

FALL 2005 Chemistry 14CL Laboratory Schedule and Assignments (LAST DAY TO DROP 14CL: October 14)

SAFETY GLASSES, LAB COATS, LONG PANTS & CLOSED-TOE SHOES MUST BE WORN IN THE LABORATORY AT ALL TIMES. FAILURE TO DO SO WILL RESULT IN DISMISSAL FROM THE LABORATORY

Pre-lab Due Date ⁴	Experiment ¹	Technique Videos ²	Assigned Readings ³	Post-lab Due Date ⁴
9/29 – 9/30	1: Check-in	Safety	M p.2-27	NONE
10/4 – 10/12	8: pH titration of an amino acid (3) & Pipet Calibration	(i) Solution Preparation (ii) Use of the Pipet & Buret	B p.1034 - 1048; AJ p.579 – 609	10/25 – 10/26
10/13 – 10/14	6: Aldol Condensation(1)	(i) Melting Point Determination (ii) Recrystallization	M p.78 - 95	10/20 – 10/21
10/18 – 10/19	Molecular Modeling (1)		B p.28-43 & 682-685; AJ Ch. 3	11/3 – 11/4
10/20 – 10/26	7a: Caffeine Extraction (2)	Extraction	M p. 56 - 71	<i>One report for lab #7a</i> 11/8 – 11/9
10/27 – 10/28	7a: Caffeine Characterization (1)		M p. 152 – 162; p.197 – 219; 284 – 296	
11/1 – 11/2	7b: Infrared Spectroscopy Workshop(1)	IR	B Ch. 12 & 14	11/15 – 11/16
11/3 – 11/4	9: Distillation (1)	Distillation	M p.109 - 118	<i>One report for lab #9</i> 11/17 – 11/18
11/8 – 11/9	9: Gas chromatography (1)	GC	M p.163 - 177	
11/15 – 11/16	Oxidation of Borneol to Camphor (1) (Handout)		M p.56 –71; AJ p. 633 – 638 ; p.F95 – F102	11/22 – 11/23
11/17 – 11/18	Isolation of Chlorophyll & Carotenoid Pigments from Spinach (1) (Handout)	Column Chromatography	M p.178 - 189	<i>One post-lab for the Spinach Experiment</i>
11/22 – 11/23	Characterization of Chlorophyll and Carotenoid Pigments From Spinach (1)	Thin Layer Chromatography (TLC)	B p. 532 - 538	11/29 – 11/30
11/29 – 12/2	Iodimetric Titration of Vitamin C (2) (Handout)		AJ p. 633 – 638 ; p.F95 – F102	12/6 – 12/7
12/6 – 12/7	15: ¹³ C NMR and DEPT Spectroscopy Workshop (1)		M p.270 – 277 ; B 498-500	12/6 – 12/7 (<i>In Lab</i>)
12/8 – 12/9	Lab Clean-up (<i>Attendance is required</i>)			

1) *Chemistry Experiments for Life Science Majors, Second Edition, A.A. Russell, Burgess Publishing company.*

- 2) Instructional Media Library, Powell 270 or on the WWW (<http://www.oid.ucla.edu/Webcast/Chemistry/index.html>)
- 3) Mohrig (Organic Techniques) = **M**, Brown (Organic Chemistry)= **B**, Atkins and Jones, The Quest for Insight, 2nd Edition = **AJ**
- 4) Pre-lab reports (if any) are due at the **beginning** of the lab period. Observations and data are due at the end of the lab period in which the data are taken. Post-lab reports are due at the beginning of your regularly scheduled lab period.

NO WORK WILL BE ACCEPTED AFTER 5:00 P.M. FRIDAY, December 9, 2005