

Chemistry 328 Syllabus

Fall, 2005

Instructor: Dr. Michael L. Wilson

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Office Hours: By appointment

Course: CO328, Qualitative Organic Analysis

Lecture Time: Monday and Wednesday from 1:40 pm to 4:30 pm in the lab at Be401.
Lecture in Be 415 from 12:40 pm to 1:30 pm on Monday.

Communication: E-Mail is the preferred method of communication. Every effort to respond within 24 hours will be made.

Prerequisite: Chemistry 121-122 (The spectroscopic material from these courses should be reviewed in preparation for the course.)

Disability Needs:

Any student who has a need for accommodation based on the impact of a disability should contact Disability Resources and Services at 215-204-1280 in Ritter Annex. Personnel there will coordinate reasonable accommodations for documented disabilities.

Textbook: Organic Structural Spectroscopy by Cruz, *et al.*
Prentice-Hall, 1998

This book is available at the bookstore in the student center. This is the same book used in Dr. DeBrosse's CO 421, Physical Methods in Organic Chemistry.

Course Goals and Outcomes: This course provides experience in preparation and characterization of organic compounds in a setting similar to a graduate or industrial research laboratory. Advanced spectroscopy will be used extensively. This course is designed to teach the student to fully characterize organic and organometallic substances, by proving their structures using a combination of spectroscopic and chemical techniques. More than one project may be underway at the same time, so learning to manage multiple simultaneous goals is part of this course. Learning to write an acceptable lab notebook and report is also part of this course. The course will start with the learning of techniques and the interpretation of their results provided by the instructors, but will increasingly rely on the student's own approach to resolving any particular structure. By the end of the course, students should be able to proceed without

instructor advice on the selection of techniques or their interpretation. Literature searching will be required to complete various reports.

Drop, Add and Withdrawal: These matters are handled entirely by the student advising office of your college. Instructor approval is no longer needed.

Attendance: Full attendance is expected and required. Poor attendance is uniformly associated with unsatisfactory results.

Grading: The course is built around a series of organic chemical structure problems which are partially or fully solved. Each project is completed with a detailed report delineating the proof of structure of the materials involved. About 8-12 projects will be undertaken, and each project will have equal value. Grading will be based on the quality and timeliness of the reports, and the suitability the techniques selected to solve the problems at hand.

Cell Phones: Cell phones are not required, so they should not be present in the work space of this course. The use of laptops is permitted.

Recitation: There is no recitation in this course.