

CHEM105 Section 002, Fall 2010 Course Syllabus

Course Specifics:

Instructor: Dr. Jason C. Hurlbert

Office: Sims 301B

Office hours: WF 11-12, R 12:30 – 1:30 and by appointment

Phone: 323-4928

E-mail: hurlbertj@winthrop.edu

Meeting Times:

Lecture: Monday, Wednesday and Friday, 9:30 – 10:45 AM, Sims 113
Tuesday, 12:30 – 1:20 PM, Sims 105

Credit Hours: 4

Course Website:

http://bohr.winthrop.edu/faculty/hurlbert/link_to_webpages/courses/chem105/chem105home.html

Textbook: Chemical Principles, 4th ed., Atkins and Jones

Course Objectives

Upon completion of this course you will be:

- Familiar with the scientific method
- Have an understanding of the basic concepts used in chemistry
- Able to ‘think’ like a chemist
- Have an appreciation for the role chemistry plays in everyday life

Course Outline:

We will cover the following topics during the semester:

- Chemical concepts
 - Stoichiometry
 - Reactivity
- The basics of atoms and molecules
 - The structure of the atom
 - The periodic table of the elements
 - Chemical bonding
- The states of matter
 - Gas laws
 - Intramolecular forces on liquids
 - Solids and their properties
- Introductory Organic Chemistry
 - Types and naming of alkanes and major functional groups
 - Basic reactions of organic molecules
 - Biologically important organic molecules

Tentative Course Schedule: Refer to Course website or see attached

- Study Tips:**
1. Attend class, take good notes, ask questions
 2. Read all assigned material before and after hearing a lecture on it
 3. Review other sources of information (textbooks, online, etc)
 4. Review lecture notes. Often.

Grading for the Course

Homework:

Assigned homework problems are given in the course calendar. These homework problems will be collected on the dates indicated. Please feel free to work in groups on these problems. However, make sure that you understand how these problems are solved as you may be required to present the solutions to the class during the recitation sections.

Quizzes:

Four quizzes will be given during the semester during the recitation section. These quizzes will be 50 minutes in duration and will be worth 20 points each. Be prepared! Bonus quizzes may spontaneously appear during any recitation section and the points from these quizzes will be added to your point total for the course.

Tests:

Test 1 (September 18, Friday)

Test 2 (October 16, Friday)

Test 3 (November 13, Friday)

- Each test will have a value of 100 points

Final Exam - Tuesday December 15, 11:30am

The final exam is cumulative and you must make at least a 50% on the exam to pass the course.

- The final exam will cover the entire course and will have a value of 200 points

Total Possible Points

Quizzes	4 @ 20 points each	80
Tests	3 @ 100 points each	300
Final Exam		200
Homework	12 problem sets @ 20 points each	240
Total possible points		820

Grades:	A: 90 - 100%	(738-820 pts)
	B ⁺ : 86 - 89%	(705-737 pts)
	B: 77 - 85%	(631-704 pts)
	C ⁺ : 74 - 76%	(533-630 pts)
	C: 66 - 73%	(541-532 pts)
	D: 56 - 65%	(459-540 pts)
	F: <55%	(<458 pts)

Notes on grading:

- If you have a question about a grade on an assignment, you must come and see me within a week from the day the assignment is returned. No grades will be changed after this one week period.
- Review the Student Conduct Code found in the Winthrop University Student Handbook and behave accordingly.

Attendance: You are expected to be in class every time it is scheduled to meet and will be responsible for anything covered during that meeting. In order to be successful in this course, you must attend the lectures, take notes during the lecture period, REVIEW those notes before the next class meeting, attempt all homework problems and seek out help without hesitation. You must be prepared to put in many hours outside the classroom to earn an 'A' in this course. Absence from a test without a written doctor's excuse is inexcusable and the student will receive a zero for that test. Absence from a test with a doctor's excuse will be accepted and the grade on the final exam will replace that specific grade.

Technology in the Classroom:

Out of respect for everyone in the room, please turn your cellular telephones to 'Silent' and (if applicable) mute your laptop computers. Also, laptop computers may only be used for taking notes during the class period, not updating your Facebook page, email, etc. Students failing to adhere to these rules may be asked to leave should their behavior prove disruptive to the class. No telephones or laptops may be used during exams or quizzes.

Drop Policy: As described in the Winthrop University Undergraduate catalog

Student code of conduct

As noted in the Student Conduct Code: "Responsibility for good conduct rests with students as adult individuals." The policy on student academic misconduct is outlined in the "Student Conduct Code Academic Misconduct Policy" in the online *Student Handbook* (<http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf>).

Students with Disabilities:

Winthrop University is dedicated to providing access to education. If you have a disability and require specific accommodations to complete this course, contact Services for Students with Disabilities at 323-3290. Once you have your official notice of accommodations from Services for Students with Disabilities, please inform me as early as possible in the semester.

**CHEM105 Section 002 Fall 2010 Tentative Course Schedule
(Modified 22 August, 2010)**

Note: This schedule will change as necessary.

