Course Syllabus
CH6800 – Liquid Chromatography/Mass Spectrometry (LC/MS)
College of Science and Arts
Spring 2009

Instructor Information
Instructor: Lynn R. Mazzoleni, Ph.D., Assistant Professor
Office Location: 402d Chemical Sciences Building
Telephone: (906)487-1853
E-mail: lrmazzol@mtu.edu
Office Hours: MTWR 8:00-9:00 AM or by Appointment (Walk-ins are welcome too)

Course Identification
Course Number: CH6800-02
Course Name: Liquid Chromatography/Mass Spectrometry (LC/MS)
Course Location: 708d Chemical Sciences Building
Class Times: Saturday 12:05-4:55 PM on 10/17, 10/31, and 11/14
Prerequisite: CH4210 or CH4212 (strongly recommended)

Course Description/Overview
Students will learn how to perform fundamental LC/MS analyses. The primary focus of topics will be the LCQ Advantage instrument design, electrospray ionization, and fragmentation analysis. This course is designed for research students. It is recommended that students take 6290-03 Special Topics in Analytical Chemistry: Advanced Mass Spectrometry Methods concurrently.

Course Learning Objectives
• Conduct fundamental LC/MS analyses.
• Describe and utilize electrospray ionization parameters.
• Design MS/MS experiments.

Course Resources
Optional Course Textbook
Course Website
- Blackboard http://www.courses.mtu.edu

Course Supplies
- Supplemental reading material will be provided in class or on Blackboard
- Additional textbooks will be on reserve in the library.

Grading

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<th>Total Available Points</th>
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<td>Lab Reports</td>
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<td>Quizzes</td>
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Late Assignments
No make-up exams will be given for unexcused absences. Official MTU excused absences are granted by the Office of Student Affairs (OSA). If you know that you will have an excusable absence on an exam day, you are required to make arrangements with me as soon as possible for an alternate exam date.

Late lab reports will be penalized by 10% per day (5 pm).

Collaboration/Plagiarism

Standards of academic conduct are set forth in the MTU Academic Integrity Code http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html. When you registered for this course, you acknowledged your awareness of the Academic Integrity Code and you are obliged to become familiar with your rights and responsibilities as defined by this Code. Violations of the Code will result in disciplinary actions. Examples of violations include plagiarism or receiving inappropriate assistance on homework, quizzes, and/or exams.

Plagiarism is an act of theft of intellectual property and thus is a serious offense of the Academic Integrity Code. Using or closely imitating the ideas/concepts of others without proper citation is a form of plagiarism. Another often misunderstood but important form of plagiarism is the use or incorporation of many of the words or concepts from a source(s) that it/they make(s) up the majority of your work, whether or not it/they are cited.

Cheating is a very serious academic offense. Therefore, allegations of cheating will be referred to the Dean of Student Affairs for appropriate action. Please see me if you have any questions about academic violations as described in the Code or as they relate to particular requirements in this course.

Cell phones, Blackberries, iPods, PDAs, Laptops or any other electronic devices are not to be used in the classroom. Please make sure to bring a standard calculator with you to class. Calculators on other electronic devices are strictly prohibited. Information exchanges on these
devices during class are also prohibited and violate the Academic Integrity Code of Michigan Tech.

**University Policies**

If you have a disability that could affect your performance in this class or that requires an accommodation under the Americans with Disabilities Act, please see me as soon as possible so that we can make appropriate arrangements. The Affirmative Action Office has asked that you be made aware of the following:

*Michigan Tech complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990. If you have a disability and need a reasonable accommodation for equal access to education or services at Michigan Tech, please call the Dean of Students Office, at 487-2212. For other concerns about discrimination, you may contact your advisor, department head or the Affirmative Action Office, at 487-3310*

**Academic Integrity:**
[http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html](http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html)

**Affirmative Action:**
[http://www.admin.mtu.edu/aao/](http://www.admin.mtu.edu/aao/)

**Disability Services:**
[http://www.admin.mtu.edu/urel/studenthandbook/student_services.html#disability](http://www.admin.mtu.edu/urel/studenthandbook/student_services.html#disability)

**Equal Opportunity Statement:**

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**Course Schedule**

A course calendar will be maintained on *Blackboard* (see: [http://www.courses.mtu.edu](http://www.courses.mtu.edu)).