

General Chemistry II Syllabus- Spring 2010

SECTIONS 8-13

HIRC Lecture Hall 3, MWF 10:00-10:50am

INSTRUCTOR CONTACT INFORMATION

Dr. Kelly Gallagher

120C Physical Science

Phone: 436-3180

Email: gallagkr@oneonta.edu

Office Hours: Tu. 9:00-10:00am, W. 1:00-2:00pm, & F. 11:00am-12:00pm

PEER-LED TUTORING (I'll be available at this time, as well)

Location: 122 Physical Science

Time: M, 12:00-2:50pm

COURSE DESCRIPTION:

General Chemistry II is a continuation of General Chemistry I with an emphasis on qualitative inorganic analysis; introductory chemical kinetics, equilibrium, electrochemistry, and chemistry of selected metals. This course includes a laboratory component.

COURSE PREREQUISITE: General Chemistry I (CHEM 111), or equivalent.

REQUIRED MATERIALS:

- General Chemistry Preliminary Edition by Vining, Young, Day, Botch
- Turning Technologies Response Card "Clicker" (any model will work)
- Laboratory Safety Goggles
- Scientific Calculator

COURSE WEBSITE:

Lecture notes, my schedule, class announcements, and laboratory information will be posted at

http://employees.oneonta.edu/gallagkr/CHEM112_S10/s10_chem112.html

ONLINE HOMEWORK:

Chemistry is a contact sport. In order to learn the material, you need to practice, practice, practice! Exam questions will not simply test your knowledge of scientific "facts", but rather your ability to apply them and use them to interpret data or observations. To assist you in the learning process, this course uses the OWL online homework system, hosted by the University of Massachusetts. OWL utilizes a "mastery" approach. This means that you work on an assignment until you successfully complete it. You may make as many attempts as you want. You are not

EMERGENCY EVACUATION/SHELTER-IN-PLACE PROCEDURES:

In the event of an emergency evacuation (i.e., fire or other emergency), classes meeting in this building are directed to reassemble at the Fine Arts Theater so that all persons can be accounted for. Complete details of the emergency evacuation, shelter-in-place, and other emergency procedures can be found at <http://www.oneonta.edu/security>.

penalized for getting an answer wrong. The system will provide you with feedback, so that eventually you will be able to master each problem. You will only lose points for not completing an assignment. Homework will be assigned each week and will be due at midnight on Sunday. Due date extensions may be given if requested at my discretion.

OWL LOGIN SITE:

<https://owl.oit.umass.edu/owl-c/user/loginpage.cgi?UserType=Student&Server=owl-chemistry>

YOUR OWL LOGIN: SUCO + your email address up to the @ sign.

For example, my login would be SUCOgallagkr

YOUR OWL PASSWORD: Your A00 number, including the A00.

GRADING: Final course grade will be determined based on the percentage of total available points earned for the semester. There are 700 points, broken down as follows:

3 in-class Exams, 100 points each=	300 points
Comprehensive Final Exam* =	150 points
OWL Homework=	100 points
Laboratory=	100 points
Class Participation†=	50 points

*The Final Exam is scheduled for **Friday, May 14, at 8:00-10:30am in HIRC 3.**

†Participation will be monitored using the Turning Point clickers.

LABORATORY INFORMATION

Sec. #	Day	Time	Location	Instructor	Instructor's email
8	Th	3:00-5:50pm	PSci. 203	J. Chiang	chiangjf@oneonta.edu
9	M	12:00-2:50pm	PSci. 202	T. Helser	helsertl@oneonta.edu
10	W	3:00-5:50pm	PSci. 202	T. Helser	helsertl@oneonta.edu
11	W	12:00-2:50pm	PSci. 203	S. Quick	quicksk@oneonta.edu
12	W	3:00-5:50pm	PSci. 203	S. Quick	quicksk@oneonta.edu
13	Th	12:00-2:50pm	PSci. 203	S. Barsukoff	sbarcy37@yahoo.com

Laboratory work both complements and supplements lecture material and is an integral part of this course. As per the Department of Chemistry & Biochemistry policy, *you must pass the lab to pass the course.* (The full policy is found on the course web site and on the final page of this syllabus.)

You are expected to attend every scheduled meeting of your laboratory section. If you miss lab for a valid reason (illness, car trouble, etc.), it is your responsibility to contact

your instructor. S/he will attempt to arrange for you to attend some other laboratory section during the same week. If it is not possible for you to reschedule, your instructor will determine how you will make up the work.

Experiment and pre-lab assignment downloads are posted on the laboratory portion of the course web site. The lab web site also contains helpful videos of common lab techniques. You are responsible for printing the experiment and completing the pre-lab assignment before you enter the lab each week.

