

## Chemistry 122 Course Syllabus Spring 2014

Course: Chem 122, General Chemistry II, 4 credits  
Term: Spring Semester, 2014  
Class Schedule: 10:00-10:50 am, MWF; Lab: Tuesday 8:00-9:50 and 10:00-11:50  
Text: Chemistry by Chang, 9<sup>th</sup> Ed. McGraw-Hill  
Instructor generated lab manual  
Instructor: Angie Bartholomay  
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Office Hours: Open, you may stop by at any time.

Course Content: General Chemistry II will cover chapters 12, 14-16, 18, 19, 23, and 24. Topics will include intermolecular forces, kinetics, solution chemistry, acid/base chemistry, thermodynamics, electrochemistry, nuclear reactions, and carbon bonding; with special emphasis on qualitative analysis. A quantitative evaluation of surface water is included especially for wildlife majors.

Grading: Grades will be based on total points using the following percentage system: 100-90, A; 89-80, B; 79-70, C; 69-60, D; <60. Exams, lab reports, a final lab project, and an independent study project will be used to determine the final grade. **IMPORTANT!** Any grievances about graded material must be addressed within one week from the time the material is returned to the student.

Exams: There will be four exams (100 points each) during the course of the semester. Exams may contain short answer/essay, multiple choice, and problems. The use of periodic tables is permitted and will be provided. If you know you will be gone the day of an exam, you must take it prior to the absence to receive full credit.

Quizzes: Quizzes are unannounced and cover mathematical aspects we have been studying. Each quiz is worth 20 points. Quizzes cannot be made up.

Lab Project: 2-3 member teams will perform a qualitative analysis project beginning with lab #9 and will have four weeks to complete the analysis. Project is worth 150 pts:

Laboratory: The laboratory portion of the course provides an opportunity to integrate lecture concepts with observable activities. Chemical splash safety goggles are required and can be purchased at the bookstore. **Attendance in lab is mandatory. There are no excused absences. Lab reports not submitted for grades at the next scheduled will receive 70% of the graded report.**

Research You will have a choice of one of the following as independent study. This is worth 150 pts.  
1) Should you choose the research paper, it will be 4-5 pages in length on some current topic in chemistry or related science. The paper must follow all of the requirements of any research paper completed for Composition II .  
2) The Science Olympiad involves preparing chemicals and test questions as needed for the chemistry events and the running of those events on March 24.

Academic Integrity Ignorance is no excuse. You are expected to understand the rules governing copyright infringement and proper acknowledge of sources of information when presenting material from research articles and from internet searches. All work submitted is expected to be your work, thoughts, and ideas. Violations of copyright laws and plagiarism are grounds for failure in this course.

Lecture Schedule:	Reading assignment	lab schedule	topic
Week 1	Chapter #12		no Lab
<b>Jan. 20</b>	<b>Martin Luther King Day – No Class</b>		
Week 2	Chapter #12		solutions and colloids
Week 3	Chapter #13		rates of chemical reactions
Week 4	Chapter #13 <b>Exam #1</b> chapters 12 & 13		catalysts
Week 5	Chapter #14		Equilibrium
Week 6	Chapter #15		pH
<b>Feb. 20<sup>th</sup></b>	<b>President's Day- No Class</b>		
Week 7	Chapter #15		
Week 8	Chapter #16		Acid- base titration
Week 9	Chapter #16 <b>Exam #2</b> Chapters 14, 15 & 16		
	<b>March 17-21 Spring Break</b>		
Week 10	Chapter #17		
Week 12	Chapter #18		entropy
Week 13	Chapter #19		field studies in water quality
	<b>Exam #3</b> Chapters 17, 18 & 19		
Week 14	<b>Easter Break April 18-21</b>		
	Chapter #23		qualitative analysis
Week 15	Chapter #24		
Week 16	Chapter #24 <b>Exam #4</b> Chapter 23 & 24		
Week 17	Final Exam		

**General Education Goals/Objectives:** This course meets General Education Goal 1: Explains the interrelationships between chemistry and their environment and the role of science in their lives. Specific objectives include:

- 1) Demonstrates the application of the scientific method of inquiry (Objective #1).
- 2) Demonstrates an awareness of the role of science in everyday life (Objective #3)

**Relationship to Campus Theme:** This course addresses the campus theme by incorporating the role that chemistry plays in our everyday life and the impact it has on our natural world. In addition students will use technology to conduct labs as well as study how technology can be used in chemistry. The course will address the role of chemistry in their everyday life as well as in their future.

**Classroom Policies:**

- Make-up: I will not allow make-up for missed exams unless prior arrangements have been made.  
If you must be absent for a school related or family event, you are expected to make prior arrangements and take the exam prior to the event. .
- Cell phone and related technology are prohibited in the classroom at all times. It is recommended that you do not bring your cell phone into the classroom or, at the very least, turn it off.
- Be respectful of other students, technicians, instructors, and guests.

**Academic Integrity:** All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the instructor and college administration. For more information, refer to the Student Handbook.

**Disabilities and Special Needs:** If you have a disability for which you need accommodations, you are encouraged to contact your instructor and the Learning Center (228-5479 or 1-888-918-5623) to request disability support services as early as possible during the beginning of the semester