CHEM 100 Chemistry in Society  
3 Credits  
CRN 61051  
WWW

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808-236-9120  
EFFECTIVE DATE: Fall 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 61098). 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

- Study weekly materials (online Modules)
- Complete weekly assignments (online Assignments & Tests)
- Complete weekly quizzes (online Assignments & Tests)
- Research Paper (online Turnitin.com)
- Two Midterm Exams (Proctoring/Testing Center)
- Final Exam (Proctoring/Testing Center)

GRADING

Grades will be based on the following:
Scavenger Hunt Activity -------------------------- 10 points (A&T)
Weekly Assignments (10 best out of 12) --------- 100 points (A&T)
Weekly Quizzes (10 best out of 12)-------------- 100 points (A&T)
Individual Discussion Posts (4)------------------- 40 points (Discussion)
Research Paper Topic/References ----------------- 10 points (Turnitin.com)
Research Paper (1) ----------------------------- 50 points (Turnitin.com)
Midterm Exams (2) -------------------------------- 220 points (Testing Center)
Final Exam --------------------------------------- 120 points (Testing Center)
Total -------------------------------------------- 650 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:
  585-650 total points = A
  520-584 total points = B
  455-519 total points = C
  390-454 total points = D
  below 390 = 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 change from A-F to Cr/NC/audit option (with Office of Admissions & Records) is on October 30, 2017.

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 30, 2017.

**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. Online office hours (Bb Collaborate) by appointment. [https://us.bbcollab.com/collab/ui/session/guest/F885C1404637DD6B88E34F4C0937CBA9](https://us.bbcollab.com/collab/ui/session/guest/F885C1404637DD6B88E34F4C0937CBA9)
7. OLA (Online Learning Academy), online tutoring open everyday except Saturday. [http://manoa.hawaii.edu/ola/](http://manoa.hawaii.edu/ola/)
8. Brainfuse. Login through MyUH, under My Tools

**COURSE POLICIES**

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 an assignment (10 points) and a quiz (10 points) due every Sunday.

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). Please read the following: [http://www.developgoodhabits.com/study-schedule/](http://www.developgoodhabits.com/study-schedule/)

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 in *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 not accurately recall the information when you reach the final exam.

6. The **scavenger hunt/syllabus 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: *Modules* (course content), *Assignments & Tests* (knowledge check), *Discussion* (interactive assignment), *Gradebook*, and *Chat Room* (ask questions).

7. **Weekly assignment (10 points).** After studying the chapter materials in *Modules*, please do the chapter assignment in *Assignments & Tests*. You have 3 attempts, and no time limit. The highest of the 3 scores is recorded in the *Gradebook*. This is open for 7 days, from Monday to 11:55 pm Sunday.

8. **Weekly quiz (10 points).** Please take the actual quiz in *Assignments & Tests* after completing the assignment. Only one attempt is allowed with time limit. This is open for 7 days, from Monday to 11:55 pm Sunday. All times are Hawaii Standard Time.

   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.

   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.

9. Discussion Posts. Four discussion postings (individual) will be required, 10 points @) to be posted in Discussion.
   #1- Introduce yourself (due 9/3/17)
   #2- Ask your Professor before midterm exam (due 9/24/17)
   #3 -Chemistry in the news (due 10/22/17)
   #4- Application of a chemical reaction in everyday life (due 11/5/17)

The grading rubric for #3 and #4 is as follows:
- Posting is at least 100 words about the topic (3 points)
- Posting is clear, organized, and contains what/when/where/how (3 pts)
- Interacted with classmates about their posts timely at least twice in a thoughtful and respectful way (2 pts @)

Student interactions are required for #3 and #4. 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

Please read your classmates’ postings before uploading your work. You cannot post about the same “news” or ask the same “question”. Should this happen, you don’t earn any points. You will have to compose another discussion. No duplication is allowed.

10. Midterm and Final 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. The two midterm and final exams will be made available for 3 days at the WCC Testing Center (TTC) or external testing site. Please get approval of your testing site from the instructor as soon as possible. Check the course schedule for the dates.

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
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.

11. **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 3-4 sentences with at least 5 reliable references is due on **November 12, 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: **15867604** and Password: Colmenares

Instructor will give **feedback if** paper was submitted **one week before due date** (Dec. 3, 2017). Paper may be revised and resubmitted on the deadline (Dec. 10, 2017). The paper grade will be based on the following rubrics:
- contains a title and purpose/thesis statement (5 points)
- discusses at least one issue and effectively connects to concepts learned in class (10 points)
- information is well-organized and coherent (10 points)
- has in-depth discussion and has correct length (at least 750 words) (10 points)
- no errors in spelling, grammar and use of English (5 points)
- cites all data/information obtained from other sources (5 points)
- lists at least 5 reliable sources, with at least 2 peer-reviewed articles (5 points)

12. **Extra Credit.** You can earn extra credit up to a **maximum of 20 points. Please upload in Turnitin.com.**
- Correct response to classmates’ question in the Chat Room is 0.5 point each.
• Scoring 80% or higher in the practice midterm and practice final will earn 3 points @ with unlimited attempts.
• A 300-word summary and reflection paper of a chemistry forum presentation is 3 points each. The video of the chemistry forum will be posted at http://www.wcc.hawaii.edu/chemistry_forum. Please upload at Turnitin.com.

