

# Chemistry 1B, Summer 2022

## General Chemistry

**Instructor:** Prof. [Jin Zhang](#)

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Email: [zhang@ucsc.edu](mailto:zhang@ucsc.edu)

Office Hours: M 3:00-4:00 pm (PSB 152).

**Lecture Time and Location:** MWF, 9:50 am-12:10 pm J. Bask Aud. 101

**Required Text:** Chemistry The molecular nature of matter and change, Silberberg and Amateis, 9<sup>th</sup> ed.

**TA:** Heng Zhang, [hzhan290@ucsc.edu](mailto:hzhan290@ucsc.edu)

**Grades will be based on the following:**

Homework (on-time to count): 20%

Quiz: 20%

Midterm: 20%

Final (comprehensive and must pass): 40%.

### **Introduction and General Policies:**

Welcome to Chemistry 1B, the second quarter of our introductory chemistry series. We will cover a range of topics including light and radiation, the atomic structure, theories of chemical bonding, chemical kinetics, and transition metals and coordination chemistry (chapters 7-11, 16, 17 and 23). The concepts learned from this course are instrumental for future studies in all areas of chemistry including biochemistry, organic chemistry, physical chemistry, environmental chemistry, medicinal chemistry, and materials chemistry. We hope that the knowledge derived from this course will give you insight into the chemical workings of our lives and the world around us. Discussion sections (referred to as "SECONDARY DISCUSSION" in the Schedule of Classes) are an integral part of this course and attendance is required.

The only way to really learn science is to solve problems. Thus, there will be a substantial amount of homework. A brief quiz in each Secondary Discussion section (graded) will usually be randomly chosen problems from that week's homework or problems similar to the homework problems. The homework problem sets are meant to be challenging, so you should be willing and prepared to spend at least five hours a week outside of class working on your assignments. We cannot accept late homework assignments.

### **Book, Aleks (class code: GEYHM-XDN93) and Recommendations**

We will use Chemistry The molecular nature of matter and change, Silberberg and Amateis, 9<sup>th</sup> ed. We use Aleks for homework and you need to sign up for is using the class code.

### **LSS (learning support service) and Help**

MSI (Modified Supplemental Instruction) offers free small group tutoring.

(<http://lss.ucsc.edu/programs/modified-supplemental-instruction/index.html>).

Tutor: Nikhil Marudai [nmarudai@ucsc.edu](mailto:nmarudai@ucsc.edu)

**ACE:** ACE is an academic success and retention program with a mission of increasing the diversity of students earning undergraduate degrees in science, technology, engineering, and mathematics (STEM) at UC Santa Cruz, and ACE has been running at UC Santa Cruz for over

thirty years. At ACE, students develop a sense of belongingness and STEM identity by building relationships with their colleagues, engaging in collaborative, interactive problem solving sessions led by professional staff, and receiving advice and advocacy through peer mentorship with student staff members who have been through the program themselves. Students can sign up. ACE web site: <https://ace.science.ucsc.edu/>  
Tutor: Jorge Ruiz Gonzalez [jolruiz@ucsc.edu](mailto:jolruiz@ucsc.edu)

### **Secondary Discussion Sections**

Discussion sections provide an opportunity for students to meet with teaching assistants on a weekly basis to go over homework and review course concepts. The Chem 1B TA is committed to helping students succeed. Attendance in discussion sections is required. Quiz will be given in the discussion sections and graded. *Wed 1-2 pm ad Th 2-3 pm* (only need to attend one section)

### **Students with Disabilities**

If you have a disability and require special arrangements, please feel free to contact the instructor. Testing arrangements will be accommodated but require authorization through the Disabilities Resources Center. Please contact them within the first two weeks of the quarter.

### **Academic Integrity**

Please consult the UCSC Policy on Academic Integrity. Chem 1B will fully adhere to the UCSC policy and any instances of cheating or plagiarism will result in failure of the respective assignment, and may lead to additional actions such as dismissal/suspension from the class and/or the university.

