CHEM 100 Chemistry in Society
3 Credits
CRN 64104
WWW

INSTRUCTOR: Leticia Colmenares, Ph.D.
E-MAIL: leticia@hawaii.edu
OFFICE HOURS: Online Bb Collaborate
OFFICE Thursday 7-8 pm or by appointment
Imiloa 116 (Windward Community College)
TELEPHONE: 808-236-9120
EFFECTIVE DATE: Spring 2017

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 O‘ahu’s Ko‘olau 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 had little or no background in chemistry and serves to fulfill a general education physical science core course for the non-science major or as a preparatory course for Chem 151.

Chem 100L (1-credit) laboratory course is available this semester. Registration is separate (CRN 64152). This satisfies DY requirement for AA degree.

STUDENT LEARNING OUTCOMES

1. Describe the relationship between properties and structure of matter.
2. Name chemicals, balance chemical and nuclear equations.
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. Relate a specific chemical concept to a current environmental, health, industrial, or technological issue by writing a short research paper.
COURSE TASKS

- Weekly assignments (online Discussion)
- Weekly quizzes (online Tasks, Tests & Surveys)
- Research Paper (online Turnitin.com)
- Two Midterm Exams (Testing Center)
- Final Exam (Testing Center)

GRADING

Grades will be based on the following:
Scavenger Hunt Activity --------------------------- 10 points (Assignments)
Chapter Assignments (12) ---------------------- 60 points (Discussion)
Individual Discussion Posts (2) -------------- 20 points (Discussion)
Quizzes (11 best out of 12) ---------------------- 110 points (AT&S)
Research Paper Topic by due date ------------- 10 points (Turnitin.com)
Research Paper (1) ---------------------------- 70 points (Turnitin.com)
Midterm Exams (2) ----------------------------- 220 points (Testing Center)
Final Exam ------------------------------------- 120 points (Testing Center)
Total ----------------------------------------- 620 points

IMPORTANT: The two midterm and final exams will be proctored at the WCC Testing Center. You may use other testing centers found in this link: http://www.hawaii.edu/dl/testcenters or if you are in the US mainland, you may use other testing centers in your locality. If you wish to take these exams at other locations, please email the instructor by the second week of classes for preapproval.

Course grades will be assigned as follows:
558-620 total points = A
496-557 total points = B
434-495 total points = C
372-433 total points = D
below 372 = F

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
Online courses actually require more discipline and individual effort on the part of the student. The focus is on YOU learning rather than the TEACHER lecturing.

**LEARNING RESOURCES**

1. **REQUIRED TEXT.** Instructor Lecture Notes (spiral bound) sold at the WCC Bookstore, about $8. Order and check shipping policies at [http://www.bookstore.hawaii.edu/wcc](http://www.bookstore.hawaii.edu/wcc)
2. **Optional text:** Chemistry in Changing Times by Hill and Kolb, 12th or later edition (buy used copy online)
3. Calculator (required) & Periodic Chart
4. Course website: [https://laulima.hawaii.edu](https://laulima.hawaii.edu)
5. Multimedia found in course website (under Laulima Modules)
6. Chapter assignments (group-based)
7. Practice quizzes & exams in Assignments, Tests & Surveys (Laulima ATS)
8. **Laulima** Chat Room. Feel free to post questions anytime.
9. Online office hours (Bb Collaborate) every Thursday at 7-8 PM. [https://us.bbcollab.com/collab/ui/session/guest/F885C1404637D68B8E3F4C0937CBA9](https://us.bbcollab.com/collab/ui/session/guest/F885C1404637D68B8E3F4C0937CBA9)
11. OLA (Online Learning Academy), online tutoring open everyday except Saturday. [http://manoa.hawaii.edu/ola/](http://manoa.hawaii.edu/ola/)
12. **Brainfuse.** Login through MyUH, under My Tools

**HOW TO STUDY FOR THIS COURSE:**

*Usually students take online courses with the assumption that it will be easier than face-to-face classes. Unfortunately this is NOT correct. Online courses actually require more discipline and individual effort on the part of the student. The focus is on YOU learning rather than the TEACHER lecturing. However, you have more flexibility, when and where to study.*

1. This course is **NOT** self-paced. Please pay attention to deadlines. **Use the Course Schedule** (found on the last page) throughout the semester. You are expected to MEET ALL DEADLINES as listed on the class schedule. There is a quiz (10 points) open every Friday to Sunday. There is a group assignment due every Sunday that the group leader must post by Tuesday in Discussion (5 points @).

