

## Chemistry 201 Spring 2022

Lecturer: Dr Tamara Byk  
Office Location: TBD  
SDSU email address pending  
Office hours: TBD  
Zoom Office Hours: M 6-8 pm

Lab Coordinator: Laurie Clare  
CSL 313  
lclare@sdsu.edu

***Waitlist students should email the lab coordinator ([lclare@sdsu.edu](mailto:lclare@sdsu.edu)) with your name and Red ID info ASAP to gain access to materials on Canvas.*** In consultation with the coordinator, you should attend online lectures and online recitation for the ion quiz and Quiz 1. Chem 201 labs will begin on the week of Feb 7.  
**You are 100% responsible for all assignments that are due and for keeping up with the work.**

**Text:** Chapters 4, 7, 12-21 of “Chemistry” by Openstax; a PDF version of this is available for download on Canvas. You can also order an on-demand print version at the Book Store. Finally, if you wish, the entire text can be viewed online or downloaded for free from <https://openstax.org/details/books/chemistry>.

**Other Required Materials:** Chem 201 Lab Manual, Lab Notebook, approved flame-resistant coat or flame-resistant yellow lab apron, safety glasses or goggles, and a non-graphing, scientific calculator.

**OWLv2 HW (Required):** Cengage OWLv2 will be used extensively for graded homework. A link for Cengage OWLv2 will be available on your Chem 201 Canvas Home page in the “Important Information and Links” module. **Additional Study Material:** Older quizzes and exams will be available in Canvas.

For all technical difficulties or errors that arise with the OWv2 systems **please contact the lab coordinator or OWLv2 technical support staff directly by phone or email.** The instructors and TAs will be unable to help you resolve anything but the most basic (is it plugged in?) technical problems.

### **Modes of Instruction, Lecture and Recitation:**

From Jan 19 until February 4, the first eight lecture classes will be held online. Students should attend online lectures from 3:00 pm - 3:50 pm, M,W,F. Laurie Clare’s Zoom link will be available on Canvas. (Note: the schedule for online lectures could be extended). After the Feb 7 pivot back to in-person, Dr Byk will conduct lectures.

Recitation will also be held online for the first 2 weeks starting the second week of the semester. TA Zoom links will be posted on Canvas. **Recitations are held on Mondays and Tuesdays,** attendance is mandatory and recorded. After the Feb 7 pivot back to in-person classes, students must continue to attend the recitation session on their class schedule.

**Absences from Lecture**, Lecture attendance is not taken but you should attend every lecture. **Absence from Recitation**, If you are going to miss a recitation session, contact the lab coordinator **before** your session begins. **Do not contact your TA**. The coordinator will try to find another recitation that you may attend, but only if you email before your session begins!

Placement into another recitation will be done only once. No quiz make-ups are allowed. You will take a quiz during a recitation on the same week the quiz was issued and at no other time. You may take a quiz at another recitation once. Failure to comply will result in a zero score for that quiz.

There will be a total of nine quizzes and the lowest quiz score will be dropped. There will be a total of 4 worksheets, but with the worksheet, you will be allowed a one-time opportunity to make up a missed worksheet during office hour with your TA. Worksheet make-up must occur during the same week issued and again only once.

### **Modes of Instruction, Lab:**

From Jan 19 until Feb 4, there will be no lab sessions.

On Feb 7, we will begin in-person labs. You must attend the lab section you registered for. If you attend any other lab section, you will receive a zero score for the formal lab write-up.

**Absence from Lab**, If you are going to be absent from lab, contact the lab coordinator before the lab starts. If possible, you will be placed in another lab section. If we cannot place you in another section, the lab coordinator will email to you, pertinent lab data so that you can finish the lab write-up. This will be done one time only.

**COVID-19 Policy for Spring 2022:** After Feb 7 or after the school mandates a return to in-person instructions, students who register for face-to-face classes are expected to attend as indicated in the course schedule. Faculty teaching face-to-face courses will not be required to create a new, alternative on-line class as an accommodation for any student.

