

CHM 108/294 Chemistry in Society Lab (Online) Fall 2020

Faculty: Dr. Kirstin Hendrickson, PS-H238, khendrickson@asu.edu

Office hours, virtual: The TAs and I will be available by appointment on our course Zoom site (see link in Canvas). We can also answer questions via email.

Website: <http://my.asu.edu> (Canvas)

Required Text: *Chemistry in the World*, Revised 3rd Edition (print or ebook), 2016, Hendrickson, K., Cognella (available online, see Canvas for online ordering).

Required Pre- or Co-requisite: You must have completed (or be enrolled in) CHM 107/294 (lecture) to take this course.

Required Equipment:

- 1) The lab protocol and worksheet for each week, which you will download from the "Lab Activities" folder on Canvas
- 2) A reliable calculator
- 3) Other equipment as listed in the "Required Materials" list, available under "Start Here" link on Canvas
- 4) A digital camera, computer with snapshot technology, or cell phone with the ability to take photos (you will use this to document attendance each week and completion of your lab project)

Note: CHM 108/294 lab is a hands-on examination of scientific principles presented in the lecture course CHM 107/294, Chemistry in Society. You will generally have to complete two experiments each week. Be aware that lab depends heavily upon material presented in the lecture portion of the class. It is highly recommended that you do not attempt a lab prior to completing the corresponding lecture work (noted for each experiment) if you are concurrently enrolled in CHM 107/294. I have designed the lab so that it coordinates with lecture, and if you stay on track per the suggested schedule in both lab and lecture, you'll always have the necessary knowledge for lab. Because this is an online course, there are no excused absences/assignments from lab. **More than three zeroes on labs (that is, failure to submit a lab, or labs that receive zero points due to lack of photo or lateness) will result in an automatic failure in this course, regardless of your final grade. This is a departmental policy standard across ASU SMS lab courses and I do not have the ability to make exceptions.**

Course Description and Learning Goals:

- 1) **To understand the reciprocal relationship between science and society on local, regional, national, and global levels.** This goal will be met through hands-on laboratory activities and discussion with (optional) lab partners or peers/family about chemistry in the real world and the interaction between current issues in science and social issues on all levels.

- 2) **To develop a critical understanding of the principles underlying some of the major visible scientific issues in the public domain.** Each of the labs conducted addresses a critical scientific issue visible to and directly affecting the public. Students will look at chemical processes in the real world—effectively conducting “kitchen chemistry”—in order to internalize an understanding of the fact that chemistry is *not* confined to the laboratory, but takes place all around us and inside us. Through these labs, students will also learn chemical principles underlying current topics in science.
- 3) **To demonstrate the ability to formulate, communicate, and defend well-informed views of their own—as well as engaging with classmates and faculty—concerning the issues examined.** Students will engage in discussions with classmates or peers/family members on a variety of topics.

Forming Groups (optional): At the beginning of the semester, you will **have the option to** use the Discussion Board on Canvas to select a partner or group within which you may complete the lab investigations (though each student will complete their own lab worksheets). **You do not have to work with others**, but you’re more than welcome to do so. Completing experiments with a partner/group will distribute any materials expense, and (based upon the testimony of past students) be more fun.

Syllabus Quiz: The syllabus you’re currently reading contains important information—it’s essentially our contract with each other for this course. You are required to know the information contained herein. As such, you will need to take a syllabus quiz (worth 10 points) to demonstrate your understanding of this information. Please note that no exam scores will be counted toward your grade if the syllabus quiz is not completed. This means that even if you take the midterm and final and the system gives you points for them, the earned points will be deducted from your final score when I process grades.

Lab Activities: For each lab, listen to the pre-lab lecture associated with the experiment. The lecture will help orient you to the principles of chemistry addressed in a given experiment, and will also provide any necessary technical information and/or hints on how to complete the lab. Follow the lab protocol, making sure to take a photo at the specified step or of the specified object. **You must submit a photo, and you must appear in your photo—students not submitting a photo, submitting a photo in which they do not appear, or submitting a photo of something other than the specified step/object will receive a zero for that lab (this is a zero-warning system to maintain the integrity of the lab).** If you happen to work with a group, it’s totally fine to take one photo of several people, but each person in the photo should submit that photo with their lab report. **Please clearly identify yourself if there is more than one person in your photo.**

Lab Reports: Completed laboratory worksheets are due by the date listed on the schedule. Late reports will lose 2% of points possible per hour late (0 after 49 hours).

