Course Syllabus

Chemistry 1C

Summer Session II 2019

Location: Physical Sciences 114

Lecture Times: MW 9:00 AM – 12:30 PM, July 29 – August 28, 2019

Final Exam: Wednesday, August 28, 2019 in Physical Sciences 114

Instructor Peter Weiss Contact Information:

Office: 454 Physical Sciences Building (PSB),

Office Hours: Monday 8:00 - 9:00 AM and Tuesday 10:00 - 11:00 AM and by appointment

Email: pweiss@ucsc.edu

Office Phone: 831-459-1616

TAs Contact Information:

Sophia Li - sli140@ucsc.edu

Office Hours: to be announced

Required text/Materials:

Cengage Web Assign Subscription including *Chemical Principles*, 8th edition, by Zumdahl and Decoste

Go to cengage.com to purchase access to the site. Use class key: ucsc 6409 6406

Scientific calculator
Web Casts:

Lectures will be available on the UCSC Web Cast system: https://webcast.ucsc.edu

The user name is chem-1c-1 Password is Chemonecee!

Lecture Videos on YouTube

These video lectures are available on my YouTube channel

Covers topics in chapters 9, 10, and 11.

Chem101 Practice Problem App

Active learning platform to assign practice problems and provide on-the-go reinforcement. Extensive help and feedback on exam practice problems.

$16 for the quarter. Go to http://www.chem101.co, sign up, and use class code RM5H85.

Grading:

Course Credit will be assigned as follows:

Participation Extra Credit: 1%

Active Learning Worksheets: 1%

In Class Clicker Questions on Web Assign (your own device): 4%

Homework on Web Assign: 20%

In Class Quizzes on Web Assign (Best 2 out of 3 scores kept): 15% (your own device)

Midterm: 25% (paper test with Scan Tron)

Final: 35% (paper test with Scan Tron)

Quiz and Exam Schedule

Quiz 1 (Chapter 9): Aug 5
Quiz 2 (Chapter 10): Aug 12

Quiz 3 (Chapter 16-17): Aug 26

Midterm: Chapters 9, 10, and 11: Aug 19

Final: Wednesday August 28, 9:00 AM - 12:30 PM, comprehensive of Ch. 9, 10, 11, 16, 17, and 20 (see study guides for list of topics you are responsible for)

Grade Scale:

A+: 96.50-100
A: 92.50-96.49
A-: 89.50-92.49
B+: 85.50-89.49
B: 81.50-85.49
B-: 76.50-81.49
C+: 71.50-76.49
C: 59.50-71.49
D: 54.50-59.49

Note: If a student's total score is greater than 59.5%, that student will earn a D if the final exam score is less than 50%.

WebAssign Homework (20%):

These problems are done on Web Assign, and they are taken from Zumdahl and Decoste 8th ed. There is a limit of 100 entries before a problem is marked wrong and significant figures are not graded. The assignment due dates are listed on the schedule and on Web Assign.

It is your responsibility to meet all these due dates.

Extensions will be granted for unusual circumstances for a 50% deduction off of unearned points. If you have a question on the homework problems, use Web Assign “Ask Your Teacher” platform. Homework and extension requests will only be answered through this platform.

Web Assign Quizzes (15%)

Must be in class to participate

Taken on your own device. Paper quiz available on request. Calculation-type problems, 2 submissions per question.
40 minute duration

Highest 2 out of 3 scores kept.

Using calculator on phone or computer is okay. Scratch paper allowed. All links on Web Assign screen allowed.

Formulas and constants provided.

**Participation Extra Credit (1%)**:  
Any student who answers more than 60% of the clicker questions AND attends 60% of the discussion sections will receive 1% extra credit at the end of the quarter.

**In Class Clicker Questions (4%)**:  
Answer on your device at webassign.net  
These are designed to get you active during class and to give the instructor feedback about how the lesson is going.

These will be offered each lecture period.

You will have 3 submissions for each question. They are all multiple choice, so you should be able to get the correct answer. This assignment will be graded on correctness.

The questions can only be answered in class.

**In Class Active Learning Worksheets (1%)**:  
Using the Claim/Evidence/Reasoning framework  
There will be two of these during the quarter (Chapter 10).

Designed to help master the material and build student identity as a scientist by focusing on Science Practice.

Worksheets designed to be completed in class or in a discussion section. The worksheets will be handed in for credit (each one is worth 0.5%)

**Exams (60%)**:  
Multiple choice Scan Tron exams (midterm and final). Formulas and constants provided.
No scratch paper or notes allowed. Handheld calculator required.

**Make ups:** There are no makeups for the quizzes. If you are extremely ill and cannot take the midterm or the final exam you must: i) contact the instructor **before** the exam takes place and ii) provide **documentation** from your physician. Arrangements for missed exams will be dealt with on a case-by-case basis.

**Cheating** on the examinations will not be tolerated. The exams will be closely proctored and it is your responsibility to honestly answer the questions and demonstrate your own understanding of the course material. Policies on cheating are detailed here: [https://www.ue.ucsc.edu/academic_misconduct](https://www.ue.ucsc.edu/academic_misconduct)

### Important 2019 Deadlines:

**Session 1:**

- Drop: Monday, July 1
- Request for “W”: Friday, July 12

**Session 2:**

- Drop: Monday, August 5
- Request for “W”: Friday, August 16

**8-Week:**

- Drop: Monday, July 8
- Request for “W”: Friday, July 26

**10-Week:**

- Drop: Monday, July 8
- Request for “W”: Friday, July 26

Neither Summer Session nor instructors drop students for non-attendance or non-payment. Students must drop themselves. Dropping results in 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](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 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. If you have questions or concerns about exam accommodations or any other disability-related matter, please contact the DRC office, located in Hahn 125 or at 831-459-2089 or drc@ucsc.edu.

