

Chem 552: Spectroscopic Identification of Organic Compounds
TuTh 10:00-11:15A ISB 321

- Textbook: Organic Structure Analysis
Crews, Rodriguez, Jaspars
- Grading: 60% Three Exams
25% Homework and quizzes
15% Participation and attendance
Grade breakdown, with some leeway:
A = 90+, B = 80-89, C = 70-79, D = 60-69, F = 0 – 59
Graduate and undergraduate students are on same scale.
- Exams: 3 Exams, all material covered previously is fair game.
These are given during class time.
10/9 Exam 1
11/6 Exam 2
12/4 Exam 3
- HW and Qs: There will be some number of assigned homework sets and quizzes assigned on an as needed basis and announced in class or on Moodle. Be sure you attend class or make a good friend in the class. Quizzes will be in the form of take-home problems, in-class quizzes, or online quizzes. Be sure to be in class on time to assure you do not miss an unannounced quiz.
- Office hours: Rather than have hard and fast times each week, I prefer that students make an appointment via email. chambers@chem.umass.edu I am absolutely more than happy to meet with any of you about class or other advice you desire.
- Absence: If you are absent from an exam or quiz, it is your responsibility to present to me an approved excuse form within 2 days. Simply put, if you miss class, the onus is on you to explain it.
- Schedule: Here is a rough schedule of topics:
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| September | Intro, publishing requirements, nature of matter, analog to digital, instrumentation
Elemental analysis
NMR (1H NMR)
IR |
| October | UV/vis
Mass spec (singly charged small molecules to some peptides/proteins) |
| November | NMR (1H NMR advanced, 13C NMR) |
| December | NMR (more advanced) |
- Some advice: This class will be challenging. Some material will be easy for you, some will be brand new. I encourage all students to use this course to augment their undergraduate or graduate research endeavors. I welcome real-world questions from your lab and hope that you will apply the information you learn in 552 to your own research efforts.