13. Communicating with instructor. Questions about the class procedures should be posted in the Chat Room. Students who respond first to these questions get an extra credit point. 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.

To talk to the instructor during office hours, please call at 808-236-9120. To talk to the instructor after office hours, please email to make an appointment for online consultation on Bb Collaborate. https://us.bbcollab.com/collab/ui/session/guest/F885C1404637DD6B88E34F4C0937CBA9

14. 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.

15. You are recommended to avail of online tutoring during the semester. You will receive 0.5 extra credit points per session. The OLA online tutoring, http://manoa.hawaii.edu/ola/ is available every day except Saturdays and State holidays. Another option is Brainfuse. Students should use tutoring from the very beginning of the semester before running into difficulty.

16. 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-three hours reading Instructor Notes and doing learning checks and self-assessment in the Notes.
- two-three hours viewing online video lectures and websites and preparing notes
- two hours doing assignments and quizzes
- one hour attending online office hour/OLA tutoring

17. Back up all your submissions.

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 or you may stop by Hale 'Akoakoa 213 for more information.

**COURSE CONTENT AND SCHEDULE**

8/25/17 Last day to receive 100% tuition refund
9/12/17 Last day to receive 50% tuition refund
10/30/17 Last day to withdraw from class (“W” on transcript), CR/NC

Please print this 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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<tbody>
<tr>
<td>1</td>
<td>Orientation &amp; Chemistry</td>
<td>Chap1 &amp; 2 Notes Multimedia in Modules</td>
<td>Aug 27 Scavenger Hunt Quiz Assign#1 Chaps 1 &amp; 2 Quiz #1-Chaps 1 &amp; 2</td>
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<td>Atomic Structure</td>
<td>Chap 3 Notes Multimedia in Modules</td>
<td>Sep 3 Assign#2 Chap 3 Quiz #2-Chap 3 Post Discussion #1</td>
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<td>3</td>
<td>Chemical Bonds</td>
<td>Chap 4 Notes Multimedia in Modules</td>
<td>Sep 10 Assign#3 Chap 4 Quiz #3-Chap 4</td>
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<td>Chemical Accounting I</td>
<td>Chap 5a Notes Multimedia in Modules</td>
<td>Sep 17 Assign#4 Chap 5a Quiz #4-Chap 5a</td>
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<td>Chemical Accounting II</td>
<td>Chap 5b Notes Multimedia in Modules</td>
<td>Sep 24 Assign#5 Chap 5b Quiz #5-Chap 5b Post Discussion #2</td>
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<td>6</td>
<td>Chaps 1 – 5 Midterm Exam</td>
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<td><strong>Sep 27-29 Midterm 1</strong> Chaps 1-5 The Testing Center</td>
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<td>7</td>
<td>Gases, Liquids, Solids</td>
<td>Chap 6 Notes Multimedia in Modules</td>
<td><strong>Oct 8</strong> Assign#6 Chap 6 Quiz #6-Chap 6</td>
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<td>8</td>
<td>Acids &amp; Bases</td>
<td>Chap 7 Notes Multimedia in Modules</td>
<td><strong>Oct 15</strong> Assign#7 Chap 7 Quiz #7-Chap 7</td>
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<td>9</td>
<td>Oxidation &amp; Reduction</td>
<td>Chap 8 Notes Multimedia in Modules</td>
<td><strong>Oct 22</strong> Assign#8 Chap 8 Quiz #8-Chap 8 Post Discussion #3</td>
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<td>Organic Chemistry &amp; Polymers</td>
<td>Chap 9 &amp; 10 Notes Multimedia in Modules</td>
<td><strong>Oct 29</strong> Assign#9 Chap 9 &amp;10 Quiz #9 Chaps 9 &amp; 10</td>
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<td>Nuclear Chemistry</td>
<td>Chap 11 Notes Multimedia in Modules</td>
<td><strong>Nov 5</strong> Assign#10 Chap 11 Quiz #10-Chap 11 Post Discussion #4</td>
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<td><strong>Nov 8-10 Midterm 2 Chaps 6-11 Testing Center</strong> Nov 12 Paper Topic/References</td>
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<td>The Testing Center</td>
<td><strong>Dec 11-14</strong> All chapters Final Exam Testing Center</td>
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*This syllabus is subject to change. Please bring any error to the attention of the instructor.*