

Valencia College West Science Department
Fall 2021 CHM 2933_15573
Special Topics in Chemistry

*This course will be taught online for the semester of Fall 2021.

Professor

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Office: Virtual
Zoom Room ID: 779 321 5359
Office Hours: Drop in
Mon 12-2 pm via [Zoom](#)
Appointment for 1:1 meeting with Prof. Song per request
Wed 12-1pm via [Calendly](#)
Thu 12-2pm via [Calendly](#)
Fri 12-1pm via [Calendly](#)

Course

Name: Special Topics in Chemistry
CRN 15573 (Term 202210)
Description: CHM 2933 dealing mainly with Laboratory illustrates principles of ionic equilibria within framework of qualitative analysis

Prerequisites: CHM 1045C / CHM 1045H with a grade of C or better.

Educational Materials

Lab:

- ◆ Labs will be performed using a virtual lab by McGraw-Hill.
- ◆ Will need to acquire an access code from McGraw-Hill.

Other:

- ◆ Scientific calculator
- ◆ Access to internet

Assessment Process

◆ Laboratory	200 pts	100%
		Total = 200 pts

Final Grade: A = 200 – 180 pts; B = 179 – 160; C = 159 – 140; D = 139 – 120; F = 119 – 0

Attendance

Regular attendance and class participation are the most important factors that promote success in college. Attendance for online course will be counted as the completion of assignments by the due date. If the student miss or submit late for one assignment, the attendance will be counted as absence or late for the day assignment is due. Student absences which exceed **ten percent** of the total amount of class meeting times including labs may lead to a withdrawal from the course without prior notice. Students are responsible for contacting the instructor if they cannot complete their assignment on time to attempt to have the absence excused.

Available Course Resources

Valencia's Online Tutoring Service: In response to COVID-19, Valencia's tutoring services have moved online and are now being offered for accounting & economics, computer programming, math, EAP and foreign languages, science, and writing. To get started, read [General Guide](#) for online tutoring, then click on the link below to self-enroll in the tutoring courses in Canvas. This is where students will access the links to live tutoring (via Zoom), as well as the schedule of tutors, times, and services. <https://libguides.valenciacollege.edu/distancetutoring>

Microsoft Office Resources: Valencia does offer Microsoft 365, which has all the common Microsoft software for free through your Atlas account. Also useful is Microsoft Lens, which allows you to scan pages into pdf files.

Health and Safety Protocols

- **Vaccines** are strongly recommended for everyone who is eligible to receive one. Valencia is partnering with the state and local health departments to provide over 70 on-campus vaccine clinics between now and the end of September. The clinics are open to anyone (students, families, community members) and provide the vaccine at no charge.
 - More information on vaccines can be found [here](#).
 - Inform yourself about vaccine safety with this excellent [libguide](#) created by Valencia librarians.
- **Masks** are expected indoors on Valencia campuses. Valencia has ordered tens of thousands of masks which will be available in classrooms, building entrances, and other easily accessible locations. We are confident that when asked, most individuals will wear a mask to keep others healthy – and ask that you model the way by wearing a mask indoors.
- **Cleaning and Sanitization** protocols are robust and in place. The facilities team has installed over 2,000 hand sanitizer dispensers and continues to [implement](#)

[cleaning protocols](#) to keep our facilities clean. More information about air quality and ventilation can be found [here](#).

- **COVID illness reporting** If you are not feeling well, have been in close contact with someone who is COVID positive, or have a positive COVID diagnosis, **do not come to the campus** and immediately contact the COVID case management team at COVIDillness@valenciacollege.edu for support.

Policies

Make-Up: There will be NO make-up quizzes, exams, or late homework without proper reasoning. Please communicate with me as early as possible so that any issues can be resolved in a timely manner.

Cheating: If caught, on a quiz or test the assignment grade will result in a zero. Repeated offences will then result in a failing course grade. The student will then further be sent to Dr. Bob Gessner the Dean of Science. If caught a second time the student would then receive an F for the course as well as be referred to the Dean of Students for further action.

Extra Credit: This is optional depending on if instructor deems necessary. Depending on attendance records a total of up to 10 extra credit points can be given at the end of the semester. Any absences for whatever reason will be calculated in giving these points. Other opportunities include survey points which will be mentioned later in the semester.

