

## Chemistry 1152, Spring 2009

11:15 – 12:10 MWF (Rogers Hall 307)

Dr. Holly E. Carpenter

Office Hours: MWF 10:00-11:00 AM, TR 11:10 AM -12:40 PM, or by appointment

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### Course Description:

Second course in a two-semester sequence covering elementary principles of general, organic and biochemistry designed for allied health professions majors. Topics to be covered include basic topics in organic chemistry and biochemistry.

### Materials:

Required: *General, Organic, and Biochemistry 6<sup>th</sup> edition*, Denniston, Topping, Carat

Required: WebCT

### Expected Course Outcomes:

- The student will formulate physical, abstract, and mathematical models of events or operations that explain phenomena.
- The student will construct and communicate reasoned scientific arguments and respond to critical comments
- The student will identify unifying concepts and processes that run across science disciplines.
- The student will use the periodic table to identify patterns and predict interactions that take place among elements.
- The student will investigate the various types of bonds between atoms.
- Making observations of macroscopic phenomena the student will generalize what is happening at the microscopic level between molecules.
- The student will classify different types of energy (heat, light, electrical, mechanical, chemical, nuclear, etc.) as potential or kinetic energy or energy contained in a field. The student will identify energy transformations and relate the tendency toward disorder with the Second Law of Thermodynamics.
- Using the EM spectrum, the student will investigate the dual nature of light.
- The student will recognize that science and society interact through the products and processes formed by each.
- The student will recognize that science distinguishes itself from other ways of knowing through the use of empirical standards, logical argument, and skepticism. The student will understand how knowledge is produced and refined in science.

### Grading:

In-class announced quizzes (10 points each), Workshops (In-class problem sets, 10-20 points),

Take-home problems/homework (10-20 points) 20% (100 points)

Three Hour Exams and one Comprehensive Final Exam (4 total) 80% (400 points)

*Letter grades will be calculated and assigned on an absolute scale as follows:*

**A** >90.0%      **B** 80.0 - 89.9%      **C** 70.0 - 79.9%      **D** 60.0 - 69.9%      **F** <60%

Grade cut-offs *might* be lowered if the class averages are below normal. Grade cut-offs will *not* be raised.

Prior to mid-semester, you may request feedback on your academic performance in this course.

### Attendance:

Class attendance is mandatory. Students are expected to be in class and are responsible for all material assigned and covered.

Prior arrangements must be scheduled BEFORE an excused absence. Work missed for absences due to documented emergencies or sicknesses must be made-up within a week of returning to class. Any unexcused or without prior arrangement absence will be recorded as a zero.

### External Plagiarism Check:

This course uses plagiarism prevention technology. Students have the option of submitting papers online through a plagiarism prevention service or allowing the instructor to submit hard copies of these papers. The papers may be retained by the service for the sole purpose of checking for plagiarized content in future student submissions.

### Class Evaluations:

Class evaluations at NGCSU are now conducted on-line through Banner. Evaluation of the class is considered a component of the course and students will not be permitted to access their course grade until the evaluation has been completed. The evaluations will be accessible beginning one week prior to Final Exam week.

### Quizzes, Take-home quizzes and workshops:

A pen/pencil and a calculator will be allowed for the in-class quizzes. Quizzes may or may not be announced. There will be no make-up quizzes; but for excused absences, a grade will be calculated by using the next exam grade. A zero will be given for unexcused absences.

### Hour Examinations:

Four examinations will be given including the final. A pen/pencil and a calculator will be allowed for the exams. Each exam is 55 minutes in length and will be given during the lecture time period for that day. Tentative coverage is listed below and will be discussed several days before the exam in case of changes. Group study sessions (whether before an exam or anytime during the semester) will be offered upon request. NOTE: Make-up exams *may* differ in format and/or coverage. The Final Exam will be COMPREHENSIVE.

### Academic Dishonesty Policy:

Simply, academic dishonesty will not be tolerated. Any violation OR attempted violation will result in an F for the course AND will be reported to the Judicial Council under the NGCSU academic integrity code. The complete academic integrity code can be found in the NGCSU Student Handbook.

### Fire Drill Procedure:

In the event of a fire signal students will exit the building in a quick and orderly manner through the nearest hallway exit. Learn the floor plan and exits of this building. Do not use elevators. Crawl on the floor if you encounter heavy smoke. Assist disabled persons and others if possible without endangering your own life.

### Chapter Coverage:

WEEK OF:	Lecture Coverage	Assigned Problems*	NOTES
January 7, 9	Introduction, Chapter 10	Ch 10: all	
January 12, 14, 16	Chapter 11	Ch 11: all	
January 21, 23	Chapter 12	Ch 12: all	<b>M: No classes on MLK day</b>
January 26, 28, 30	Chapter 13	Ch 13: all	
February 2, 4, 6	Chapter 14	Ch 14: all	
February 9, 11, 13	Chapter 15	Ch 15: all	<b>Friday, Exam 1 (Ch. 10-15 )</b>
February 16, 18, 20	Chapter 16	Ch 16: all	
February 23, 25, 27	Chapter 17	Ch 17: all	<b>T: Last day to withdraw</b>
March 2, 4, 6	Chapter 18	Ch 18: all	
March 9, 11, 13	Chapter 19	Ch 19: all	<b>Friday: Exam 2 (Ch. 16-19)</b>
<b>March 16-20</b>	<b>Spring Break</b>		
March 23, 25, 27	Chapter 21	Ch 21: all	
Mar 30, Apr 1, 3	Chapter 22	Ch 22: all	
April 6, 8, 10	Chapter 23	Ch 23: all	
April 13, 15, 17	Chapter 20	Ch 20: all	<b>Friday: Exam 3 (20-23)</b>
April 20	Special topic/Review		Last day of Spring classes
<b>Friday, April 24, 2009, 10:30-12:30</b>		<b>Final Exam</b>	
<b>*Assigned problems will not be turned in for a grade but it is highly recommended that you complete the assigned problem sets.</b>			