

*Chemistry 327
Syllabus
Summer, 2016*

Chemistry 327 is a combined lecture/laboratory course that is an introduction to analytical chemistry. The lectures will begin with a discussion of the treatment of experimental error, including the use of statistics. This will include acid-base equilibria, solubility equilibria, complexation equilibria, and oxidation-reduction equilibria. Electrochemistry will be covered in connection with the discussion of oxidation-reduction equilibria. There will also be coverage of spectroscopy and spectrophotometry, chromatography, and mass spectrometry.

Instructor: R. Claude Woods, 262-2892, rcwoods@wisc.edu,
4337 Chemistry

Lectures: MTWTh 10:40 am, B371 Chemistry. **Questions or discussion from class members are most welcome during lecture.**

RCW's Office Hours: Make an appointment, or try just stopping by.
Appointments may be made immediately after a lecture, or if necessary, by e-mail.

On line content: Learn@UW.

Text: Daniel C. Harris, *Quantitative Chemical Analysis* (Eighth Edition, W.H. Freeman and Company, New York, 2007).

Safety Goggles: You are required to wear safety goggles at all times when in the laboratory. Further important information about laboratory safety issues is contained in the laboratory manual.

Mathematical and Plotting Software: Excel will be used in this course.

Problem Sets: You will receive problem sets at roughly one week intervals throughout the session. The teaching assistants will grade your solutions, and solution sets will be supplied after the problem sets are turned in. You may work with other students on the problems, but you must hand in and take responsibility for your own solutions. The problem set grades are counted in the final grade. More importantly the exams will be closely related to the problem work that has been assigned, so a firm grasp of the problem sets will be the highly important for doing well on the exams.

Examinations: There will be three examinations. These tests will be given during regularly

scheduled lab periods on dates to be given later, except that the last of the three will be on the last day of class.

Conflicts: If a religious observance conflicts with any scheduled activity, please notify me. We will schedule a makeup or otherwise accommodate you.

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| <i>Grading:</i> | Three tests (150 points each) | 450 points |
| | Problem sets | 150 |
| | Laboratory | 400 |
| | TOTAL | 1000 points |

You must complete the laboratory satisfactorily to pass the course. Letter grades for the cut-offs for various final semester letter grades will be determined at the end of the semester, but in no case will the final letter grades be in a different order than the above numerical totals. There are no predetermined numbers of any particular grades. The teaching staff will, to the best of their ability, assign letter grades that fairly and accurately correspond to each student's performance in the class.