Withdrawal: Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), a student who withdraws from class before the established deadline for a particular term will receive a grade of “W.” A student is not permitted to withdraw after the withdrawal deadline. I do not withdraw students after the withdrawal deadline.

Students with Disabilities: Students with disabilities who qualify for academic accommodations must provide a letter from the Office of Students with Disabilities (OSD) and discuss specific needs with the instructor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

Academic Honesty: Plagiarism is defined as claiming as your own a paper, report, article, or speech which in whole or in part was prepared by someone other than yourself. Cheating on an exam or copying someone else’s laboratory report is also a violation of this policy. A violation of this policy can result in failure of an assignment, the entire course, or your current status as an active student. Each student is expected to be informed and compliant with the college policy on academic honesty as stated in the Student Handbook.

Expected Student Conduct: Valencia College is dedicated not only to the advancement of knowledge and learning but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding the general rules of conduct. The primary responsibility for managing the classroom environment rests with the faculty. Students who engage in any prohibited or

unlawful acts that result in disruption of a class may be directed by the faculty to leave the class. Violation of any classroom or Valencia's rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriate and authorized actions. You will find the Student Code of Conduct in the current Valencia Student Handbook.

College Resources: A full description of all college policies can be found in the [College Catalog](#), [Policy Manual](#) and the [Student Handbook](#).

Valencia Student Core Competencies: Valencia faculties have defined four interrelated competencies (Think, Value, Communicate, and Act) that prepare students to succeed in the world community. These competencies are outlined in the college catalog. In this course, through lecture and discussion, group work, and other learning activities, you will further develop your mastery of those competencies.

Computer/Equipment Use: Use of computers in the Business, IT, and Public Service classrooms at Valencia College is restricted to those activities designated by the instructor to enhance the class materials. Any other use is strictly forbidden. Inappropriate use includes, but is not limited to:

- Use of computer to send Email or access Internet sites not specifically assigned in class.
- Use of computer for job, internship, or other activities not assigned in class.
- Modifying any hardware or software system configuration or setting.
- Activities not in accordance with the Valencia Student Code of Conduct.

Use of computers in the departmental open lab is limited to those activities involved with preparing homework or coursework in this department and is subject to the same restriction as listed above. Computer use is remotely monitored; any student using computers inappropriately may be subject to dismissal from class or banishment from the lab. Subsequent offense may be sent to the campus administration for further disciplinary action.

Student Assistance Program: Valencia College is interested in making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. **BayCare** Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

Additional College Resources

Enrollment services:

- Call: 407-582-1507
- Email: enrollment@valenciacollege.edu
- Hours
 - Mon-Thurs: 8 AM - 8 PM
 - Fri: 8 AM - 5 PM
 - Sat and Sun: 10 AM - 3 PM

Academic Advising:

- Call: 407-582-1507
- Email: advising@valenciacollege.edu
- Link to “chat” <https://valenciacollege.edu/students/advising-counseling/>
- Hours
 - Mon-Fri: 7 AM – 10 PM
 - Sat and Sun: - 10 AM - 10 PM

Virtual Answer Center:

- M-F 7a-10p
- Sat/Sun 10a-10p
- [Zoom Link to Virtual Answer Center](#)
- [Website](#) for Virtual Answer Center

Counseling Services:

- M-Th 8am-8pm
- Friday 8am-5pm
- Sat/Sun 10am-3pm

Financial Aid:

Contact FinAidOffice@valenciacollege.edu for their financial aid questions, as well as for potential assistance with financial support

Learning Outcomes

Students should become proficient with chemistry concepts as well as skills to complete common chemistry problems. Topics which will be taught are listed but not limited;

1. **Chemical Kinetics**
2. **Equilibrium**
3. **Thermodynamics**
4. **Acid and Bases**
5. **Electrochemistry**

Important Dates

Drop/Refund Deadline: August 30, 2021

Labor Day: September 6, 2021

Withdrawal deadline to receive a “W” is November, 03, 2021

Veteran’s Day: November 11, 2021

Thanksgiving Holiday: November 24-28, 2021

Final Exam: the week of December 6-12, 2021

Lab Overview

Labs will be performed using a virtual lab software by McGraw-Hill. A link to McGraw Hill connect page can be found among navigation tabs in the course shell for CHM 2933-15573. Registration should be free with McGraw Hill with a given registration code. There are also several labs which are not using the virtual lab software as well. Instructions will be given per assignment on Canvas.

