CH 351 QUALITATIVE ORGANIC ANALYSIS

Fall 2009 W 1:00 pm to 8:00 pm

Lecture: Chemistry Conference Room (S-1-89)
Laboratory: S-2-074

Instructor: Dr. Bela Torok
Room S-1-32, Science Building
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Office Hours: Monday: 10am-1pm or by appointment

Exams: Exam 1: 21 October 2008
Exam 2: 18 November 2008

There will be no make up exams. In case of any serious problems contact me in advance.

Grading: Grades will be determined on the basis of your performance in the following areas

Assignments (5):	100
Mid-term 1:	75
Mid-term 2:	75
Laboratory Reports:	150

The grades will be computed by the percentage of the total 400 points. The percentage-grade equivalences are as follows:

Grading:		
	400-375	A
	374-350	A-
	349-325	B+
	324-305	B
	304-290	B-
	289-275	C+
	274-260	C
	259-245	C-
	244-230	D+
	229-215	D-
	214-200	D-
	below 200	F

Both the assignments and exams will be designed to test your ability to apply what you have learned. They will be only: spectrum analysis, short-answer type questions and short essays.

Classroom rules: As usual. Please, be in time. In case of any problem, let me know it in advance.

Books:

Silverstein: Spectrometric Identification of Organic Compounds, 7th ed, Wiley.

Reference books:
Friebolin, Basic One and Two Dimensional NMR Spectroscopy

Summary Statement
The purpose of this course is to take you to the level of the contemporary Qualitative Organic Analysis. This is basically the determination of the structure of organic compounds. As organic/medicinal chemistry requires and produces an enormous number of compounds (including many new compounds) every year, the hands-on knowledge of the structure determination methods is invaluable. This course is meant to cover topics in modern structural chemistry, particularly chromatographic techniques, mass spectrometry, and NMR spectroscopy.

Tentative Course Outline

Week	Date	Topic	Graded works
1	09/09	**Introduction**	
2	09/16	**Separation Methods**	
3	09/23	**Separation Methods**	
4	09/30	**Separation Methods**	
5	09/07	**Mass Spectrometry**	
6	10/14	**Mass Spectrometry**	
7	10/21	**NMR Spectroscopy/ + EXAM 1**	
8	10/28	**NMR Spectroscopy**	
9	11/04	**NMR Spectroscopy**	**A1**
10	11/11	**NMR Spectroscopy**	
11	11/18	**NMR Spectroscopy + EXAM 2**	**A2**
12	11/25	**No Class**	
13	12/02	**NMR Spectroscopy**	**A3**
14	12/01	**NMR Spectroscopy**	
15	12/09	**NMR Spectroscopy**	**A4**
16	12/16-22	**Final Exam Period**	**A5**

Academic Integrity
Students are required to adhere to the University Policy on Academic Standards and Cheating, to the University Statement on Plagiarism and the Documentation of Written Work, and to the Code of Student Conduct as delineated in the catalog of Undergraduate Programs, pp. 44-45, and 48-52. The Code is available online at: http://www.umb.edu/student_services/student_rights/code_conduct.html