

Chemistry 211 – Principles of Chemistry I

Fall 2008

Instructor: Dr. Scott Day

Phone: 696-7054

Office Hours: MW 3-4; TR 10-11 and by appointment

Lecture Room: Science Building 473

Course Credits: 3

Course PR: MTH ACT of 21 or better OR C or better in MTH 127 or equivalent

Required Text: *Chemistry: The Central Science* 11th Ed. by Brown, LeMay, Bursten, & Murphy
MU online will be used to post notes, homework solutions and exam keys

Office: Science Building 479

E-mail: day17@marshall.edu

Time: MW 4:00 – 5:15

Course Description:

A study of the properties of materials and their interactions with each other. Development of theories and applications of the principles of energetics, dynamics and structure. Intended primarily for science majors and pre-professional students.

Course Objectives:

1. To learn vocabulary, to classify and name chemical materials and to develop familiarity with general chemical trends and principles.
2. To learn how to apply general chemical knowledge to solve basic chemistry problems and to implement these logical strategies to solve complex, multistep problems.
3. To establish and develop personal study habits.

Attendance:

Attendance for this class is not mandatory, but strongly encouraged. Absences from exams can only be made-up if the absence falls within one of the categories outlined in the undergraduate catalog. To make-up an exam, you will need to follow the process for securing an excused absence. All excused absences must be obtained as soon as possible.

Grading:

The grade for this class will be determined from 4 in-class tests and a cumulative, final exam. Each test is worth 100 points and the final is worth 200 points. The material for the tests will come from lectures, homework problems, and the reading assignments. In-class exams may cover up to 20% of previous material.

Grading Scale: A 90-100 B 80-89 C 70-79 D 60-69 F < 60

Suggested Activities for Success:

1. Read the suggested material from the textbook before and after each lecture.
2. Try to work through every homework problem no matter how difficult.
3. Always attend class and take good notes.
4. Seek help from others, some possibilities:
 - a. Take advantage of my office hours.
 - b. Work in small groups on homework problems and studying for tests.
 - c. Work with a tutor. (www.marshall.edu/uc/ts.shtm)
 - d. Helpful website: <http://science.marshall.edu/castella/c211.html>
5. Exercise regularly and maintain a healthy diet.

Course Policies:

1. Graphing calculators, calculators with alphanumeric programming, and calculators on cell phones, PDAs, etc. cannot be used during any exam. Likewise, sharing of calculators during exams is prohibited.
2. During exams, all materials necessary will be provided to you except a pencil and calculator. You may NOT use your own paper, etc.
3. If a snow day or other university cancellation occurs on an exam day, the exam will be given on the next class meeting.
4. Please turn off cell phones during class, failure to do so may result in dismissal from lecture.
5. Students with disabilities who require special accommodations will be made. www.marshall.edu/disabled.
6. Academic dishonesty will be dealt with as outlined in the undergraduate catalog.

Schedule:

Date	Chapter	Notes	Reading
August 25	1	Introduction	
August 27	1		1.1 – 1.6, Appendix A.1
September 1	---	<i>Labor Day, No Class</i>	
September 3	2		2.1 – 2.5
September 8	2		2.6 – 2.9
September 10	3		3.1 – 3.4
September 15	3		3.5 – 3.7
September 17	4		4.1 – 4.4
September 22	---	Exam I (chap. 1 - 3)*	
September 24	4		4.5 – 4.6
September 29	5		5.1 – 5.4
October 1	5		5.5 – 5.8
October 6	6		6.1 – 6.3
October 8	---	Exam II (chap. 4 & 5)*	
October 13	6		6.4 – 6.6
October 15	6		6.7 – 6.9
October 20	7		7.1 – 7.5
October 22	7		7.6 – 7.8
October 27	8		8.1 – 8.4
October 29	8		8.5 – 8.8
November 3	9		9.1 – 9.3
November 5	---	Exam III (chap. 6 - 8)*	
November 10	9		9.4 – 9.6
November 12	9		9.7 – 9.8
November 17	10		10.1 – 10.5
November 19	10		10.6 – 10.9
November 24		<i>Thanksgiving/Fall Break</i>	
November 26		<i>Thanksgiving/Fall Break</i>	
December 1	11		11.1 – 11.5
December 3	---	Exam IV (chap. 9 & 10)*	
December 8	11		11.6 – 11.8
December 13		Final Exam Saturday from 10:00 a.m. – 12:00 p.m.	

*Exam dates are approximate and subject to change

Homework Problems:

Chapter 1	1, 2, 5, 11, 17, 24, 26, 29, 31, 33, 35, 39, 43, 45, 49
Chapter 2	1, 11, 17, 25, 27, 31, 32, 37, 39, 47, 51, 57, 59, 65, 67
Chapter 3	1, 5, 11, 12, 13, 18, 19, 21, 25, 27, 33, 35, 39, 43, 47, 51, 57, 59, 71, 77
Chapter 4	15, 18, 21, 23, 30, 31, 37, 43, 49, 51, 53, 61, 64, 67, 70, 73, 77, 82, 85
Chapter 5	5, 12, 13, 18, 24, 25, 27, 30, 35, 38, 41, 45, 48, 51, 54, 57, 61, 63, 67, 71, 83
Chapter 6	2, 3, 13, 15, 22, 23, 26, 33, 36, 39, 44, 45, 49, 50, 52, 54, 63, 65, 68, 71
Chapter 7	13, 23, 26, 28, 32, 38, 42, 45, 47, 52, 61, 67, 71, 73, 77
Chapter 8	9, 12, 15, 24, 34, 35, 37, 40, 43, 45, 46, 49, 52, 55, 61, 67, 69
Chapter 9	15, 20, 21, 23, 26, 33, 38, 39, 41, 43, 49, 51, 53, 56, 60, 61
Chapter 10	4, 5, 9, 19, 23, 25, 28, 30, 33, 35, 37, 40, 46, 53, 63, 66, 75, 77, 86
Chapter 11	2, 12, 16, 17, 20, 31, 34, 37, 44, 48, 53, 55, 58, 60, 61, 71