

QUANTITATIVE CHEMICAL ANALYSIS

LAB SCHEDULE (CHMY 311)

*Tentative*

Fall 2009

INSTRUCTOR: Dr. Will Wickun (657-2027; [williamwickun@msubillings.edu](mailto:williamwickun@msubillings.edu))

TEXT: Daniel C. Harris, *Quantitative Chemical Analysis, 6th ed.* (New York: W.H. Freeman and Company, 2003)

STUDENT WEB SITE FOR EXPERIMENTS: [www.whfreeman.com/qca7e](http://www.whfreeman.com/qca7e)

<u>Day</u>	<u>Experiment</u>	<u>Website</u>	<u>Due Date</u>
9/10	Open	--	--
9/17	Lab introduction, lab report brief, check-in	--	--
9/24	Gravimetric Determination of Iron as Fe <sub>2</sub> O <sub>3</sub>	3	8 Oct
10/1	...continued		
10/8	Statistical Evaluation of Acid-Base Indicators	5	15 Oct
10/15	Preparing Standard Acid and Base	6	(combined with #8)
10/22	Analysis of a Mixture of Carbonate and Bicarbonate	8	5 Nov
10/29	...continued		
11/5	Iodometric Titration of Vitamin C	13	12 Nov
11/12	Measuring Mn in Steel by Spectrophotometry with Standard Addition	24	3 Dec
11/19	...continued		
11/26	<b>Thanksgiving Break</b>		
12/3	Clean glassware and bench; Check-out		
12/10	Open		

COURSE REQUIREMENTS: This course requires mandatory lab attendance and six lab reports. Reports will be graded upon the criteria of scientific soundness, quality of empirical results, format, grammar, spelling, and scientific writing style. Each lab report is worth 40 points, each quiz 10 points, and the lab notebook 10 points. Therefore, each experiment has a total value of 60 points.

LAB NOTEBOOKS: I will collect laboratory notebooks at the completion of each experiment and I expect that you will keep them in the proper professional manner. Please read Section 2-2, pp 22, or better yet, see me, if you are not certain. To ensure that you are indeed recording data as collected and observations as they occur, I will make spot checks of your notebooks during the lab.

DUE DATES FOR LAB REPORTS: *Each of the five lab reports will be due at the beginning of the lab period exactly one week from the completion of that particular experiment! 10% will be subtracted for each day or fraction thereof that the report is late.*

<u>GRADING:</u>	Lab Reports (five)	200 points	<u>SCALE:</u>	300 - 270 pts	A
	Lab Quizzes (five)	50		269 - 240	B
	Lab Notebooks	50		239 - 210	C
	TOTAL	300 points		209 - 180	D
				180 - 0	F

LABORATORY PROCEDURE: Each week, the agenda will be as follows:

1. submission of lab reports
2. short quiz on experiment to be performed that lab period
3. lab prep by instructor or TA
4. perform experiment
5. inspection of assigned balance and bench area and instructor's or TA's sign-out of lab notebook
6. dismissal

POLICY ON ACADEMIC DISHONESTY: All students are expected to adhere to the highest standards of academic honesty and refrain from any action that is dishonorable or unethical. In all quizzes, and lab reports, students are expected to submit their own work. Violation of Academic Dishonesty will be dealt with severely.

**This syllabus is subject to change due to circumstances beyond my control. But if it does, I will inform you of the fact as soon as it occurs.**