2. You are expected to **login the course website** at least every other day. The website is your classroom and not coming to the site is like skipping class. You are expected to spend at least eight hours a week for this course. Please schedule **real-time hours** that you will routinely follow. An example: **MWFS 7-9 pm** (8 hrs total)
3. Focus on the objectives of each chapter. You are expected to do ALL the Learning Checks and Self-Assessment in each chapter (in Instructor Notes). If your Notes from the bookstore have not yet arrived, please download and print the chapters found in Laulima Modules. Still, you have to purchase the actual Notes to have complete information.

4. In addition to the Notes, multimedia materials are used to deliver course content in the course website. These include voice over powerPoints, videos, animations, mp3 audios, Quicktime movies and interactive websites. All the downloadable files and links are found under Laulima Modules.

5. Have a notebook. Take notes when reading the Notes, when watching videos, tutorials, and animations. If you don’t write your notes, you will forget the material when you reach the final exam.

6. Weekly group assignment. The purpose is to learn through interactions and feedback from other students. Download the weekly assignment at the end of each chapter in Modules. In general, each blank in the assignment corresponds to a one-word answer. Copy and paste your assignment in Discussion by the due date (11:55 pm Sunday). If another group member had already posted a set of answers, what you have to do is go over the answers and write your comments. Ask, if you don’t know how to get the correct answers. State, which answers you don’t agree with and explain why. State what you think the correct answers are and hash it out with group members. If you agree with all the answers, state that, and respond to any other questions posted there. After the discussion, the group leader must post the group final answers in the All Groups Discussion by the due date (11:59 pm Tuesday). The assignment is worth 5 points. Instructor feedback will be provided on your group submission. All who participated in the group discussion will receive the same score. Those who did not participate will get a score of zero.

7. Weekly quiz. The actual quiz is randomized from a quiz test question pool. You are expected to take the practice quiz at least twice before the actual online quiz to build confidence and do well in the quiz.

8. If you have any problems, please do not hesitate to see or email your instructor for consultation and attend online office hours every 7-8 pm @Thursday. Face-to-face consultation or Bb Collaborate attendance at the start of the semester is mandatory if this is your first time taking an online class. Your first meeting or first Bb Collaborate attendance will be given 1 extra credit point.

9. You are recommended to attend online office hours and online tutoring during the semester. You will receive 0.5 extra credit points per session. This is available at https://us.bbcollab.com/collab/ui/session/guest/F885C1404637DD6B88E34F4C0937CBA9
The OLA online tutoring, http://manoa.hawaii.edu/ola/ is available everyday except Saturdays and State holidays. Students should use tutoring from the very beginning of the semester before running into difficulty.

10. You should plan to spend at least 8 hours per week on this course (remember, you’re not physically attending a class or spending time traveling to and from campus!). Here is how your time will be allocated during most weeks:
- two hours reading Notes, and doing learning checks and self-assessment
- two hours viewing online video lectures and websites
- two hours doing homework assignment and group discussion
- one hour attending online office hour/OLA tutoring
- one hour taking practice quiz, preparing your cheat sheet and taking the actual quiz

11. Back up all your submissions.

**POLICIES**

1. The scavenger hunt assignment is mandatory. Please do this as soon as possible. It is very important that you become familiar with the tools in the course website: Assignments, Tests & Surveys, Gradebook, Modules, Discussion, Assignment, and Chat Room. Please download it from Laulima Modules, answer it, save it and upload in Assignments.

**How to submit.** Save in .doc or .docx or .pdf but NOT in .txt or .wps. or .pages IMPORTANT. If you are using word-processing software other than Microsoft word, please convert your submission to .pdf so it can be opened and graded. Label the file with your family name and assignment number and upload in "Assignments" as attachment.

2. Assignments (Discussion). There are a total of 12 group assignments and 2 individual discussion posts (see list below). The assignments are downloadable from Laulima Modules from each chapter.

**How to submit group assignment.** By Sunday midnight, all members in each group are expected to discuss the assignment with each other in Discussion. Before Tuesday midnight, the group leader must post the group final answers in ALL Groups Discussion. You may opt to have a permanent group leader and a permanent backup leader for the whole semester. Or, you may decide within your group to have a rotation for these two positions. Each group must decide for themselves what is best for the group. Each group must have only one group submission in Discussion. In case there are multiple submissions, only the first one will be recognized.
Individual Discussion Posts. Two discussion postings (individual) will be required, 10 points @ ) to be posted in Discussion.

