CHEM 100 Chemistry in Society
3 Credits CRN 64065
MW 8:30-9:45 am, Imiloa 111

INSTRUCTOR: Bernie Reeves. M.S.
OFFICE Imiloa 111
OFFICE HOURS: MW 7:45-8:15 am (or by appointment)
TELEPHONE: E-MAIL: br2@hawaii.edu
EFFECTIVE DATE: Fall Term 2018

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide Oahu's Koʻolau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

Chemistry 100 provides a survey of basic concepts and applications of chemistry in the real world. This course is suitable for students who have little or no background in chemistry and serves to fulfill a general education physical science core course for the non-science major or serves as a preparatory course for Chem 151.

STUDENT LEARNING OUTCOMES

1. Describe the relationship between properties and structure of matter.
2. Name chemicals, balance chemical and nuclear equations.
3. Solve problems involving mole and mass ratios in chemical reactions.
4. Identify the types of chemical reactions (i.e. acid-base, redox, nuclear) and their applications to everyday lives.
5. Explain the chemistry of household chemicals, and the composition of air and water.
6. Apply knowledge of a specific chemical concept to a current environmental, health, industrial, or technological issue or condition by writing a short research paper.
COURSE TASKS

- Class participation & quizzes
- Online and written assignments
- Online practice exams (4)
- Long Exams (4)
- Research Paper (Turnitin.com) or Presentation
- Cumulative Final Exam

GRADING

Grades will be based on the following:

Grades will be based on *in-class participation, research paper, quizzes, long exams, and a final exam.*

Attendance & Participation ----------- 5 % of total grade
Homework------------------------------- 5% of total grade
Quizzes (daily and on-line)------------ 20 % of total grade
Long exams (4) ------------------------ 30 % of total grade
Final exam ------------------------------ 25 % of total grade
Paper or classroom presentation ---- 15 % of total grade

Total---------------------------------------100

Course grades will be assigned as follows:

A  100-90 %
B  89-80 %
C  79-70 %
D  69-60 %
F  below 60 %

Curving might be used if deemed necessary.

The other grades I, W, Cr, NC to be assigned are described in the current college catalog. The NC grade will be assigned only as part of the Cr/NC option except in very unusual circumstances. Those circumstances must be discussed with the instructor.

1. *In-class participation* during lecture and inquiry-based learning activities will be graded on a daily basis. Scoring:
   a. On time and participates in class activities ----- 1 points
   b. Absent------------------------------------------ 0 points

2. *Homework* will be assigned from the lecture notes and collected at the end of each chapter. There will also be one online homework assignment per chapter.
3. **Quizzes.** A short quiz based on the homework problems will be given during each class. A longer quiz will be given on line for each chapter on Laulima. If you are absent for a quiz, please email me for a time to make it up. All quizzes are worth 10 points each.

4. There will be **four long exams**, each of which will cover approximately one-fourth of the course. Long exams will last approximately 35 minutes.

5. The **final exam will cover all topics** (cumulative) from the beginning with special emphasis on topics covered after the third midterm exam. The final exam will be approx. 2 hrs. The dates of these evaluations are given in the Course Schedule (see last page).

6. In order to evaluate the ability to relate chemical concepts/theories to current issues on environmental, health, and technological problems/issues or real-life applications, a literature **research paper** or PowerPoint presentation will be required. In this short paper or presentation, a strong connection between theory and application should be emphasized. The report should be at least 3 pages long, double space with **at least 5 references** (web and library sources). The PowerPoint should be at least 10 slides with at least 5 references. Rubrics will be posted on Laulima.

N Grade: The 'N' grade indicates that the student has worked conscientiously, attended regularly, finished all work, fulfilled course responsibilities, and has made measurable progress but has not achieved the minimal student learning objectives and is not yet prepared to succeed at the next level. Or, the student has made consistent progress in the class but is unable to complete the class due to extenuating circumstances, such as major health, personal or family emergencies. Students requesting for N grade must provide a formal letter of request before the final examination with supporting evidences.

The other grades I, W, Cr, NC to be assigned are described in the current college catalog. These options must be discussed with the instructor. The deadline to change from A-F to Cr/NC/audit option (with Office of Admissions & Records) is on October 29, 2018.

If you drop out from the course without any notice you will get ‘F’ grade. To avoid this, please be sure to withdraw officially (through MyUH) by October 29, 2018.

**LEARNING RESOURCES**

Course Website:  http://laulima.hawaii.edu (use UH email account login and password)

*Supplementary Instruction – schedule will be posted*

*OLA (Online Learning Academy) open everyday except Saturday.* http://manoa.hawaii.edu/ola/

Other Requirements:  Scientific Calculator

Internet access

TRIO Student Support Services, https://windward.hawaii.edu/trio/student_support_services.php

Paper anti-plagiarism and feedback tool  Http://Turnitin.com

Office consultation Hours. Before every lecture.
ADDITIONAL INFORMATION

Nothing is more important to your academic success than strong study skills. On average, you should spend about **six hours per week** outside the classroom to study for this course.