Week	Day	Chapter(s) Covered	Homework Problems Due
1 L1-2	T Aug 24	Discussion of Course Objectives and Expectations, Fundamentals A1 – A3	
	W Aug 25	Fundamentals B1 – B4	(A.1, A.9, A.11, A.13, A.15, A.17, A.21, A.25, A.27, A.29)
	F Aug 27	Fundamentals C1 – D5	(B.1, B.3, B.5, B.7, B.15, B.19, C.5, C.11, C.13, C.17, D.1, D.3, D.5, D.9, D.11, D.15)
	M Aug 30	E1 – F2	(E.1, E.5, E.7, E.15, E.19, E.25, F.1, F.5, F.9, F.15, G.7, G.11, G.13, G.17, G.23)
2 L3-5	T Aug 31	F3 – H2 Fundamentals Review	(H.5, H.7, H.13, H.21)
	W Sept 1	Review for Quiz	
	F Sept 3	Quiz 1	HW 1: All assigned Fundamentals Problems Due
3 L6-8	M Sept 6	Chapter 1 1.1-1.5	(Ch 1: 3, 4, 5, 6, 7, 9, 11, 15, 17)
	T Sept 7	1.7-1.11	(Ch 1: 37, 47, 49, 59)
	W Sept 8	1.12-1.14	(Ch 1: 67, 69, 71, 79)
	F Sept 10	1.15-1.22	(Ch 1: 85, 87, 91, 119)
	M Sept 13	Chapter 2 2.1-2.6	HW2: All assigned Chapter 1 problems due
	T Sept 14	2.7-2.16	(Ch 2: 1, 3, 9, 19, 29, 33, 35)
4 L9-11	W Sept 15	Review for Test 1	(Ch 2: 41, 45, 49, 63, 73, 77)
	F Sept 17	Test 1: Fundamentals, Chapter 1 and Chapter 2	HW3: All assigned Chapter 2 problems due

5 L12-14	M Sept 20	Chapter 3 3.1 - 3.3	
	T Sept 21	3.4 - 3.7	(Ch 3: 9, 11, 25)
	W Sept 22	Review	(Ch 3: 33, 35, 41)
	F Sept 24	Quiz 1B	HW4: All assigned Chapter 3 problems due
	M Sept 27	Chapter 4 4.1 - 4.5	
6 L15-17	T Sept 28	4.5 - 4.8	(Ch 4: 1, 5, 7, 9, 15, 21)
	W Sept 29	Chapter 4 4.8 - 4.11	(Ch 4: 33, 47, 61, 73, 79, 101, 107)
		Quiz 2 Review	
	F Oct 1	Quiz 2	HW5: All assigned Chapter 4 problems due
	M Oct 4	Chapter 5 5.1 - 5.11	(Ch 5: 1, 3, 9, 13, 15, 21, 28, 29, 67, 69, 71)
7 L18-20	T Oct 5	Fundamentals L and M	
	W Oct 6	Fundamentals L and M	(Fundamentals L: 1, 2, 6, 7, 14, 18, 22; Fundamentals M: 1, 4, 8, 9, 11, 19)
	F Oct 8	Fundamentals L and M	HW6: All assigned Chapter 5 problems due
	M Oct 11	Chapter 6 6.1 - 6.7	
	T Oct 12	6.8-6.12	(Ch 6: 1, 4, 11, 17, 20, 21, 37, 40, 45, 59, 61)
8 L21-23	W Oct 13	6.13-6.21	HW7: Fundamentals L, M and Chapter 6 problems due
	F Oct 15	Test 2: Fundamentals L, M, Chapters 3, 4, 5 and 6	
	M Oct 18	Fall Break	
	T Oct 19		
	W Oct 20	Chapter 7 7.1-7.5	(Ch 7: 1, 3, 7, 11, 15, 23, 25)
9 L24,25	F Oct 22	Test 2 Recap <small>Last Day to Withdraw from Course with a Grade of 'N'</small>	(Ch 7: 41, 45)
	M Oct 25	7.7-7.11	(Ch 7: 51, 53, 63, 65)
	T Oct 26	7.12 - 7.13	
	W Oct 27	7.14 - 7.16, Thermo Review	
	F Oct 29	Chapter 8 8.1-8.7	HW 8: Chapter 7 due
10 L26-28			

11 L29-31	M Nov 1	8.8-8.14	(Ch 8: 1, 5, 7, 9, 19, 25, 27, 31) Take Home Quiz (Quiz 3) Due
	T Nov 2	8.15-8.16	(Ch 8: 35, 47, 53, 65, 71)
	W Nov 3	8.16 – 8.20	
12 L32-34	F Nov 5	Chapter 8 Review	HW9: All assigned Chapter 8 problems due
	M Nov 8	Chapter 9 9.1-9.8	(Ch 9: 1, 8, 9, 11, 13, 17, 29, 39, 47, 73 75)
	T Nov 9	Chapter 10 10.1-10.6	(Ch 10: 3, 17, 23, 25, 27, 31, 33, 45, 53, 55, 63)
	W Nov 10	10.7-10.10	HW10: All assigned Chapter 9 problems due
	F Nov 12	Test 3: Chapters 7, 8, 9 and 10	
13 L35-37	M Nov 15	Chapter 11 11.1-11.5	
	T Nov 16	Chapter 13 13.1-13.3	(Ch 11: 3, 9, 15, 23, 33, 35)
	W Nov 17	13.4-13.6	(Ch 13: 1, 5, 19, 33)
	F Nov 19	13.4-13.6	
	M Nov 22	13.7-13.10 Quiz 4 Handed Out	(Ch 13: 43, 51)
14 L38	T Nov 23	Quiz 4 Work Day	
	W Nov 24	Thanksgiving Break	
	R Nov 26		
	M Nov 29	13.11-13.14	Quiz 4 Due (Ch 13: 59, 65)
15 L39-41	T Nov 30	Chapter 18: 18.1 – 18.3	
	W Dec 1	18.5, 18.7, 18.8	HW11: All assigned Chapter 11 and 13 problems due
		Chapter 19 : 19.1- 19.4	(Ch 18: 3, 9, 13, 18, 25, 43)
	F Dec 3	Chapter 19 : 19.5 – 19.8	(Ch 19: 1, 5, 13, 19, 23)
16		Class Evaluations	
	M Dec 6	Review for Final	HW12: All assigned Chapter 18 and 19 problems due
Tuesday December 15, 11:30am Final Exam			

