

Spring 2016 Chemistry 14CL Laboratory Schedule and Assignment (Last Day to Drop Impacted class: April 8, 2016)

**SAFETY GLASSES AND FLAME-RESISTANT LAB COATS MUST BE WORN IN THE LABORATORY STARTING ON THE FIRST MEETING.
FAILURE TO DO SO WILL RESULT IN DISMISSAL FROM THE LABORATORY.**

Date	Experiment ¹	Videotape ²	Recommended Reading ³	Post-labs Due Date ⁴
3/29-3/30	1: Check-in, Pipet Calibration (1)	Safety (#5805) <i>Use of a Pipet</i>	M p. 3-20, 32-39	<i>NONE</i>
3/31-4/6	8: Titration of an Unknown Amino Acid (2)		AJ p. 475-496; B p. 1120-1128	4/12 & 4/13
4/7-4/8	Determination of Iron in Vitamin (1) (Handout)	Spectrophotometry	B p. 1065; AJ p. F 47-F 50, p. F 77- F 84	4/14 & 4/15
4/12-4/15	7a: Extraction of Caffeine (2)	Extraction (#3132)	M p. 142-173	<i>One postlab for 7a refer to due date shown below</i>
4/19-4/20	7b: Spartan Infrared Spectroscopy (1)	Infrared (#3139)	B Ch. 12 & Ch. 14	
4/21-4/22	7a: Analysis of Caffeine (1)		M p. 255-269; p. 311-347; p. 441-464	4/28 & 4/29
4/26-4/29	Titrimetric Analysis of Vitamin C (2) (Handouts)		AJ p. 515-542; p. F 47-F 50, p. F 77- F 84	5/5 & 5/6
5/3-5/4	6: Aldol condensation (1)	Melting Point Determination (#3138)	M p. 211-220, p. 221-235	5/12 & 5/13
5/5-5/6	Molecular Modeling (1) (Handout)			5/12 & 5/13
5/10-5/11	Isolation of Chlorophyll and Carotenoid Pigments from Spinach (Handouts) (1)	Column Chromatography (#3133)	M p. 270-291	<i>One post-lab for Spinach</i>
5/12-5/13	Characterization of Pigments isolated from Spinach (1)	Thin Layer Chromatography	B p. 1110-1112, M p. 255-269	5/19 & 5/20
5/17-5/18	15: ¹³ C NMR and DEPT Spectra (1)		M p. 408-429; B p. 538-540	5/17 & 5/18
5/19-5/20	10: Oxidation of Borneol to Camphor (1) (Handouts)		M p. 142-173; AJ p. 515 - 542;	<i>for due date see below</i>
5/24-5/27	9: Distillation & Gas Chromatography (2)	Distillation (#3134) GC (#3134)	M p. 173-196 M p. 291-307	5/31 & 6/1
5/31-6/1	10: Analysis of Camphor (1)			6/2 & 6/3
6/2-6/3	Lab Clean-up & Review for Final (Attendance is mandatory)			

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://www2.oid.ucla.edu/Webcast/chemistry>)

3. **M**= Mohrig (Organic Techniques, 4th edition), **B**= Brown (Organic chemistry, 7th edition), **AJ**= Atkins and Jones (The Quest for Insight, 5th edition)

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 one week after the experiment is finished.

NO WORK WILL BE ACCEPTED AFTER 4:00 P.M. Friday, 6/3/2016