1. Prepare for each class by *familiarizing* yourself with the **lecture slides** on Laulima. I will be using slides during the lecture that I will post on Laulima. Take **notes** during the lecture. Bring your **calculator** at all times. Ask **questions** if you do not understand. Please contact me by email (br2@hawaii.edu) if you have questions or make an appointment to see me during office hours or sometime other than the posted office hours.

2. **Participate** in all the in-class **Learning Checks** and **activities**.

3. **Review** your notes soon after class. Do all of the exercises at the end of the chapters.

4. **There will be a short quiz during each class based on the homework assignments**. Please see me before class if you are having difficulties. **Note:** You are expected to attend several review sessions with the Supplemental Instructor on important concepts. These extra tutoring sessions will help you to do well on your quizzes, tests, and the exam. Five SI sessions are required. If you attend additional sessions, you will receive ½ grade point for each additional 2 hours.

5. Practice the following tests for review.
   - *Chapter Drills and Homework*
   - **Practice exams** will be posted on Laulima **about two weeks before the midterms or the final**. These will cover the same material and be similar to your tests and exam.

OTHER POLICIES

1. The topics and exam schedule are found in the **Course Schedule** on the last page.

2. It is expected that you have the required mathematics skills for the course. To review the mathematics you need to apply in this course (i.e. exponential notations, significant figures, proportionality, percentages, metric system, solving equations, volume) consult your SI.


4. Plagiarism will not be tolerated. Make sure you give credit to your sources and use quotation mark when you make a direct quote.
5. **Missed Quizzes.** If you are absent, the quiz you missed will be counted as zero. You may make up the quiz if email me about why you were absent and make arrangements to take the quiz. Your lowest four quiz grades will be dropped.

6. **Missed Midterm.** Only one missed long exam (with requisite doctor’s note, police report or obituary notice) can be made up, if you notify the instructor in advance or on the day of the exam. There will be no make-up for the final exam.

7. **Make-ups.** Exams and quizzes cannot be retaken to obtain better grades.

8. **Disruptive behavior** leads to loss of learning time. Examples are activated beepers and cell phones, checking/sending text messages, making offensive remarks, eating or drinking in the classroom, making noise, leaving class early, sleeping in class, prolonged chattering, reading other materials not relevant to this class, etc. If a student takes part in disruptive behavior, the instructor reserves the right to immediately exclude the student from that class meeting and the student will be marked absent.

9. If you have any special learning needs, including hearing/visual impairment, please inform the instructor before the first class.

10. An "F" will be assigned to students cheating and will be reported to the Dean.

11. Any class announcement pertaining to changes in schedule will be made at least a week prior to the affected date. However, you are responsible for knowing these changes, whether or not you were in class for the announcement. If you were late or missed class please borrow notes from your classmate.

12. If you have any question or issue to discuss with me, the best time to see me is during before class. You may also email at any time and you will be answered within 24 hours. If you need to see me at any other time, please email me to set up an appointment.

13. **Extra Credit** opportunities will be posted on Laulima.

14. **Attendance at SI sessions after the first 5 hours will add ½ grade point for each 2 hours of SI.**

15. MySuccess: Students may be referred for extra help or advising through MySuccess. Students can also explore resources at MySuccess.Hawaii.edu and windward.hawaii.edu/MySuccess

**DISABILITIES ACCOMMODATIONS**

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale "Akoakoa 213 for more information.
TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235-7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alakai 121
Phone: 808-235-7422
Email: wccaa@hawaii.edu

CONTENT AND SCHEDULE

Important Dates Last day for withdrawal, 11/4M); Last day of instruction, 12/11 (W)
Holidays: 9/2 11/11

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topic*</th>
<th>Date</th>
<th>Learning Outcomes</th>
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<tbody>
<tr>
<td>2</td>
<td>Structure and Periodic Table</td>
<td>8/27-29</td>
<td>Atoms and structure. Periodic Table</td>
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<tr>
<td>3</td>
<td>Bonding</td>
<td>9/5-10-12</td>
<td>Name chemical compounds. Write chemical formulas. Ionic &amp; covalent compounds. Polar and Nonpolar molecules.</td>
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<td><strong>Review for Test 1 with SI</strong></td>
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<td></td>
<td><strong>Test 1</strong></td>
<td>9/17</td>
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<td><strong>Test 2</strong></td>
<td>10/3</td>
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<tr>
<td>6</td>
<td>Acids, Bases, Salts</td>
<td>10/15-17</td>
<td>Identify acid-base reactions and their applications in everyday lives.</td>
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<tr>
<td>7</td>
<td>Oxidation and Reduction</td>
<td>10/22-24</td>
<td>Identify redox reactions and their applications in everyday lives.</td>
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<td><strong>Test 3</strong></td>
<td>10/29</td>
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<td>Review for Exam</td>
<td>12/5</td>
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<td>Final Exam</td>
<td>12/12</td>
<td>8:30-10:30</td>
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