

LECTURE SCHEDULE

<i>Date</i>	<i>Chapter*</i>	<i>Topic</i>
5/17	0,1	Introduction to Chemical Analysis
5/19	3	Errors in Measurements, Propagation of Uncertainty
5/24	4	Coping with Random Error (distributions)
5/26	4	Interpreting Data from a Few Measurements
5/31	5	Linear Least Squares, Calibration Methods
6/2	28	Sampling and Standards
6/7	6,8	Quantitative Chemical Reactions and Equilibria
6/9	10,11	Acid-Base Reactions and Equilibria
6/14	11,12	Acid-Base Titrations and Buffers
6/16	13	Metal-ion Complex Reactions and Titrations
6/21	14	Oxidation-Reduction Reactions and Electrochemical cells
6/23	16	Redox Titrations
6/28	Hour Exam (in class)	
6/30	15	Potentiometry
7/5	18,20	Introduction to Spectroscopy
7/7	18,19	Quantitative Spectrophotometry, Beer's Law
7/12	18, 20, Handout	Fluorescence Spectroscopy and Applications
7/14	21	Atomic Spectroscopy, introduction
7/19	21	Atomic Spectroscopy, theory and applications
7/21	23	Introduction to Chemical Separations
7/26	24	Gas-Liquid Chromatography
7/28	25	High Performance Liquid Chromatography
8/2	Catch-up and Review for Final Exam	
8/4	Thursday, 12:30 PM - 2:30 PM Comprehensive Final Exam	

* Chapters refer to D. C. Harris (no relation), *Quantitative Chemical Analysis*, Sixth Edition
Freeman: New York, 2002.

LABORATORY SCHEDULE

Week

- 5/16 No lab Mon. & Tues. Exp 1. Basic Operations, Weds. & Thurs.
- 5/23 Exp. 1. Review of Basic Operations
- 5/30* Exp. 2. Applied Acid-Base Titrations
- 6/6 Exp. 3. Redox Titration of Iron
- 6/13 Exp. 4. Spectrophotometric Determination of Manganese in Steel
- 6/20 Rotation of Exps. 5 - 8 Exp. 5. Gas Chromatography
- 6/27 Rotation of Exps. 5 - 8 Exp. 6. High Performance Liquid Chromatography
- 7/4* Rotation of Exps. 5 - 8 Exp. 7. Atomic Absorption Spectroscopy
- 7/11 Rotation of Exps. 5 - 8 Exp. 8. Molecular Fluorescence Spectroscopy
- 7/18 Special Project
- 7/25* Special Project
- 8/2 Special Project Report due

Note: Special Project Preproposal due Tuesday, June 21, 11:30 AM (in class)

Note: Special Project Proposal due Wednesday, July 6, 5:00 PM (JMH Office)

Note: Special Project Reports due in Tuesday, August 2, 5:00 PM (JMH Office)

* Due to the Monday Holiday, the Monday afternoon section will meet Friday afternoon.