# Chemistry 1B, Spring 2018
# General Chemistry

**Instructor:** Prof. Jin Zhang
Office: Room 152 PSB, Phone 459-3776 (o)
Email: zhang@ucsc.edu
Office Hours: Monday and Wednesday 2:00-3:00 pm (PSB 152).
**Lecture Time and Location:** MWF, 9:20 am–10:25 am, Media Theater M110
**Required Text:** Chemical Principles, 7th Edition by Zumdahl and Decoste
**TAs:** Melissa Guarino-Hotz, meguarin@ucsc.edu
Megan Freyman, mfreyman@ucsc.edu

**Course credit will be assigned in the following way:**
First Midterm: 20%
Second Midterm: 20%
Final (comprehensive and must pass): 45%;
Homework (on-time to count): 15%

**Introduction and General Policies:**

Welcome to Chemistry 1B, the second quarter of our introductory chemistry series. To enroll you must pass Chemistry 1A or score 15 or higher on the placement exam. 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 12-15 and 19). 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 while attendance is not required, it is strongly recommended.

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 section (not 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, WebAssign (class key: ucsc 9582 6510) and Recommendations**
We will use Zumdahl and Decoste's Chemical Principles, 7th edition*. In addition, students will need access to WebAssign, an online homework environment.
There are several options and packages:
- Webassign for one quarter is $79.95 with e-book. Note that this times out after one quarter.
- Webassign for multiple quarters is $98.95. This includes an e-book, but not hard copy text.
- Special bundle package that includes a loose leaf copy of Zumdahl 7th edition, and webassign for multiple quarters is $159.35. This is an outstanding deal and highly recommended. Everything you need for all three quarters of the Chem 1 series.

- Hard bound copies of the Zumdahl text are also available, but these cost roughly $200 and do not include webassign.

*Please note that the 7th edition is highly preferred, but the 6th along with WebAssign should be okay.

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

MSI (Modified Supplemental Instruction) to make accouchement in class (http://lss.ucsc.edu/programs/modified-supplemental-instruction/index.html).

TAs: Shaneen Britton Acevedo and Katelyn Murphy

ACE Problem Solving Sessions

Denisse Gomez, dgomez@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 TAs are committed to helping students succeed. Attendance in discussion sections is optional. Quizzes will be given in the discussion sections.

**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 coming to class on time (9:20 am), remaining quiet during lecture and not leaving class until the end of lecture at 10:25.
- not using electronic devices (e.g. cell phone, laptops, and game boys) during lecture unless they are necessary for note-taking or the alike (exceptions require instructor permission), violation can result in confiscation of the device,
- not talking during lecture in any way causing unnecessary disruptions. Disruptions will be noted and dealt with on an individual basis.
- staying in your seat during lecture unless it is absolutely necessary to leave,

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 | Monday | Wed. | Friday | chapter |
|---|---|---|---|---|
| April | 2 | 4 | 6 | 12 |
| April | 9 | 11 | 13 | 12/13 |
| April | 16 | 18 | 20 | 13 |
| April | 23 | 25* | 27 | 14 |
| April | 30 | | | 14 |
| May | | 2 | 4 | 14 |
| May | 7 | 9 | 11 | 15 |
| May | 14 | 16* | 18 | 15 |
| May | 21 | 23 | 25 | 15 |
| May | 28 (holiday) | 30 | | 19 |
| June | | | 1 | 19 |
| June | 4 | 6 | 8 | 19 |
| June | 14 (final, 12-3 pm) | | | |

***Tentative Midterm dates.**
****Final Exam:** Th, June 14th, 12:00-3:00 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 12 (due on Sunday. April 15th 11:59 pm)