General Chemistry II Lab CHE 1561 Spring 2019

Purchase College

Course Meetings

Pre-lab in Einstein Corner (NS 3046) and lab in NS 3028

Monday 12:30-3:20pm Prof. Taina Chao Taina.Chao@purchase.edu

Office: NS 3033 Office hours: Mon 11am-12pm, 3:20-4:20pm

Tuesday 12:30-3:20pm Prof. Stephen Cooke Stephen.Cooke@purchase.edu

Office: NS 3029 Office hours: Mon, Tue, and Thu 10:10am-11:10am

Wednesday 3:00-5:40pm Prof. Elizabeth Middleton <u>Elizabeth.Middleton@purchase.edu</u>

Office: NS 3040 Office hours: Tue 12:15pm-1:15pm, Wed 9:45am-11:45am

Course Description

Basic techniques in analytical, inorganic, organic and physical chemistry. The lab provides students with hands on, high impact educational activities that reinforce and demonstrate the material from the lecture class.

Registration

To take the General Chemistry II lab, you must also be registered for or have previously completed General Chemistry II lecture (CHE 1560) and have completed General Chemistry I lab (CHE 1551). If you drop or withdraw from the General Chemistry II lecture, you must also drop or withdraw from the General Chemistry II lab.

You must attend the lab section you are enrolled in!

Course Materials

All laboratory experiments, videos, prelabs, and other handouts are posted on the course Moodle site for General Chemistry II Lecture. You can find the course site at moodle.purchase.edu, and all materials are on the "lab handouts" page. There are three handouts for each lab. Students are responsible for printing and bringing all three-handouts to lab each week. three-handouts.

Lab goggles and proper laboratory attire are also required. Lab goggles will be available for you to borrow or you may purchase and bring your own pair.

Lab Expectations

- <u>Arrive on time</u>. Arriving late to a lab already in progress is very dangerous and may preclude you from performing the lab.
- <u>Incorrect attire will result in immediate dismissal from lab</u>. At a minimum, this means covering your knees to your neck, wearing closed toe shoes, and wearing goggles.
- Cell phones and electronic devices are not permitted to be used during lab.
- Backpacks and bags must be stowed at the front of the lab prior to beginning work.
- Absolutely <u>no food or drink</u> is permitted in the lab.
- If you are unsure of a procedure, ask your instructor first.
- Be considerate of the environment when disposing of chemicals and materials—in many cases disposal containers will be provided.
- Come prepared with the lab notes and worksheets printed out, and pre-lab questions completed.
- Labs are not a race, take your time!

Purchase College Academic Integrity Policy

The purchase college academic integrity policy (https://www.purchase.edu/offices/community-standards/student-code-of-conduct/section-a-academic-integrity/index.php) explicitly forbids cheating, plagiarism, and other forms of academic dishonesty. Plagiarism is the appropriation or imitation of the language, ideas, and/or thoughts of another person and the representation of them as one's own original work. Students are responsible for familiarizing themselves with the definition of plagiarism and acceptable methods of attribution.

Students who have any questions or doubts about whether any activity is academically permissible should check with the instructor.

<u>Specifically for this course</u>, students are allowed to assist each other when completing portions of the lab, but should under no circumstances copy the work of another student or allow their own work to be copied. Students should submit their own unique, independent work for each assignment. **Identical (or nearly identical) work from two students may not be submitted**.

Student Disabilities

Students with documented physical, learning, psychological and other disabilities are entitled to receive reasonable accommodations. If you need classroom or testing accommodations, please contact the Office of Disability Resources at ODR@purchase.edu or in person in the Student Services Building, Room 316A. Students must also inform the professor at the beginning of the semester so arrangements can be made.

Attendance and Make-up Policy

Attendance at the laboratory meeting each week is required and an unexcused absence will result in a grade of zero for the experiment. In cases where a student knows in advance that laboratory work must be missed, arrangement must be made for making up the work at least one week prior to the absence. In cases where an emergency or serious illness prevents a student from attending lab, the student must contact the professor immediately (on the day of the missed lab or earlier) to make arrangements to make up the lab. Makeup labs will not be available after the lab has been disassembled or after unstable reagents become unusable. Accumulation of three absences from labs will result in a failing grade for the lab.

Grading Policy

Lab grades will be given for each experiment (out of a total of 10 points) and are based on the following factors:

- Completion of all written work on the lab handout, including pre-lab (1 point) and during lab/post-lab work (5 points)
- On-time arrival and successful completion of the lab with correct laboratory techniques and safety procedures and within the time allotted (4 points)
- Lab reports that are messy or illegible may be penalized or not accepted
- The instructor or learning assistant must sign your lab work before you leave lab; failure to obtain instructor signature will result in a 0.5 point deduction
- Late lab reports will be deducted 2 points for each week late

Midterm and final exams, each covering content from half of the labs, will be given during the lecture period. The midterm will take place on Friday, March 15 and the final will take place the week of April 29. Each exam will contribute 10% to your final laboratory grade.

Assignments for Each Experiment

Before lab, you must read the experimental procedure, complete the pre-lab assignment, and watch the accompanying instructional videos.

When coming to lab, you must bring the pre-lab, during lab, and post-lab handouts. You will turn in the completed pre-lab at the beginning of lab, and <u>students will not be allowed to participate</u> in the lab if the pre-lab is not complete.

Completed post-lab handouts are due at the beginning of lab one week after the experiment has been completed. Each post-lab handout must be submitted with a cover sheet on the front.

Grades for each assignment will be posted in the grade book on your individual lab Moodle site.

Final Grades

Highest	Lowest	Letter Grade
100	93	Α
92.99	90	A-
89.99	87	B+
86.99	83	В
82.99	80	B-
79.99	77	C+
76.99	73	С
72.99	70	C-
69.99	60	D
59.99	0	F

A grade of A+ will be given at the discretion of the professor for exceptional work in the course

Purchase College does not award grades of D+ or D-

Schedule of Experiments

Ехр	Week of	Name	
	Jan 21	No lab this week (first partial week of classes)	
	Jan 28	No lab this week	
1	Feb 4	Check-in, Molecular weight from freezing point lowering	
2	Feb 11	Analysis of sea water part I: Total cation concentration	
3	Feb 18	Analysis of sea water part II: Ca ²⁺ and Mg ²⁺ concentration	
4	Feb 25	Synthesis of aspirin	
5	Mar 4	Qualitative analysis of cations	
	Mar 11	No lab this week; lab midterm given during lecture on Mar 15	
6	Mar 18	Determination of an unknown acid	
7	Mar 25	Nickel lab	
	Apr 1	No lab this week (spring break)	
	Apr 8	Flex week (keep this date available)	
8	Apr 15	Electrochemical cells	
9	Apr 22	Kinetics of the reaction between hydrogen peroxide and iodide ion Check-out	
	Apr 29	No lab this week; lab final given during lecture, exact date TBD	
	May 6	No lab this week (beginning of final exams)	