There are ten lab experiments to be carried out for this course. Each week may have one lab activity due. Some labs can be completed in two weeks. Please review the following tentative schedule of labs to plan ahead.

Students taking this course will need to acquire an access code from McGraw-Hill to get access to virtual labs.

Pre-lab, virtual lab practical and lab assignment will be counted as 20 points totally for each experiment.

Tentative Schedule of Labs

Week	Date	Exp #	Experiment Title
1	Aug 23	0	Lab Safety Module
2	Aug 30	1	Evap. and Intermolecular Attractions
3	Sep 6	2	Colligative*
4	Sep 13	3	Kinetics* conc
5	Sep 20	--	Kinetics* temp
6	Sep 27	4	A Rate Law & Activation Energy
7	Oct 4	5	Equilibrium* Calibration curve
8	Oct 11	--	Equilibrium* Determine Kc
9	Oct 18	6	Buffer* Observing a Buffer
10	Oct 25	--	Buffer* Buffer Capacity
11	Nov 1	7	Acid/Base: Equilibrium*
12	Nov 8	8	Solubility Prod. Constant
13	Nov 15	9	Thermodynamics. Dissolution of Borax
14	Nov 24-28	--	No Lab, Thanksgiving week
15	Nov 29	10	Electrochemistry*
16	Dec 6	--	No lab, Final Exam week.

Disclaimer Statement: This outline may be altered, at the instructor's discretion, during the course of the term. It is the responsibility of the student to make any adjustments as announced.

LETTER FROM THE DEAN

Expectations of a Valencia College Science Student

Welcome to the Science Division of Valencia College's West Campus; we are enthused to have this opportunity to assist you in achieving your educational goals. Higher education is a privilege and an opportunity; it is your responsibility to realize that you are in control of those behaviors and actions that can enable success in this course.

From your professors, **you can expect** the following:

1. They will be prompt, courteous and respectful.
2. They will provide a professional learning environment throughout the entire scheduled instructional period.
3. They will provide an up-to-date syllabus; when changes need to be made, they will announce changes in a manner that is conveyed to all students in their class.
4. They will provide you with a course that is of necessary rigor to prepare you for the career you have chosen; because the class you are taking transfers to a four year college or university, it will be taught with the same academic expectations. The bonus of starting your education at Valencia, when compared to attending a four year college, is you will be able to get more personal attention with small class sizes and you will be able to save money; the classes are not easier.
5. They will offer time outside of class to discuss your questions.
6. They will be available to discuss your class concerns in private, outside of class time; you should try to resolve your class concerns with your professor before you try to voice your concerns with administrators.
7. They will respond to emails within 2 business days.
8. They will expect from you what they have expected from the many students who passed their classes in the past.

In return, this is **what your professor will expect from you:**

1. You will be prompt, courteous and respectful.

Prompt means you come to class on time, ready to work, with all assignments completed before you enter class or lab. It means that you have studied, that all conversations, texting and diversions come to a stop and that you are ready to contribute to a positive learning environment from the beginning of the class or lab.

Courtesy means you are polite in your attitude and behavior towards your professor and classmates.

Respectfulness means that you regard everyone's classroom experience as valuable to them, that you accept your professor's expertise and experience to create relevant course objectives and that you treat college and personal property with care.

2. You will read your syllabus; your syllabus is a contract between your professor and you. Be aware of deadlines to complete assignments on time and know your professor's attendance policy. You will need to attend class for the full length of time allotted to your science class and lab.
3. You will be aware of Valencia College policies and procedures found in the college catalog; ignorance of policies and procedures doesn't mean they don't apply.
4. You will be serious about learning; it is your responsibility to be an active participant in your own learning. You will need to devote sufficient time to learn the material presented by your professor; for most students, this means you will need to spend at least two hours studying for every hour of instruction. Learning is an action verb; you will need to do more than sit through class and reread your notes to be successful. To succeed in higher level classes, you must retain the information, concepts and skills you will learn; this can only happen if you work at learning to make the course content a part of your long term memory. Do not cram!!
5. You will be encouraged to produce your own study guides. Most college professors do not provide study guides, but they can give you tips that will help you produce your own study guides to gain a better understanding of the course content.
6. You will be expected to participate fully in classroom activities. The work you produce must be your own; cheating in any form is not tolerated and your professor will have specific consequences, in their syllabus, which will be enforced should cheating occur.
7. You will be expected to contribute to a positive learning environment. Avoid classmates who speak negatively, or who have a negative outlook, about your class or your professor. Instead, get to know your professor during office hours; you will learn much more with a positive attitude.
8. You will be held to a high standard of maturity and responsibility. Disruptive behaviors will not be tolerated in the classroom or lab. First time disruptions will be handled by your professor and may include a request that you leave the class or lab. Very serious or repeated disruptions will be reported, to the Dean of Science and the Dean of Students, with specific consequences that can include your permanent removal from the class.