Students with medical conditions that would present a COVID-related risk in a face-to-face instructional setting should contact the Student Ability Success Center (<https://sdsu.edu/sasc>) to begin the process of getting support. Students who do not adhere to the [Covid19 Student Policies](#) or the directives of their faculty will be directed to leave the classroom and will be referred to the Center for Student Rights and Responsibilities.

Do not come to campus if you do not feel well. Contact the lab coordinator then remain home, monitor your symptoms, and seek medical attention as needed.

### **COVID-19 Protocols**

Vaccination and testing protocols set by the CSU and SDSU will be enforced. Make sure to upload proof of your COVID-19 booster shot to [Healthconnect](#). If you opt for exemption, you must provide COVID-19 test results every 5-7 days. Plan accordingly, missing lab because of non-clearance is not a valid excuse and will result in zero scores. For more information use the following link: <https://sacd.sdsu.edu/student-health-services/covid-19>

**Grading.** Letter grades will be assigned based on your total points using the following scale:

A:1000-900; A-: 899-870  
 B+: 869-850; B:849-800; B-: 799-780  
 C+: 779-750; C: 749-650; C-: 649-600  
 D: 599-500  
 F: <500

### Points

3 midterm exams, multiple choice, 100 pt ea.	300
Final, multiple choice, comprehensive	200
Quizzes, best 8 out of 9, 20 pt ea.	160
4 Worksheets	40
Ion Naming Test, required to pass course	0
Homework	50
7 Lab Reports	175
1 Group Unknowns.	20
General Unknown	50
Lab points	<u>5</u>
	1000 pts

Quizzes will be given in the Recitation sections. They will be based on lecture material from the previous week. A homework assignment will be given in lecture (but not collected) to help prepare you for each quiz. Midterm exams will each consist of 20 multiple choice questions. They will be given on Fridays at the regularly scheduled lecture time in various locations depending on lab section. The Final exam will consist of 40 multiple choice questions based primarily on questions from the 3 midterm exams. There will be a few questions based on material covered in lecture after the 3<sup>rd</sup> midterm exam.

**CHEM 201 Student Help** will be available in the Math & Stats Learning Center (MSLC) located on the third floor of Love Library in room LL328. The MSLC will have chemistry tutors as well as TA help hours. A schedule of chemistry tutors is available through <https://mlc.sdsu.edu/>. A schedule for TA office hours at the MSLC will be made available in Canvas at the end of the first week of the semester.

### Accommodations (SASC):

SDSU via the [Student Ability Success Center](#) (SASC) provides accommodations for students with documented disabilities or medical conditions covered under the Americans with Disabilities Act (ADA). In keeping with current public health guidance, no accommodations will be granted to students without an ADA-qualified disability or medical condition.

If you are a student with a disability and are in need of accommodations for this class, please contact the Student Ability Success Center at [sascinfo@sdsu.edu](mailto:sascinfo@sdsu.edu) (or go to [sdsu.edu/sasc](https://sdsu.edu/sasc)) as soon as possible. Please know accommodations are not retroactive, and I cannot provide accommodations based upon disability until I have received an accommodation letter from the Student Ability Success Center. SASC registration and accommodation approvals may take up to 10-14 business days, so please plan accordingly.

### **Learning Objectives for Chem 201**

The main goal of Chem 201 is to complete the general introduction to Chemistry begun in Chem 200 in order to prepare you for more advanced courses in science.

More specific goals are to:

