## **CHEMISTRY 311** Syllabus for Lecture and Discussion Fall 2013

Professor: Dr. Deyang Qu E-mail: <u>Deyang.qu@umb.edu</u> Telephone: 617-237-6035 Office hours: TuTh 10:50-12:20 in Chemistry Conference Room Office: Science Building RM-1-129 Lecture: TuTh 9:30-10:45 (W-01-0004) Discussion: Tu 8:00-9:15 (W-01-0004)

**Objectives:** This course will focus on the fundamental theory and applications for the analytical chemistry. Four major areas will be covered: traditional wet chemistry analysis; electrochemical analysis; spectroscopy, and separation science. The theory behind the techniques will be discussed as well as the basic areas of application in the lecture and discussion.

**Text:** Quantitative Chemical Analysis, 8<sup>th</sup> Edition by Harris with Sapling Learning online.

**Grading:** 3 Exams (wet chemistry 25%, electrochemical analysis 25% and final 40%), final examination will include spectroscopy and separation. There will be <u>no makeup exams</u>. Sapling on-line home work (10%)

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	Total
Grade	Points
F	<60
D-	60
D	64
D+	67
C-	70
С	74
C+	77
B-	80
В	84
B+	87
A-	90
А	94

## Grading Scale:

Academic dishonesty: "It is the expressed policy of the University that every aspect of academic life not only formal coursework situations, but all relationships and interactions connected to the educational process shall be conducted in an absolutely and uncompromisingly honest manner. The University presupposes that any submission of work for academic credit indicates that the work is the student's own and is in compliance with University policies....." It is OK to get help on a question from a classmate anytime except during the exams. If there is any question in your mind about whether or not the action you are about to undertake constitutes cheating, IT DOES, and DO NOT PROCEED!! Please see UMB Code of Student Conduct

(http://www.umb.edu/life\_on\_campus/policies/code)

Attendance: You are expected to attend all lectures and discussions.

"Students are expected to attend all scheduled classes. No administrative control of attendance is exercised except as hereinafter provided. In case of illness, students should explain their absence directly to their instructors. Grades shall not be reduced because of absences due to illness when students have met their instructors' requirements for making up back work. Students should report illnesses to the University Health Service, which will verify dates of absence if requested by faculty members."

**Homework and Discussion Sections:** Homework problems are two parts (problems from text book and Sapline on-line problems which you should access those questions from your Sapling Learning accounts) will be given each week. During the discussion section, group discussion will be engaged to solve the textbook questions.

Sapling on-line questions will be counted for 10% of the final grade. The problems from the text book will not be counted for your final grade. However, you are strongly encouraged to finish all the homework questions, because 40% of the questions in all the exams will be directly from the homework.

## **Lecture Schedules:**

September 3 – October 10: Wet Chemistry Analysis, Chapter 6 -11 October 15: Review – No discussion. October 22: 1<sup>st</sup> examination October 17, 24 – November 7: Electrochemical Analysis, Chapter 14 – 16 November 12: Review – No discussion. November 19: 2<sup>nd</sup> examination

November 14, 21 – December 12: Spectroscopy and separation

December 16: Final review.