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 (http://titleix.ucsc.edu), the online reporting link (https://ucsc-gme-advocate.symplicity.com/public_report/index.php/pid681212?), applicable campus resources (https://titleix.ucsc.edu/Resources%20and%20Options%202.18.pdf), reporting responsibilities, the UC Policy on Sexual Violence and Sexual Harassment (https://policy.ucop.edu/doc/4000385/SVSH) 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/Sexual Harassment Office is located at 105 Kerr Hall. In addition to the online reporting option (https://ucsc-gme-advocate.symplicity.com/public_report/index.php/pid681212?), you can contact the Title IX Office by calling 831-459-2462.

And For Fun...

Peter Weiss and Earth Rangers: environmental education music for kids. Check it out on Spotify, iTunes, YouTube, etc.

Discussion Section Schedule

<table>
<thead>
<tr>
<th>Class</th>
<th>Days &amp; Times</th>
<th>Room</th>
<th>TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1C-01A (70985)</td>
<td>TBA</td>
<td>TBA</td>
<td>Sophia</td>
</tr>
<tr>
<td>CHEM 1C-01B (70986)</td>
<td>TBA</td>
<td>TBA</td>
<td>Sophia</td>
</tr>
</tbody>
</table>

Course Schedule

https://canvas.ucsc.edu/courses/26409/assignments/syllabus
<table>
<thead>
<tr>
<th>Mon.</th>
<th>Wed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 29</td>
<td>July 31</td>
</tr>
<tr>
<td>Aug 5</td>
<td>Aug 7</td>
</tr>
<tr>
<td>Quiz Chapter 9</td>
<td></td>
</tr>
<tr>
<td>Chapter 10: 2nd Law Thermo, Spontaneity, Definition of Entropy, Entropy Changes with Temperature, Pressure, and Change of State, The 3rd Law, Entropy Changes in Chemical Rxns</td>
<td></td>
</tr>
<tr>
<td>Aug 12</td>
<td>Aug 14</td>
</tr>
<tr>
<td>Quiz Chapter 10</td>
<td></td>
</tr>
<tr>
<td>HW2 Due 9:00 AM</td>
<td>Chapter 11: Equilibrium Constants, Ksp, and Concentration cells, Electrolysis</td>
</tr>
<tr>
<td>Chapter 11: Oxidation #s, Balancing Redox Eqns, Electrochemical Cells, Work and delta G Standard Reduction Potentials, Nernst Equation</td>
<td></td>
</tr>
<tr>
<td>Aug 19</td>
<td>Aug 21</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>HW4 Due Friday, Aug 23, 11:00 PM</td>
</tr>
<tr>
<td>HW3 Due 9:00 AM</td>
<td>Chapter 17: Solution Composition, Thermodynamics, Vapor Pressure of Solutions, Colligative Properties</td>
</tr>
<tr>
<td>Chapter 16: Intermolecular Forces: Electronegativity, Bond Polarity, Ion Sizes, Molecular Structure VSEPR Model, Structures</td>
<td></td>
</tr>
</tbody>
</table>

https://canvas.ucsc.edu/courses/26409/assignments/syllabus
## Course Summary:

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon Aug 5, 2019</td>
<td><strong>Ch 9 Quiz</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87625">https://canvas.ucsc.edu/courses/26409/assignments/87625</a>) due by 9am</td>
</tr>
<tr>
<td></td>
<td><strong>Homework #1</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87629">https://canvas.ucsc.edu/courses/26409/assignments/87629</a>) due by 9am</td>
</tr>
<tr>
<td>Mon Aug 12, 2019</td>
<td><strong>Ch 10 Quiz</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87623">https://canvas.ucsc.edu/courses/26409/assignments/87623</a>) due by 9am</td>
</tr>
<tr>
<td></td>
<td><strong>Homework #2</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87630">https://canvas.ucsc.edu/courses/26409/assignments/87630</a>) due by 9am</td>
</tr>
<tr>
<td>Mon Aug 19, 2019</td>
<td><strong>Homework #3</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87631">https://canvas.ucsc.edu/courses/26409/assignments/87631</a>) due by 9am</td>
</tr>
<tr>
<td></td>
<td><strong>Midterm</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87635">https://canvas.ucsc.edu/courses/26409/assignments/87635</a>) due by 9am</td>
</tr>
<tr>
<td>Fri Aug 23, 2019</td>
<td><strong>Homework #4</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87632">https://canvas.ucsc.edu/courses/26409/assignments/87632</a>) due by 11pm</td>
</tr>
<tr>
<td>Mon Aug 26, 2019</td>
<td><strong>Ch 16-17 Quiz</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87624">https://canvas.ucsc.edu/courses/26409/assignments/87624</a>) due by 9am</td>
</tr>
<tr>
<td></td>
<td><strong>Homework #5</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87633">https://canvas.ucsc.edu/courses/26409/assignments/87633</a>) due by 9am</td>
</tr>
<tr>
<td>Date</td>
<td>Details</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Wed Aug 28, 2019</td>
<td><strong>Homework #6</strong> (<a href="https://canvas.ucsc.edu/courses/26409/assignments/87634">https://canvas.ucsc.edu/courses/26409/assignments/87634</a>) due by 9am</td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/87626" alt="Claim Evidence Reason Worksheets" /></td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/87627" alt="Clicker Questions" /></td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/87628" alt="Final exam" /></td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/81677" alt="Midterm Check In Survey" /></td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/87622" alt="Midterm Check In Survey" /></td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/87636" alt="Overall score" /></td>
</tr>
<tr>
<td></td>
<td><img src="https://canvas.ucsc.edu/courses/26409/assignments/87637" alt="Participation extra credit" /></td>
</tr>
</tbody>
</table>