#1 - Chemistry in the news
#2 - Application of a chemical reaction in everyday life

The grading rubric is as follows:

- Posting is focused, organized, and clearly conveys ideas to reader (3 pts)
- Posting integrates concepts from the notes, text or multimedia (3 pts)
- Must be well-developed, use own words and stimulates discussion (2 pts)
- Interacted timely at least twice in a thoughtful and respectful way (2 pts)

Student interactions are required. You must comment on two other postings, and respond to those about your post. Please be respectful to everyone at all times. Please remember when online to follow netiquette rules. Avoid flaming: http://www.albion.com/netiquette/corerules.html

3. Weekly online quizzes. Access the weekly quiz through Laulima Assignment, Tests and Surveys. Each chapter quiz consists of ten multiple-choice questions. The quiz will be available every week from Friday 1AM to Sunday 11:59PM. All times are Hawaii Standard Time. You may take the quiz anytime within this period. You are expected to move on to the next chapter as soon as you are done with a quiz.

If you encounter a technical problem (e.g., the computer crashes, Laulima is down, etc), please submit a Request Assistance form (at the bottom of each Laulima page) immediately from the computer that the problem occurred. Please indicate the course (CRN), which quiz, what kind of computer, which web browser, and what kind of internet connection was used. Please notify me immediately before the deadline has passed. Upon verification of malfunction by Laulima staff, I will reset the quiz and you will be allowed a second attempt. However, please make sure that your Internet connection is a robust connection when taking online quizzes. Please do NOT take your quiz at the coffee shop or using wireless connection.

Make-up or retaking quizzes is NOT allowed. Each quiz MUST be completed by the time and date set in the course schedule. If you fail to take a quiz, for whatever reason, your score for that quiz will be zero. In calculating your course grade, the lowest quiz score will be dropped.

The quiz will be timed (10-20 min depending on the questions). The quiz will automatically close when the time limit is reached. If you step away while taking the quiz, you will be timed out and cannot retake the quiz. Always have a calculator and a periodic chart ready before you begin the quiz. You are allowed to use a cheat sheet. You may NOT open your Lecture Notes or textbook. The reason why the quiz is timed is to prevent cheating.
After taking the quiz, check your score in the gradebook. After the quiz is closed, click ‘Review’ to see the answer key.

4. Midterm Exams. Each midterm exam will cover approximately 40% of the material of the course. The final exam will be cumulative covering ALL topics taken throughout the semester. **Check the course schedule for the dates.**

The two midterm and final exams **will be made available for 3 days at the WCC Testing Center (TTC) or external testing site approved by the instructor.**

**Important.** A **picture ID is required** and no cell phones will be allowed. The midterm and final exams are **closed books and notes** (no cheat sheet). Please bring your own calculator to the testing center. The proctored exams will be timed, 75 min for midterm and 2hrs for the final. The proctor at the testing site will input the password for the midterm and provide you with a periodic table.

Hours of operation may vary from campus to campus. At the WCC Testing Center, the hours are found in this link: [http://windward.hawaii.edu/Testing_Center/index.php](http://windward.hawaii.edu/Testing_Center/index.php)

After taking the exam, you must not tell anybody what is in the test, as this would fall under the guidelines of academic integrity. Any evidence of cheating will result in a score of zero for all parties involved, and this will be reported to the Vice Chancellor for disciplinary action.

5. Research. The **research paper** is a three-page (double space) paper of at least 750 words to make a **connection between a chemistry concept and an application/issue in everyday life.** This will be made based on textbook readings and online resources. A sample paper and a handout “tips on how to search for references” will be provided.

Research **paper topics** need to be pre-approved. A description of the paper topic in 2-3 sentences with at least 5 reliable references is due on **April 2, 2017** (submit in Turnitin.com). Topics like the Kreb’s cycle, Glycolysis, or Prebiotics, etc, (textbook topics in nutrition, biology and zoology, etc courses) and topics already tackled in extra credit, such as antacids and airbags, and in sample paper are **NOT acceptable.**

**Topic with references, Draft and final research paper** must be submitted at http: turnitin.com. This is free of charge and this helps prevent plagiarism. If this is your first time using this website, please create an account and register. Course ID: 14330114 and Password: Colmenares

Instructor will give **feedback** if paper was submitted **one week before due date** (April 30, 2017). Paper may be revised and resubmitted on the deadline (May 7, 2017). The paper grade will be based on the following rubrics:
contains title and purpose (10 points)
explains correctly at least one chemistry concept in detail (10 points)
discusses at least one application or current issue in detail (10 points)
effectively connects the chemistry concept to application (10 points)
information is technically sound and coherent (10 points)
well-organized and body has correct length (at least 750 words) (5 points)
no errors in spelling, grammar and use of English (5 points)
citations (in-text) are included (5 points)
reference list (at the end) of at least five reliable sources is included (5 points)