### **Expectations:**

You are expected to be full participants in the lecture class and the discussion sections. We are dedicated to doing everything that is reasonable to help you learn the material of Chem 1B. Furthermore, we will be prepared to present lectures and sections on time and within the appointed time slots. We request that you show respect for your classmates and instructors by:

- being respectful of the classroom environment by showing up via zoom on time (9:40 am), and not leaving class until the end of lecture at 12:00 noon.
- reduce sound noises during lecture or mute unless you plan to ask questions.

Following these simple requests will enable all of us to focus on the endeavor that brought us together: *learning chemistry*.

**Web/Internet usage:** I am happy to take your questions via email and can usually get back to you within a day or two. Likewise, all TAs are available via email. We will use UCSC Canvas to post announcements helpful hints, and important notices (class site: <https://canvas.ucsc.edu/courses/321>). For a Canvas Overview, visit: <https://guides.instructure.com/m/4210/l/141852-canvas-overview-video>, and a link to all of the video guides for students- (<https://guides.instructure.com/m/4210/c/56054>). Homework will be handled using WebAssign.

### **Tentative Class Schedule:**

Month/dates	M	Wed.	F	chapter
June	Holiday	22	24 (+makeup)	7/8
June/July	27	29	7/1	9/10
July	Holiday	6*	8	11/16
July	11	13	15	16/17
July	18	20	22**	23

\* **Midterm (second half of lecture, one hour, in classroom).**

\*\***Final Exam (in classroom):** F, July 22<sup>nd</sup>, 9:50 am-12:10 pm.

**Exam Policy:** You must be present at each of the exams. A missed exam is treated as a zero in your class record. If you are extremely ill or have an emergency situation and cannot take a particular exam, you must i) contact the instructor before the exam takes place and ii) provide documentation from your physician or police. Arrangements for a make-up exam or alternative will be dealt with on a case-by-case basis. Travel for family matters such as wedding and reunion or for sports or music festivals are NOT considered as emergency and no exceptions will be granted. Cheating in any form will result in zero of the exam. All three exams are scantron based (students bring own scantron forms).

**Final Words:** A learning strategy: *P-LTA-R* (Preview before class-Listen/Think/Ask in class-Review after class)

HM #1 covering chapters 7 and 8 (due on Sunday June 26<sup>th</sup> 11:59 pm)

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### Some Important Information from Summer Session Office

Summer is unique. **You will not be dropped for non-attendance or non-payment.** You must drop yourself. Dropping before the deadline results in a full-tuition reversal/refund. Withdraw posts a W for the grade and full tuition is charged (no refund).

For all dates and deadlines, including 'change of grade option' (P/NP) and grades due, here is the summer academic calendar: <https://summer.ucsc.edu/studentlife/index.html>

For questions about dropping, requesting a W grade for a course, or withdrawing from the summer quarter, email [summer@ucsc.edu](mailto:summer@ucsc.edu).

### DRC Remote Accommodations:

The Disability Resources Center reduces barriers to inclusion and full participation for students with disabilities by providing support to individually determine reasonable academic accommodations. Operations continue via remote appointments. If you have questions or concerns about exam accommodations or any other disability-related matter, email the DRC Schedulers at [drc@ucsc.edu](mailto:drc@ucsc.edu) for an appointment.

### Academic Dishonesty

Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree. All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC.

In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript.

For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the [Academic Integrity page](#) at the Division of Undergraduate Education.

#### **Title IX:**

The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors.

The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. [Information about the Title IX Office](#), the [online reporting link](#), applicable campus resources, reporting responsibilities, the [UC Policy on Sexual Violence and Sexual Harassment](#), and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment can be found at [titleix.ucsc.edu](http://titleix.ucsc.edu).

The Title IX Office is actively responding to reports and requests for consultation. If you are not currently working with someone in the office and want to make a report/request a consult, you can expect the fastest response by using our [online reporting link](#).

For more information please visit the [Title IX Operations under Covid-19](#) page.