- (1) Make sure you are completely comfortable with basic chemical “arithmetic”, that is, calculations involving molecular weight, grams to moles, moles to grams, molarity, dilutions, reaction stoichiometry, and so on.
- (2) Make sure you are completely comfortable with drawing and looking at Lewis structures of chemical compounds. To start to get you thinking of molecules as 3-D objects and not just a collection of letters and numbers in a molecular formula.
- (3) Make sure you know the names, formulas, charges and structures of the common ions and the common strong acids and bases.
- (4) To learn to identify and understand what is happening in three fundamental types of chemical reactions: (i) acid-base reactions, (ii) ion dissolution and precipitation reactions and (iii) oxidation/reduction reactions.
- (5) To learn that there are two aspects to all chemical reactions - thermodynamics and kinetics, that thermodynamics determines the final result or equilibrium state of a chemical reaction, and that kinetics determines how long it will take to reach the equilibrium state.
- (6) More specifically, with regard to thermodynamics, to learn how we characterize the equilibrium state using the equilibrium constant expression and equilibrium constant (K), how you can use knowledge of K along with other information (starting concentrations and stoichiometry) to calculate the final concentrations in a reaction, and how you can experimentally determine values of K by measuring the final concentrations. You should also learn that ultimately the value of K is determined by the thermodynamic properties (enthalpy, entropy and free energy) of the reactants and products in a chemical reaction and how you can use knowledge of these values to calculate K's.
- (7) With regard to kinetics, you should learn how we characterize the kinetics or speeds of chemical reactions with the rate law and rate constant (k), how we have to determine both of these quantities by experiment, and what types of experiments can be done to do this. You should also learn that the kinetics are determined by the exact path or mechanism that converts reactants to products, and how knowledge of the rate laws is very useful in determining what are likely mechanisms for a reaction.

**Dropping the course:** It is your responsibility to follow university policies regarding Cr/NC, drops, withdrawals, and incompletes. Your last opportunity to withdraw from the course without a grade appearing on your report card is **February 1, at 7:59 p.m.**

**Email Policy:** Students are provided with an SDSU Gmail account, and this [SDSU email address](#) will be used for all communications. Per University Senate policy, students are responsible for checking their official university email once per day during the academic term. For more information, please see [Student Official Email Address Use Policy here](#). Scroll to the bottom of the page

All communication regarding this course should occur through official SDSU email accounts. The course instructor and lab coordinator will be available via email to answer questions or to schedule office hour appointments. Please allow at least 24 hours for a response, longer over

weekends and holidays. To ensure a prompt response include CHEM 201 in the subject line of your emails and make sure to provide your full name and lab section.

**Preferred Names & Pronouns:** Any student who wishes to be addressed by a name other than what is presented in Canvas is encouraged to contact the lab coordinator, ([lclare@sdsu.edu](mailto:lclare@sdsu.edu)) with the name you wish to use. Similarly, if you have preferred pronouns that you wish to be addressed by please contact the coordinator. The coordinator will communicate your desires to the TAs and all instructional staff will gladly honor your request.

### **Policy on Cheating/Plagiarism:**

There is a zero-tolerance policy regarding plagiarism in this course. Any instances of cheating or plagiarism identified by the TA, lab coordinator, or the instructors, will result in a meeting between the instructor and student(s) following which the instance and documentation of plagiarism will be reported to the Academic Senate as well as the student **receiving a grade of F for the course**. It is your responsibility to know what constitutes cheating and plagiarism.

### **Finding Help on Campus:**

Need help finding help -- an advisor, tutoring, counselling, or emergency economic assistance? The [SDSU Student Success Help Desk](#) is here for you. Student assistants are available via Zoom Monday through Friday, 9:00 AM to 4:30 PM to help you find the office or service that can best assist with your particular questions or concerns.

- CAL Student Success Center: <https://cal.sdsu.edu/student-resources/student-success>
- College of Education Student Success Center: <https://education.sdsu.edu/oss>
- Center for Student Success in Engineering: <https://csse.sdsu.edu/>
- CoS Student Success Center: <https://cossuccess.sdsu.edu/>
- FSB Student Success Center: <https://business.sdsu.edu/undergrad/advising>
- HHS Advisors: <https://chhs.sdsu.edu/student-resources/advising/>
- IVC Student Success and Retention: [https://ivcampus.sdsu.edu/student\\_affairs/retention](https://ivcampus.sdsu.edu/student_affairs/retention)
- PSFA Advisors: [https://psfa.sdsu.edu/resources/student\\_advisors](https://psfa.sdsu.edu/resources/student_advisors)
- Math & Stats Learning Center: <https://mlc.sdsu.edu/>

