
General Chemistry II

Honors

Chemistry 122H Course Policies and Information 2005 Spring Semester

- Professor: Jeffrey D. Madura (Spring 2003)
- Blackboard Site: <http://www.bb6.duq.edu>
- Description: The second semester for first-year honors chemistry. Lecture material emphasizes thermodynamics, equilibrium, kinetics and mechanism, electrochemistry, acid-base chemistry, and buffers. The novel aspect of the honors sequence is
- Sections: Spring 2005, section 1 (lecture); section H1 (laboratory)
- Credits: 5 credit hours
- Meeting Times: Spring 2005: Lecture (MWF) 10–10:50 am, 103 Bayer Learning Center
Recitation (T) 6–8 pm, 102 Bayer Learning Center
Laboratory (Th) 5:30–8:30 pm Mellon Hall 322
- Texts: “General Chemistry: Principles and Modern Applications”
Petrucci, Harwood, Herring, 8th edition, Prentice-Hall
- “The Physical Basis of Chemistry”, Second Edition
Warren S. Warren, Harcourt/Academic Press, 2000.
- E-hours: On the Internet, I am available most times. Contact me at madura@duq.edu. I find e-mail an excellent way to provide fast answers to your questions.
- Office Hours: Tuesday and Thursday 9:00 – 10:00 am in Mellon Hall 320 or Mellon Hall 308. Appointments outside of the regularly scheduled office hours can be made Monday through Friday with the receptionist in the chemistry front office (Mellon Hall 308 or 320) or following the completion of any lecture.
- Absences: Attendance is not mandatory, except for the quizzes and examinations. Examinations and quizzes, however, will be heavily based on lecture and homework material. The spring 2005 semester starts January 10th and ends on May 5th. It is assumed that, as a condition of enrollment, you plan to be in attendance for all examinations and classes between those dates. It is your responsibility to arrange your travel plans around the schedule of these classes.

Spring 2005 Exams: For the spring 2005 semester, three examinations will be given. All examinations will be essay style and no computer grading will be performed. Each examination is comprehensive. **No make-up examinations will be offered.**

EXAM I 100 pts Tuesday, February 8th, 2005, 6-9 pm.

EXAM II 100 pts Tuesday, March 8th, 2005, 6-9 pm.

EXAM III 100 pts Tuesday, April 12th, 2005, 6-9 pm.

BlackBoard: I will use BlackBoard in this class as a mechanism for posting announcements, notes, papers, solutions to assignments, and grades. You are responsible for knowing how to access BlackBoard and using it. If you have any questions about BlackBoard please see me.

Calculator: Programmable calculators are permitted in this class. You will need a calculator that can calculate square roots, logarithms, anti-logarithms, and possible find roots to quadratic and cubic equations.

Homework: Daily homework assignments will be given and the due date will be announced at that time.

There are several reasons for these assignments. First, practice is the only way to learn how to solve these problems. Homework also forces you to keep up with class (there is no faster route to disaster than to fall behind). Finally, it is a way for you to get some easy points. Doing well on the homework can make a difference of a half a letter grade for the final grade; NOT doing the homework can likewise mean AT LEAST a drop of a half a letter grade (probably more, because if you don't work problems, you are virtually guaranteed to do poorly on exams).

Additional Problems: In addition to the assigned problems, you are strongly encouraged to work all the problems in each chapter that are similar to those assigned for homework. If you can do the problems in the book, WITHOUT resorting to the solutions manual (even if you can find one), you stand a very good chance, unless you panic, of getting at least a B in the class, and if you can do the difficult problems, you stand a good chance of getting an A (your final grade depends on a lot of things, so this is not a guarantee). So, do problems for PRACTICE and FEEDBACK on how well you really understand the material.

Recitation: I am your recitation instructor. Recitation serves two main purposes. The first is as a support mechanism to help you with the class. We will spend the first hour, usually, of all recitation sessions (except for exam sessions) taking quizzes and discussing problems of current interest, usually the homework that is due during the week. We will also use that first hour to review for exams and to go over problems from the exams. COME PREPARED TO ASK QUESTIONS. This hour is for you. The second hour will generally be spent in discussion of a variety of topics, such as current topics of interest in science and society (e.g.,

nanotechnology), concepts of how scientific discovery and practice work, etc. There will be some reading assignments. This will mostly be informal. Bring your brains.

Quiz Dates:

Ten quiz pairs will be given throughout the semester. All quizzes will be on the material covered during the past week, 15 – 20 minutes in length, worth 20 points, and are designed to prepare you for each examination. We will follow the “Corrective-feedback Learning Cycle” pedagogy. Briefly, the first quiz will be given at the beginning of recitation section on Tuesday. After all of the quizzes are collected, then solutions will be handed out for an open discussion on all material. An optional second quiz will then be given in the remaining 20 minutes of the first hour of recitation. The second quiz will involve different questions over the same conceptual ideas. The best grade will count towards your final score. All quizzes will be constructed from the assigned homework and lecture material since the previous quiz. **No make-up quizzes will be offered.**

PRS:

The personal response system will be used in this class as a tool to provide dynamic assessment of your understanding of the various concepts you are to learn this semester. You will be given a response keypad to keep for the semester. It is your responsibility to bring the keypad to every class and recitation meeting. At the end of the semester you will be required to return the keypad. Failure to return the keypad will initially result in an I for the course. To remove the I you will either have to return the keypad or pay \$50 to the Department of Chemistry & Biochemistry. Although no points are allocated in the determination of your course grade, how you respond will be used in making a grade assignment if you are on the border.

