
34	Wed	2-Nov-11	Transient Behavior: Phase Plots & Types of Steady States		HW9	DJK	
35	Fri	4-Nov-11	Multiple Steady State Behavior: Theory			DJK	
36	Mon	7-Nov-11	Midterm Exam 2: HW 5-9				
37	Wed	9-Nov-11	Multiple Steady State Behavior: Numerical Solution	HW10		DJK	
38	Fri	11-Nov-11	Oscillatory Steady States			DJK	
39	Mon	14-Nov-11	Multiple Reactions			HSF6	12,13
40	Wed	16-Nov-11	Bioreactors		HW10	HSF7	
41	Fri	18-Nov-11	Bioreactors			HSF7	
42	Mon	20-Nov-11	Bioreactors			HSF7	
43	Wed	23-Nov-11	Adsorption Equilibria			DJK	
44	Fri	25-Nov-11	Thanksgiving Break - No Class				
45	Mon	28-Nov-11	Heterogeneous Reaction		PROJECT	HSF10	8,9
46	Wed	30-Nov-11	Study Day - No Class				
47	Mon	?-Dec-11	Final Exam: Cumulative, 10:15 AM-12:15 PM				