

## **General Information**

CH 115

### **Dr. Mridula Satyamurti**

Office: S-1-125

Phone: 617-287-6139

E-mail: [mridula.satyamurti@umb.edu](mailto:mridula.satyamurti@umb.edu)

Office hours:

TBA

For other times e-mail me to set up an appointment but do not just talk to me in the class, always confirm it with an email so that I can make a note of it.

### **Text book**

The text for this course is Brown, LeMay, and Bursten's Chemistry: The Central Science, 12th edition. In CH 115 we will be covering chapters 1 through 9. If you decide to use the 11<sup>th</sup> edition you are responsible for any material that is different between the editions.

### **Lecture:**

The lectures, not the book, constitute the principal source of material for the tests. The projected overheads that I will use in class are available for print-out on the website. Most students find it useful to have these in hand during the lecture. However, much of the content of the lectures are not in these overheads. Therefore, it is imperative that you faithfully attend lectures and take good notes.

### **Discussion:**

Discussions are intended to give you opportunities to deepen your understanding of the material, to explain homework problems, and to prepare you for the tests. We follow the POGIL format for our discussions. You are expected to print and read the worksheets that are posted on the website weekly.

The discussions will start only in the second week of the semester. There will be no discussion on any week when a holiday falls on the Monday.

### **OWL (Online Web-based Learning) system**

This is an online homework system that allows multiple tries at questions, with the questions changing randomly. The system can be accessed at <http://owl.oit.umass.edu> Please be sure to check the due dates for the various sections. Note that the assignment numbers on OWL do NOT correlate with the chapter numbers in the textbook. Look at the topics instead of the numbers. The OWL account closes a few days before the final exam as you are expected to be doing the problems as you go through the chapters.

### **Calculators:**

Calculators may be used in all aspects of this course, including examinations. You may find it useful to have a more sophisticated calculator, such as the Texas Instruments TI-86 or similar models. However, during a test you may not use any calculator or device that is capable of communicating with any other calculator or device. Anyone bringing such a

device to a test will receive a zero for the test. Be sure you know how to operate your calculator before you have to use it in a test situation. Before coming to a test, be sure your calculator is working properly and that it has fresh batteries (if needed) or will work in low light (if solar powered). You may bring a back-up calculator to the tests, calculator sharing is not allowed during a test.

### **Tests and Academic Honesty:**

The dates for the hour examinations are listed at the end of the syllabus. Tests will be given during the normal lecture hour.

If you cannot attend a test for some legitimate reason (e.g., debilitating illness, death in the immediate family, or car accident on the way to the university) you must call me or send e-mail in advance of the test or as soon as possible under the circumstances. In cases of real emergency you might be eligible to start the test late or to be excused from the examination. Absence without notice and/or legitimate cause will result in a score of zero for the test. Make every effort to arrive on time to each test. If you arrive late, you will not be given extra time, except in special circumstances. No one arriving late to a test will be allowed to take the exam after the first paper has been handed in, unless special arrangements have been made in advance.

You must take every test. During a test you are allowed to have pencils, erasers, and your calculator (with extra batteries, if needed) – nothing else. You may not have notes, open books, or scrap paper.

Academic dishonesty will not be tolerated and may result in your failing the test, failing the course, or being expelled from the University, depending on the circumstances.

### **Grades:**

	<b>%</b>
Class Attendance	5
Disc Attendance	5
Three Tests + Final (worth two tests)	90
<b>Total</b>	<b>100</b>

#### **Extra credit**

OWL	<b>3</b>
Supplemental Instruction	<b>3</b>

### **Attendance**

The class attendance will be taken using the iclicker. The clicker is available in the bookstore. It is the responsibility of the student to ensure that they have their attendances marked. Any student that leaves after the attendance is taken or just shows up for a few minutes to get the attendance credit will be marked absent at the instructor's discretion.

The attendance comes in handy at the time of grade calculation as there you can get all the points just by being present. Attendance will start getting recorded from the second week of the semester in the regular semester and on the day announced in the summer semesters.

You can miss two lectures and two discussions in the regular semester and one of each in the summer semesters without any loss of credit. These are intended to make up for the personal reasons, medical absences or religious occasions you may have during the semester.

**Syllabus :**

- Chapter 1: All sections
- Chapter 2: All sections
- Chapter 3: All sections
- Chapter 4: All sections [Read “The Activity Series”, pp. 142-144, for interest only.]
- Chapter 5: Sections 5.1-5.7 [Read section 5.8 for interest only.]
- Chapter 6: All sections
- Chapter 7: Sections 7.1-7.6 [Some material in section 7.7 will be discussed.]
- Chapter 8: All sections
- Chapter 9: Sections 9.1-9.6; sections 9.7 and 9.8 will be covered if time permits.

**Test:**

**For the daters refer to the website**

The tests will be on the specified dates. The test will cover the chapters between the tests and will not be cumulative. The final exam will be cumulative and will cover all the chapters. There will be four (4) in-class tests, to be given on the dates listed above and a three hour final. There will be no make up tests. I will drop the test with the lowest grade or the one you are unable to take for any medical, personal or religious reasons.

In the summer semesters there will be only two tests and no test will be dropped.

The final exam date is determined by the university, be prepared to take the final on the specified date, do not make plans before you know the exam date. There will be no exceptions to this.

Please do not make any reservations on the snow days decided by the university, I will not take the exam again.

The exam questions are generated from the lecture material, homework and the text. You will see some direct questions from the homework in your exams. Most of my long answer questions come from the solved examples, practice questions in the book or homework. In addition, some exam questions are challenging and thought provoking - you will need to apply concepts and think critically in order to solve them. These are the problems that will get you an A in the class.

Make an effort to arrive on time for each exam. If you arrive late, you will not be given extra time. You will not be allowed to take the test if even one student has left the hall.

Exam answers are posted on the website after grading is completed.

The Exam will consist of about 20 to 30 multiple choice questions which will be about 70 % of the grade and two to three short answer questions which will be about 30% of the overall grade. This is only a guideline and will somewhat vary from test to test.

**Homework:**

The problems within the chapter are a good place to start. These will reinforce the previous material. Selected problems from the end of each chapter will be assigned [see the course website]. Both of these represent the minimum number of problems; of course, you are encouraged to do other problems at the end of the chapter as well.

No amount of reading or outlining is a suitable substitute for problem solving! A “Study Guide and Solutions Manual” is available; however, reading the correct answer will not lead to mastery! Do not use the solutions book until you have really tried the problem.

Homework is not collected or graded, and worked-out answers are available. Although you will not turn in your homework, you should always attempt to do the assignment before coming to discussion where you can ask for help with the problems.

Dr. Isaac Reif is teaching the evening class. You need to get in touch with him with any questions related to the evening course.

Prof Jason Evens is in charge of the laboratory part of the course. You need to contact him with any questions.