6. Extra Credit. You can earn extra credit up to a maximum of 20 points.
   - Correct response to classmates’ question in the Chat Room is 0.5 point each.
   - Extra credit essays (uploaded in Laulima Assignments). @2pts.
   - Attendance in supplemental instruction or online tutoring will earn 0.5 point per session. First session is 1 point.
   - Scoring 80% or higher in the practice midterm and practice final will earn 2 points @ with unlimited attempts.
   - Attendance and one-page reflection paper in chemistry forum is 3 points each. The dates of the chemistry forum will be posted at http://www.wcc.hawaii.edu/chemistry_forum.

7. Communicating with instructor. Questions about the class procedures should be posted in the Chat Room. For other matters, please email the instructor using the Email tool in Laulima. Please check your Hawaii.edu account for instructor response to your email. Please ALLOW 24 HOURS for responses to emails or messages. In emergencies, please call 808-236-9120.

8. Frequently Asked Questions. Please review the FAQ’s. When in doubt, please ASK. If you notice any discrepancies, please be the first to notify the instructor.

MySuccess REFERRAL
At Windward community college we want every student to be successful. MySuccess is a system wide effort that seeks to support students early in the semester when they first begin experiencing difficulty in class. If I feel that you’re having difficulty in my class within the first few weeks of the semester (e.g. missing class, missing assignments, or low test scores) and working together to address your challenges shows that you would really benefit from being connected to resources outside of the classroom, I may refer you to your assigned counselor. Once referred, MySuccess will:
   - Call you and send an email to your Hawaii.edu account to let you know about my referral; and
- Have a Counselor follow up with you by phone or by email to find out what kinds of help you might need and connect you with the necessary resources to help you devise a strategy for success.

I will not refer you without telling you. However, if I do refer you, know that I am doing so in an effort to connect you with all of the help you may need to do well this semester as your success is important to me.

**DISABILITIES ACCOMMODATION**

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 (and instructor) to discuss reasonable accommodations that will help you to succeed in this class. Ann Lemke can be reached at 235-7448 or [lemke@hawaii.edu](mailto:lemke@hawaii.edu) or you may stop by Hale 'Akoakoa 213 for more information.

**COURSE CONTENT AND SCHEDULE**

Important Dates: 1/13/17 Last day to receive 100% tuition refund  
1/30/17 Last day to receive 50% tuition refund  
3/3/17 Last day to withdraw from class ("W" on transcript)

Please print the course schedule and use the last column to record scores & extra credits.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings</th>
<th>Due Dates 11:55 PM*</th>
<th>Notes</th>
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<tr>
<td>1</td>
<td>Orientation &amp; Chemistry</td>
<td>Chap1 &amp; 2 Notes Multimedia in Modules</td>
<td>Jan 15 Scavenger Hunt Syllabus Quiz Assign#1 Chaps 1 &amp; 2</td>
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<td>Atomic Structure</td>
<td>Chap 3 Notes Multimedia in Modules</td>
<td>Jan 22 Quiz #1 Chaps 1 &amp; 2 Assign#2 Chap 3</td>
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<td>Chemical Accounting I</td>
<td>Chap 5a Notes Multimedia in Modules</td>
<td>Feb 5 Quiz #3-Chap 4 Assign#4 Chap 5a</td>
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<td>Chemical Accounting II</td>
<td>Chap 5b Notes Multimedia in Modules</td>
<td>Feb 12 Quiz #4-Chap 5a Assign#5 Chap 5b</td>
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<td>6</td>
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<td>Review Chaps 1 – 5 for Midterm Exam</td>
<td>Feb 19 Quiz #5-Chap 5b Post Discussion #1</td>
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<td>Gases, Liquids, Solids</td>
<td>Chap 6 Notes Multimedia in Modules</td>
<td>Feb 22-24 Midterm 1 Chaps 1-5 The Testing Center</td>
<td>Feb 26 Assign#6 Chap 6</td>
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<td>Acids &amp; Bases</td>
<td>Chap 7 Notes Multimedia in Modules</td>
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<td>Quiz #6-Chap 6</td>
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<td>Assign#7 Chap 7</td>
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<td>Quiz #9 Chaps 9 &amp; 10</td>
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<td>Paper Topic with 5 reliable references</td>
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<td>Submit Paper Topic</td>
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<td>Assign #12 Chap 21</td>
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<td>Research Paper</td>
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*This syllabus is subject to change. Please bring any error to the attention of the instructor.*