

**Introduction to Chemical Engineering
Engineering 110**

**Class Schedule
2008**

Week	Date	Topic	Assignment
1	Sept. 2 Tues	Course introduction What is Chemical Engineering? Engin110 website	Read Chapter 1
	Sept. 3 Wed	<i>Computer Laboratory Session</i> Chemical engineering accounts, computer set-up, and printing	
	Sept. 4 Thurs	History of chemical engineering Studying chemical engineering	
2	Sept. 9 Tues	Breadth of Chemical Engineering Process design Synthesis of Ammonia	Read Chapter 2.1 HW#1 due (Intro)
	Sept. 10 Wed	<i>Computer Laboratory Session</i> Introduction to the Internet and Microsoft Word	
	Sept. 11 Thurs	Process design Unit operations and flow sheets	Read Ch. 2.2 - 2.4
3	Sept. 16 Tues	Process design	Read Ch. 2.5 - 2.8 HW#2 due (Design)
	Sept. 17 Wed	<i>Computer Laboratory Session</i>	
	Sept. 18 Thurs	Mass balances Introduction to units and dimensions Conversions and significant figures	Read Ch. 5.1 Read Ch. 3.1-3.3
4	Sept. 23 Tues	Mass balances	HW#3 due (Units)

	Sept. 24	<i>Computer Laboratory Session</i>	
	Wed		
	Sept. 25	Mass balances	
	Thurs		
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5	Sept. 30	Engineering creativity	Read Ch. 3.6
	Tues	Individual research projects	HW#4 due (Mass Balances)
		Interpolative and Extrapolative Creativity	
		Generating Ideas	
	Oct. 1	<i>Computer Laboratory Session</i>	
	Wed	Creativity exercise	
	Oct. 2	Engineering creativity	
	Thurs	Introduction to physical sciences library	
		Effective technical writing / Peer review	
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6	Oct. 7	Mathcad	HW#5 due (Mass Balances)
	Tues	Introduction	
	Oct. 8	<i>Computer Laboratory Session</i>	
	Wed		
	Oct. 9	Midterm Examination I	
	Thurs		
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7	Oct. 14	<i>No Class – Monday Schedule</i>	
	Tues		
	Oct. 15	<i>Computer Laboratory Session</i>	
	Wed		
	Oct. 16	Process economics	
	Thurs	Introduction	
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8	Oct. 21	Process economics	Individual Paper Due
	Tues	Learning in teams; discussion of the group project; PowerPoint	Read Ch. 3.14

	Oct. 22	<i>Computer Laboratory Session</i>	
	Wed		
	Oct. 23	Process economics	
	Thurs	LeBlanc Process	
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9	Oct. 28	Microsoft Excel	HW#6 due
	Tues	Introduction	(Economics)
		Measurements and Curve Fitting	
	Oct. 29	<i>Computer Laboratory Session</i>	
	Wed		
	Oct. 30	Microsoft Excel	Read Handouts
	Thurs	Solving Mass Balances	
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10	Nov. 4	Mathcad	HW#7 due (Mass
	Tues	Solving Mass Balances	Balances + Excel)
	Nov. 5	<i>Computer Laboratory Session</i>	
	Wed		
	Nov. 6	Mathcad	
	Thurs	Economic Analysis and Optimization	
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11	Nov. 11	<i>No Class – Veteran Day</i>	
	Tues		
	Nov. 12	<i>Tuesday Schedule</i>	HW#8 due (Mass
	Wed	Chemical engineering faculty research panel	Balances +
			Mathcad)
	Nov. 13	Midterm Examination II	
	Thurs		
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12	Nov. 18	<i>No Lecture - AIChE</i>	
	Tues		
	Nov. 19	<i>No Laboratory - AIChE</i>	
	Wed		

Nov. 20 *No Lecture - AIChE*
Thurs

13 Nov. 25 **Safety** Read Handouts
Tues Plant case studies
Laboratory safety

Nov. 26 *Computer Laboratory Session*
Wed

Nov. 27 *No Class – Thanksgiving*
Thurs

14 Dec. 2 **Group Design Presentations I**
Tues ***** Also Tuesday evening from 5:30 – 7:30 *****

Dec. 3 *Computer Laboratory Session*
Wed

Dec. 4 **Group Design Presentations II**
Thurs ***** Also Thursday evening from 5:30 – 7:30 *****

15 Dec. 9 **Engineering ethics** Read Handouts
Tues

Dec. 10 *Computer Laboratory Session*
Wed

Dec. 11 **Course Summary**
Thurs