**Sexual Violence / Title IX Mandated Reporting:** As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I am a mandated reporter in my role as an SDSU employee. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep the information you share private to the greatest extent possible. However, I am required to share information regarding sexual violence on SDSU's campus with the Title IX coordinator, Jessica Rentto 619-594-6017. She (or her designee) will contact you to let you know about accommodations and support services at SDSU and possibilities for holding accountable the person who harmed you. Know that you will not be forced to share information you do not wish to disclose, and your level of involvement will be your choice. If you do not want the Title IX Officer notified, instead of disclosing this information to your instructor, you can speak confidentially with the following people on campus and in the community. They can connect you with support services and

discuss options for pursuing a University or criminal investigation. Sexual Violence Victim Advocate 619-594-0210 or Counseling and Psychological Services 619-594-5220, [psycserv@sdsu.edu](mailto:psycserv@sdsu.edu). For more information regarding your university rights and options as a survivor of sexual misconduct or sexual violence, please visit [titleix.sdsu.edu](http://titleix.sdsu.edu).

The [Family Educational Rights and Privacy Act](#) (FERPA) mandates the protection of student information, including contact information, grades, and graded assignments. I will not post grades or leave graded assignments in public places. Students will be notified at the time of an assignment if copies of student work will be retained beyond the end of the semester or used as examples for future students or the wider public.

### **Medical Related Absence**

Contact the lab coordinator in the event you miss a class or lab due to an illness, injury, or emergency. Remember, one quiz score is dropped but if you miss more than one quiz due to an illness, you must provide medical documentation of your sickness or emergency.

If you miss more than one lab, you must provide medical documentation of your sickness or emergency to receive an experimental data set so that you may write the formal report

If you miss a class or lab due to being quarantined because of a positive COVID-19 result, you must request a class excuse letter. Send an email to [vpsafrontdesk@sdsu.edu](mailto:vpsafrontdesk@sdsu.edu) to notify the university. Student Affairs and Campus Diversity will initiate the process for absent letters to be sent to course instructors, Assistant Deans, and the Provost. Medical documentation may be required prior to the letter being issued.

[Student Health Services](#) (SHS) does not provide medical excuses for short-term absences due to illness or injury. When a medical-related absence persists beyond five days, SHS will work with students to provide appropriate documentation.

When a student is hospitalized or has a serious, ongoing illness or injury, SHS will, at the student's request and with the student's consent, communicate with the student's instructors via the Vice President for Student Affairs and Campus Diversity and may communicate with the student's Assistant Dean and/or the [Student Ability Success Center](#).

### **SDSU Economic Crisis Response Team:**

If you or a friend are experiencing food or housing insecurity, technology concerns, or any unforeseen financial crisis, it is easy to get help! Visit [sdsu.edu/ecrt](http://sdsu.edu/ecrt) for more information or to submit a request for assistance. SDSU's Economic Crisis Response Team (ECRT) aims to bridge the gap in resources for students experiencing immediate food, housing, or unforeseen financial crises that impacts student success. Using a holistic approach to well-being, ECRT supports students through crisis by leveraging a campus-wide collaboration that utilizes on and off-campus partnerships and provides direct referrals based on each student's unique circumstances. ECRT empowers students to identify and access long term, sustainable solutions in an effort to successfully graduate from SDSU. Within 24 to 72 hours of submitting a referral, students are contacted by the ECRT Coordinator and are quickly connected to the appropriate resources and services.

**Technology Help**

For students who need assistance accessing technology for their classes, contact the [Library Computing Hub](#)

**Religious Observances**

According to the University Policy File, students should notify instructors of planned absences for religious observances by the end of the second week of classes. Contact the coordinator: [lclare@sdsu.edu](mailto:lclare@sdsu.edu)

**Land Acknowledgement:**

We stand upon a land that carries the footsteps of millennia of Kumeyaay people. They are a people whose traditional lifeways intertwine with a worldview of earth and sky in a community of living beings. This land is part of a relationship that has nourished, healed, protected and embraced the Kumeyaay people to the present day. It is part of a world view founded in the harmony of the cycles of the sky and balance in the forces of life. For the Kumeyaay, red and black represent the balance of those forces that provide for harmony within our bodies as well as the world around us.

As students, faculty, staff and alumni of San Diego State University we acknowledge this legacy from the Kumeyaay. We promote this balance in life as we pursue our goals of knowledge and understanding. We find inspiration in the Kumeyaay spirit to open our minds and hearts. It is the legacy of the red and black. It is the land of the Kumeyaay.