Safety is an important concern in the chemistry laboratory. You must attend the lab section for which you are registered. If you are not wearing proper lab attire, *including safety goggles*, you may be asked to leave the laboratory.

Lab reports are due the following lab meeting after the completion of the experiment.

Written lab reports, including calculations, must be *your own original work*, even if some of the data was collected while working with another student.

TENTATIVE SCHEDULE OF COURSE TOPICS:

Chapter 5: Thermochemistry
Chapter 19: Entropy and Free Energy
Chapter 11: Liquids
Chapter 12: Solids
Chapter 13: Solutions
Chapter 14: Kinetics
Chapter 15: Equilibria
Chapter 16: Acid-Base Equilibria
Chapter 17: Buffers and Titrations
Chapter 18: Solubility Equilibria
Chapter 20: Electron-Transfer Reactions

An inspirational quote to begin the semester:

“[Thermodynamics](#) is a **funny** subject. The first time you go through it, you don't understand it at all. The second time you go through it, you think you understand it, except for one or two small points. The third time you go through it, you know you don't understand it, but by that time you are so used to it, it doesn't bother you anymore.”

[Arnold Sommerfeld](#), German theoretical physicist

Department of Chemistry and Biochemistry

Policy on Course Attendance, Performance, Participation and Behavior

1. Students are expected to attend all scheduled course sessions and should be prepared by reading in advance any relevant material assigned or provided. Participation (defined by interacting with the instructor, working problems at the board, individually or in groups, using personal response "Clicker" systems and other mechanisms defined in the syllabus) is expected.
2. Students are reminded that instructors are not required to accept assignments submitted late, except in instances allowed according to College policies. College Policies as defined in the Student Code of Conduct apply to lecture, recitation and laboratory portions of all courses.
3. Laboratories are an integral part of education in chemistry courses. As a result, participation in all laboratories scheduled for a course is expected. Unless alternate activities are scheduled, students can expect that their laboratory section will meet each week, and failure to attend laboratories may lead to failure in the course.
4. The minimum passing score for courses in the Department of Chemistry & Biochemistry is 70%. Thus, in order to pass a course, a student must earn a total of 70% of the available points or score values (either raw or adjusted). This is inclusive of the laboratory portion of the course.
5. The laboratory for a course must be passed, normally by earning 60% **of the available score or points for the laboratory**, in order to pass the course. Exceptions may be noted in syllabus.
6. Students are expected to bring to laboratory the laboratory manual (or printout of the experiment), a laboratory notebook (if required), a calculator, ruler or other materials as specified by the instructor or in the syllabus.
7. Students are not allowed to work in the laboratory without direct faculty supervision.
8. Unless announced in advance, **SAFETY GOGGLES (WHICH PROVIDE A COMPLETE SEAL AROUND THE EYES AND ARE EQUIPPED WITH INDIRECT VENTS) ARE REQUIRED TO BE WORN AT ALL TIMES IN THE LABORATORY. STUDENTS ARE REQUIRED TO PROVIDE THEIR OWN SAFETY GOGGLES.**
9. Open-toed shoes (e.g. sandals, "Birkenstocks", flip-flops, etc), unrestrained long-hair, excessively loose clothing and other items which may be easily ignited or snag on apparatus are not allowed.
10. Food, drink, candy, cosmetics, tobacco products, etc. are not allowed in the laboratory.
11. Students are expected to be attentive to the material and any experiments and apparatus in the laboratory. The following must be turned off and stored away from the laboratory bench while in laboratories:
 - Portable music players (e.g. iPods, MP3 players and the like)
 - Cellular telephones, pagers, text messaging devices and the like
 - Other portable electronic devices as defined by the laboratory instructor
12. Horseplay, practical jokes, "goofing around" or interfering with other students' work is not allowed in the laboratory.
13. Students should not expect to be able to makeup missed laboratory sessions or experiments. If a makeup session is possible, it will be at the discretion of the laboratory instructor and will normally be during the same week as the missed laboratory section.
14. Students will not be permitted to work in any laboratory section other than that they are registered for unless they have the written approval of both their regular instructor AND the instructor in the section they wish to enter.

Course instructors may modify these guidelines as necessary to meet the requirements of individual courses or chemical specialties in consultation with the Department Chairperson. Students should expect to receive a copy of these guidelines in their course syllabus or be given a copy by the course instructor (either in paper form or by electronic mail).

Adopted by the Department of Chemistry & Biochemistry on 16-March-2009 and to be included in each course syllabus beginning in Fall 2009.