Disruptions include:

- Being noisy when arriving late to class or leaving early.
- Carrying on private conversations while the professor is talking.
- Disrespectful language, tone and mannerisms.
- Sleeping or attempting to sleep in class.
- Repeatedly asking unnecessary or irrelevant questions.

My wish is that you get the best learning value from the science classes that you are taking. With everyone abiding by the expectations in this letter, your science classes at Valencia should be the next step in achieving your academic dreams.

Dr. Robert Gessner

West Campus Dean of Science

LETTER FROM THE DEAN

Expectations of Academic Integrity

Welcome to the Science Division of Valencia College's West Campus; we are enthused to have this opportunity to assist you in achieving your educational goals. In working to provide you with the best learning experience at Valencia College, my expectation is that each of our faculty and students maintain the highest ethical academic standards.

From your professors, you can expect the following:

1. They will be on time to class and available during their scheduled office hours.
2. They will return graded tests, labs and other assignments when promised and within a reasonable period of time.
3. They will answer emails and phone calls within 48 business hours.
4. They will properly cite their references and resources, where applicable.

From you, we expect the following:

1. You will take your exams without referring to any books, notes, electronic devices or classmates unless you are specifically instructed that a test is open-book or collaborative.
2. You will not tell other students about test questions or answers before or during their exam and you will protect the exam from being seen by others.
3. You will avoid even the appearance of cheating by not looking in the direction of other exams, by not wearing clothing/hats/visors that hide your eyes, by keeping your belongings, other than pens, pencils and erasers away from your desktop, by going to the restroom before the exam and by asking your professor for permission and supervision if you need to retrieve another pen, pencil or eraser from your backpack or purse.
4. You will not allow anyone else to be the author of any part of your essays, lab reports or other written assignments and you will not include any materials from any sources (books, journals, other students, the internet, etc.) unless you give credit to those sources.

It is my hope that you will think about why it is important that we each show academic integrity and how cheating and plagiarism affect all of us, including those guilty of these academic crimes. Some students think that it only hurts their grade if they get caught cheating or plagiarizing, but cheaters typically lie not only to others, but to themselves. Eventually, cheaters pay a price.

- Those who cheat typically fail licensure exams, since they don't really know the material. Without a professional license, they won't be able to get employment. Would you want to be treated by a doctor who cheated in order to pass an exam that covered his or her knowledge of your disease? Also, if they falsify a patient's medical records, can you guess what can happen to them?
- Research scientists who falsify data are typically discredited and their reputations can be permanently ruined.
- Although you may think your professors have no clue when a student is cheating, usually your classmates do and some will inform your professor.

- Cheating becomes habitual. See what happens when employees cheat their employer.
- Students who let others cheat off them are not doing anyone a favor. If you are in a highly competitive field, you may ultimately be aiding your competition.
- Guess what a professor says to a student seeking a letter of recommendation when they know the student cheated or plagiarized.
- Finally, what happens to a person's self-esteem and to their reputation when they act unethically by cheating or plagiarizing?

Use the following as your guide: *“Each student is required to follow Valencia policy regarding academic honesty. All work submitted by students is expected to be the result of the student's individual thoughts, research, and self-expression unless the assignment specifically states 'group project.'”* To get the most out of each of your classes, it is best to learn how to study for long term comprehension, not just to memorize facts. Study so you can teach others what you are learning. My motto is, *“if you can't teach what you are learning to others, you don't really know the material.”* Academic dishonesty, in the forms of cheating and plagiarism, will not be tolerated and for most of our science professors will result in a student getting a zero on a test or assignment for the first offense and then an F for the course if a student is caught cheating or plagiarizing again; at that point the Dean of Students will also be notified. Don't throw away your dreams and your reputation by showing a lack of academic integrity. We wish you the best and want you to succeed and be proud of your accomplishments at Valencia.

Dr. Robert Gessner

Valencia College West Campus Dean of Science