Research Paper:

Last semester you were introduced to using the library and literature searching tools available to research scientific topics. This semester you will use that knowledge and experience to write a short (5-8 pages, double spaced, 12 pt font, 1 inch margins) paper proposing a research project that you could undertake next year. The last three class meetings have been set aside for you to present this paper to the class and some of the faculty. The research topic you choose has to pertain to research currently being done with in the Department of Chemistry & Biochemistry. I will discuss the research currently being done with in the Department during recitations. You are encouraged to contact any of the faculty and discuss with them a possible research project which you can write about. You are not required to do any research this semester for this assignment. Later in the semester I will hand out more details on the content and format of this paper.

Regrade Policy:

Regrade requests must be more than 5 points to be considered. All regrade requests must be made in writing and attached to the front of the examination. The entire test will be regraded from the beginning to the end. Any regrade must be requested within 1 day of the return date.

Honor Code:

This is an honors class for exceptional students. I expect each student to behave with the utmost maturity and integrity. All students are responsible for reading,

understanding, and upholding the “Code of Student Rights, Responsibilities and Conduct.” Signed pledges are required for written work submitted for evaluation, but the absence of a signed pledge does not free a student from the ethical standards required by the Code. Procedures for dealing with infractions of the Code, including provisions for appeals, are printed in the text of “The Student Handbook and Code of Student Rights, Responsibilities and Conduct.”

- Class Rules:
- (1) Class starts at 10 am; be on time.
 - (2) Class ends at 10:50 am; do not prepare to leave until class is over.
 - (3) No sleeping, eating or conversation while in class.
 - (4) Beepers and cell phones are not allowed in class.

Grading Policy: A straight scale will be used for the the spring semester 2003 class. Grades will be based upon the following scheme from the total of 950 points. The grading is consistent with that described in your “The Student Handbook and Code of Student Rights, Responsibilities and Conduct.”

Examinations 300 pts	Quizzes 200 pts	Final 200 pts	Presentation 100 pts	Laboratory 150 pts
		A ≥ 95% (903 pts)	C+ ≥ 77% (732 pts)	
		A- ≥ 90% (855 pts)	C ≥ 70% (665 pts)	
		B+ ≥ 87% (827 pts)	D ≥ 60% (570 pts)	
		B ≥ 84% (798 pts)	F < 60% (???) pts)	
		B- ≥ 80% (760 pts)		

January

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
9	10 Classes Begin	11 Recitation	12 Lecture 1 Chapter 7	13	14 Lecture 2 Chapter 7	15
16	17 NO CLASS	18 Recitation	19 Lecture 3 Chapter 7	20	21 Lecture 4 Chapter 7	22
23	24 Lecture 5 Chapter 20	25 Recitation	26 Lecture 6 Chapter 20	27	28 Lecture 7 Chapter 20	29
30	31 Lecture 8 Chapter 16					

February

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
		1 Recitation	2 Lecture 9 Chapter 16	3	4 Lecture 10 Chapter 16	5
6	7 Lecture 11 Chapter 16	8 EXAM I	9 Lecture 12 Chapter 17	10	11 Lecture 13 Chapter 17	12
13	14 Lecture 14 Chapter 17	15 Recitation	16 Lecture 15 Chapter 17	17	18 Lecture 16 Chapter 18	19
20	21 Lecture 17 Chapter 18	22 Recitation OUT OF TOWN	23 Lecture 18 Chapter 18	24	25 Lecture 19 Chapter 18	26
27	28 Lecture 20 Chapter 19 OUT OF TOWN					

March

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
		1 Recitation OUT OF TOWN	2 Lecture 21 Chapter 19 OUT OF TOWN	3	4 Lecture 22 Chapter 19	5
6	7 Lecture 23 Chapter 19	8 EXAM II	9 Lecture 24 Chapter 15	10	11 Lecture 25 Chapter 15	12
13	14 Lecture 26 Chapter 15 OUT OF TOWN	15 Recitation OUT OF TOWN	16 Lecture 27 Chapter 15 OUT OF TOWN	17	18 Lecture 28 Chapter 21	19
20	21 SPRING BREAK	22 SPRING BREAK	23 SPRING BREAK	24 SPRING BREAK	25 SPRING BREAK	26
27	28 EASTER BREAK	29 Recitation	30 Lecture 29 Chapter 21	31		

April

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
					1 Lecture 30 Chapter 21	2
3	4 Lecture 31 Chapter 21	5 Recitation	6 Lecture 32 Chapter 26	7	8 Lecture 33 Chapter 26	9
10	11 Lecture 34 Chapter 26	12 EXAM III	13 Lecture 35 Chapter 26	14	15 Lecture 36 Chapter 27	16
17	18 Lecture 37 Chapter 27	19 Recitation	20 Lecture 38 Chapter 27	21	22 Lecture 39 Presentations	23
24	25 Lecture 40 Presentations	26 Lecture 41 Presentations MEET ACCORDING TO MONDAY SCHEDULE	27 Reading Day	28 FINAL EXAM 8:45 – 10:45 AM	29	30