

Chem 21 Schedule – Fall 2009 – Dr. Kline

Monday Lab Sci 305, 3-7 pm	Tuesday Lecture Sci 140, 6:30-9 pm	Wednesday Lab Sci 305, 6-10 pm	Thursday Lecture Sci 140, 6:30-9 pm
31-Aug Lab & Safety Information; .NExT	1-Sep Course Information; Chpt 1–Bonding, Acid- Base	2-Sep Lab & Safety Information; .NExT	3-Sep Chpt 1–continued
7-Sep Labor Day Holiday Campus closed	8-Sep Chpt 2-Intro to Organic (Naming)	9-Sep Lab Check In (T 1,3,4); Expt 1M (G) – Caffeine from Tea (T 2,5,6,8 & 9.5, step 4)	10-Sep Quiz 1 Chpt 2–Intro to Organic
14-Sep Lab Check In (T 1,3,4); Expt 1M (G) – Caffeine from Tea (T 2,5,6,8 & 9.5, step 4)	15-Sep Chpt 2-continued	16-Sep Expt 2m (G) – Purification of Caffeine (T 12, 15)	17-Sep Quiz 2 Chpt 3–Alkene Structure; Intro to Reactions
21-Sep Expt 2m (G) – Purification of Caffeine (T 12, 15)	22-Sep Chpt 3-continued	23-Sep Expt 4m (G)– Salicylic Acid (T 7.1, 9, 10)	24-Sep Test 1
28-Sep Model Lab (and Lecture): Stereochemistry (Chpt 5)	29-Sep Chpt 4-Alkene Reactions	30-Sep Model Lab (and Lecture): Stereochemistry (Chpt 5)	1-Oct Quiz 3 Chpt 4-continued
5-Oct Expt 4m (G)– Salicylic Acid (T 7.1, 9, 10)	6-Oct Chpt 4-continued; Intro to Spectroscopy (portions of Chpt 12 & 13)	7-Oct NMR of Salicylic Acid (T 19.11/13); Set up fermentation for Expt 3	8-Oct Quiz 4 Chpt 13– ¹³ C NMR Spectroscopy (sections 1, 2, 3, 19, 20)
12-Oct NMR of Salicylic Acid (T 19.11/13); Set up fermentation for Expt 3	13-Oct Chpt 13– ¹ H NMR Spectroscopy (rest of chpt 13)	14-Oct Expt 3M (+ handout) – EtOH from Fermentation – Distillation (T 11.1 – 11.5)	15-Oct Quiz 5 Chpt 12: Mass Spectrometry (sections 12.1-12.5)
19-Oct Expt 3M (+ handout) – EtOH from Fermentation – Distillation (T 11.1 – 11.5)	20-Oct Test 2	21-Oct Expt 6.2M (G) – Limonene frm Oranges (T 11.7, 14); mp 16.2m	22-Oct Chpt 12: Infrared Spectroscopy (sections 12.6-12.15)
26-Oct Expt 6.2M (G) – Limonene frm Oranges (T 11.7, 14); mp 16.2m	27-Oct Quiz 6 Chpt 5–Stereochemistry	28-Oct Expt 16.2m (G) – Br ₂ Addition to Cinnamic Acid	29-Oct Chpt 5-continued
2-Nov Expt 16.2m (G) – Br ₂ Addition to Cinnamic Acid	3-Nov Quiz 7 Chpt 6-Alkynes	4-Nov Handout –Spectr. ID of a Liquid Unknown (solo) (T 18, 19, 20.2, 20.5)	5-Nov Chpt 7 – Delocalized Electrons
9-Nov Handout –Spectr. ID of a Liquid Unknown (solo) (T 18, 19, 20.2, 20.5)	10-Nov Quiz 8 Chpt 7-continued; uV- Visible Spectroscopy (sections 12.16-12.20)	11-Nov Expt 9.1 (G) - S _N 1 and S _N 2 Reactivity; Chpt 8– Substitution Rxns of Alkyl Halides (lecture)	12-Nov Chpt 8- Substitution Reactions of Alkyl Halides
16-Nov Expt 9.1 (G) - S _N 1 and S _N 2 Reactivity; Chpt 8– Substitution Rxns of Alkyl Halides (lecture)	17-Nov Test 3	18-Nov Expt 10M (G) - E2 Elimination (T 7.2, 7.3, 16)	19-Nov Chpt 8- continued

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23-Nov Expt 10M (G) - E2 Elimination (T 7.2, 7.3, 16)	24-Nov Quiz 8 Chpt 9–Elimination Rxns of Alkyl Halides, S _N vs. E	25-Nov No lab scheduled.	26-Nov Thanksgiving Holiday Campus closed
30-Nov Expt 8.1 (G)– Radical Chlorination	1-Dec Chpt 9–continued	2-Dec Expt 8.1 (G)– Radical Chlorination	3-Dec Test 4
7-Dec Lab Checkout	8-Dec Chpt 11–Radical Rxns	9-Dec Lab Checkout	10-Dec Lab Test Chpt 11–continued
14-Dec No lab scheduled.	15-Dec First Day of Final Exams	16-Dec	17-Dec Final Exam 6:45-9:45 pm
21-Dec			

Schedule Notes

Lecture topics may deviate from this schedule without notice. Any **changes** in lab experiments, tests, or quizzes will be announced in lecture and/or via eCompanion (email or announcement). Please notify the instructor within the first week of class if any test, quiz, or lab dates present a problem with respect to a day of **religious observance**. **Quizzes** will be given at the end of the class period. **Tests** will use the entire class period.

Lab reading from *Techniques in Organic Chemistry* (T) is indicated by chapter and/or section for each experiment (this information is also indicated with each experiment). For each experiment also read the introductory information for the experiment from *Modern Projects and Experiments in Organic Chemistry* as well as the appropriate procedure. The Lab Website has links to additional information, including videos of techniques, for many of the labs along with the Report Summary Sheet for each experiment. (G)=lab book says gloves required for one of reagents (*which one(s) should be noted in your lab book*); (g)=lab book says something is skin irritant or to avoid contact with skin, but doesn't specifically mention using gloves.

Other class information available includes a course syllabus, lab information, and suggested problems to work.

Revised 8/4/09