

Spectrometric Analysis  
CH 436, CH 536 -- Fall, 2007  
Syllabus

Instructor: Dr. David H. Peyton; 323B SB-I

Office hours: 1:30 - 2:30 MW, or by appointment.

Text: Introduction to Spectroscopy, 3<sup>rd</sup> Ed., Pavia, Lampman, & Kriz, 2001.  
*The student is, of course, also responsible for all material given in class.*

Web Pages: <http://chem.pdx.edu/~peytond/>  
*This is a webCT-available course!*

CH\_536: There will also be reports on the literature for the 536 students.

Overview: This course is designed to improve the students' prowess in using spectroscopic techniques for the structural analysis of organic chemical compounds. The techniques include infrared spectroscopy, nuclear magnetic resonance spectroscopy (NMR), optical (UV-VIS) spectroscopy, and mass spectrometry. The emphasis will be NMR, including 1-D and 2-D methods as relates to "small organic molecule" structural interpretation. An introduction to the physical principles and instrumentation behind each of the measurements will be given.

Grades: Based on two midterm exams and a cumulative final exam, and quality of literature reports (for CH 590 students).  
It is anticipated that incompletes or Xs will not be given. Family emergency and severe illness cases should contact the instructor.

Midterms: Oct 19 (Friday) & Nov 7 (Wednesday)

The Final: will be worth twice each Midterm score, and the Grade will be awarded based on the standard scale:  
90% = A; 80%=B; 70%=C; 60%=D (with +/- within these ranges).  
*Date/time of the Final Exam: Tuesday, Dec 4, at 8:00 – 9:50 am*