Quizzes: There will be two quizzes during the semester—each will consist of multiple-choice questions. Make certain that you take the exams during the period in which each is

available (listed in the syllabus); late exams lose 2% of points possible per hour late (0 after 49 hours).

Night/Weekend Work: You are welcome to work on the weekends, but be aware that **the TAs and I are not available on weekends or at night to answer questions or resolve technical issues.** If you leave your lab until the last minute and have trouble, you will not get an email response until the next morning (or Monday, if it's a weekend), and if you're unable to turn in your lab on time, **your lab will be late.** It is your responsibility to read the lab during the week, **even if you plan to complete the lab over the weekend**, and ask any questions you may have during business hours.

Discussions: Because this is a Chemistry and Society lab, there is, by necessity, a social component to the labs. Labs will have mandatory discussion questions, which require you to talk to group members (if you've chosen to form a group) or family members/friends/whomever you like (the person doesn't have to be in the class). You may choose to whom you talk, but you must talk to someone about certain components of certain labs to receive points. Part of what you're learning in this class is how to have a discussion about science. Consequently, you'll be having discussions about science. **Please be prepared for this, and identify (in your own mind) at least one individual that you can talk to occasionally about what you're learning.**

Evaluation:	Lab worksheets	300 (30 points each, 2 lowest are dropped)
	Syllabus quiz	10
	Midterm quiz	50
	<u>Final quiz</u>	<u>50</u>
	Total	410 points

Questions About Material: In addition to emailing me with questions, you can get help from the TAs for this course. The TAs will have virtual office hours through the Canvas Virtual Classroom (instructions for using virtual classroom are posted on Canvas). Note that TAs and I are only available on Zoom by appointment—at any other time, the Virtual Classroom will be empty. TAs can also be reached by email (though they will not answer late-night or weekend questions until the next business day).

Withdrawing from the course: The withdrawal deadline is March 26.

Academic integrity: Cheating will absolutely not be tolerated. The first such infraction will be dealt with to the fullest extent permissible by the university. There are no exceptions. This includes (but is not limited to) any form of inter-student collaboration not specifically sanctioned by the professor, use of prohibited materials or devices during exams (including dictionaries and translating devices), copying or distribution of quiz or exam answers prior to the test, plagiarism, and collaboration with a non-student or use of a professional "class-taking" service.*

Deception, in either written or oral form, directed at University personnel by a student for the purpose of improving his/her own academic or financial standing or that of another student is subject to disciplinary action as part of the Academic Integrity policy.

*Note that a significant discrepancy in verbal and/or written communication skills between submitted work and emails, etc, is sufficient to arouse suspicion of plagiarism and/or use of a class-taking service.

General ASU Policies

Grade Appeals

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the department chair per the [University Policy for Student Appeal Procedures on Grades](#).

Student Conduct and Academic Integrity

Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>. Additionally, required behavior standards are listed in the [Student Code of Conduct and Student Disciplinary Procedures](#), [Computer, Internet, and Electronic Communications policy](#), and outlined by the [Office of Student Rights & Responsibilities](#). Anyone in violation of these policies is subject to sanctions.

[Students are entitled to receive instruction free from interference](#) by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per [Instructor Withdrawal of a Student for Disruptive Classroom Behavior](#).

The Office of Student Rights and Responsibilities accepts [incident reports](#) from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Prohibition of Commercial Note Taking Services

In accordance with [ACD 304-06 Commercial Note Taking Services](#), written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the notetaker's name as well as the instructor's name, the course number, and the date.

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that

unforeseen events will make syllabus changes necessary. Please remember to check your ASU email and the course site often.

Accessibility Statement

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act as amended (ADAAA) of 2008, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

[Qualified students with disabilities may be eligible to receive academic support services and accommodations.](#) Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are [responsible for requesting accommodations and providing qualifying documentation](#) to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities.

Qualified students who wish to request an accommodation for a disability should contact the DRC by going to <https://eoss.asu.edu/drc>, calling (480) 965-1234 or emailing DRC@asu.edu. To speak with a specific office, please use the following information:

ASU Online and Downtown Phoenix Campus

University Center Building, Suite 160
602-496-4321 (Voice)

Polytechnic Campus

480-727-1165 (Voice)

West Campus

University Center Building (UCB), Room 130
602-543-8145 (Voice)

Tempe Campus

480-965-1234 (Voice)

Title IX

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As mandated reporters, course instructors (including TAs) are obligated to report any information they become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.