## **CHEM 369**

Chemical Structure
Professor Michelle Foster
Fall 2008
M W F 10:00 – 10:50 - lecture
M 9:00 – 9:50 – discussion
S-01-063

## http://www.chem.umb.edu/chemistry/ch369/

**Text**: Physical Chemistry by P.W. Atkins and J. de Paula, 8<sup>th</sup> edition

(Alternatively you could purchase <u>Physical Chemistry Volume 2: Quantum Chemistry, Spectroscopy and Statistical Thermodynamics</u> also by Atkins but only half of the book. ISBN: 0-7167-8569-2 If you can find it online.)

Some other books that may be helpful (and are available in the bookstore) include:

<u>Applied Mathematics for Physical Chemistry</u> by James R. Barrante <u>Mathematics for Physical Chemistry</u> by Robert G. Mortimer

**Professor Foster:** Office: S-01-087 Student Success Center: S-02-060

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Office Hours: Wednesday: 9:00 – 9:50 am

or by appointment

## Outline:

Quantum Theory Atomic Structure Molecular Structure Spectroscopy

**Grades:** Grades follow the traditional scale. (>93, A; 90-92, A-; 87-89, B+; 83-86, B; 80-82, B-; ...) The scales might be lowered, but they will not be raised. Your final score will be calculated in the following manner:

Exams 75 % Homework 25 %

**Examinations**: There will be three in-class exams and a comprehensive final exam. The best 3 out of 4 exams will count for 75% of your grade (25 % each). There will be NO Makeup Exams.

The schedule for exams is as follows (Chapters covered are tentative):

Exam 1	Monday	Oct 19	Chapters 8 & 9
Exam 2	Monday	Nov 16	Chapters 10 & 11
Exam 3	Monday	Dec 14	Chapters 13 & 14, etc
Final	TBA	TBA	Chapters 8 - 11 & 13 - 14, etc

**Discussion Sections:** Monday 9:00 am. All exams will take place on Mondays with the understanding that the extra hour of discussion will be employed to complete your test. For those Mondays with no exam scheduled, we will have a traditional discussion section. Questions about homework problems can be asked and sample problems will be reviewed. It is likely that new material will be introduced.

**Homework**: 25% of your final grade will be determined from your weekly homework assignments. These homework assignments will be corrected and returned to you promptly.

Assignments will be taken from our textbook, previous exams from this course, and other sources. I encourage you to work together to solve the complicated homework problems, but the work you turn in must be your own. I encourage you to use the solutions manuals (both student and instructor version on reserve in Healey) to help you through the trickier problems, but remember that I too have a copy of the solutions manual and I will not accept an exact copy of their solution as your answer. **The work you turn in must be your own.** 

These assignments are due at the *beginning of class* each Wednesday. Solutions will be posted on the class website on Wednesday afternoon. Late homework will be **severely** penalized, 20% point reduction per day late. For example, homework turned in Wednesday after class will have a maximum score of 8/10, if it is turned in on Thursday the max will be 5/10, if it is turned on Friday the max will be 3/10. No homework will be accepted after the Friday evening following the due date. I will drop your lowest homework score when calculating your final grade.

**Quizzes**: Pop quizzes may occur at any time. They count as extra credit towards your final grade.

**Student Conduct:** 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 University Catalog and Student Handbook. The Code is available online at: <a href="http://www.umb.edu/student">http://www.umb.edu/student</a> affairs/programs/judicial/csc.html

**Accommodations:** Section 504 of the Americans with Disabilities Act of 1990 offers guidelines for curriculum modifications and adaptations for students with documented disabilities. If applicable, students may obtain adaptation recommendations from the Ross Center for Disability Services, M-1-401, (617-287-7430). The student must present these recommendations and discuss them with each professor within a reasonable period, preferably by the end of Drop/Add period.