

**Chemistry 100: Chemistry and Man**  
**Fall 2012, CRN 20819**  
**Building 5- 208, Tue, Thur 8:30 – 9:45**

**Instructor: Brent K. Rubio, Ph.D.**

Office Hours: Building 5-101E: Tues:1-230pm, Wed:10-noon, Thur:10-1130am, or by appointment

Email: brubio@hawaii.edu

**Text Book**

Chemistry for Changing Times, 12<sup>th</sup> edition, John W. Hill and Doris Kolb, Pearson, NJ.

**Semester Grade**

The break down of semester points is to the right. Final grades are determined from the total points at the end of the semester.

The following *tentative* scale is used for grades: A 90-100%; B 80-89%; C 65-79%, D 55-64%; F 0-54%.

Exam I	100 points
Exam II	100 points
Exam III	100 points
<u>Final Exam</u>	<u>200 points</u>
Total	500 points

**Student Learning Outcomes/General Course Description**

A non-mathematical descriptive overview designed to give the non-science major a basic understanding of chemistry, particularly as it relates to problems of society and the environment. The course includes topics such as atomic structure, chemical bonding, nuclear power and energy sources, air and water pollution, pesticides, drugs, plastics, soaps and detergents, and nutrition. Some specific course objectives include:

1. To learn the elements and principles of chemistry
2. To develop skills in employing the scientific method of learning
3. To learn how to extract practical information from theoretical information
4. To appreciate the impact and influence of chemistry on our lives, and to learn how we can cope with our environment using our knowledge of chemistry.

**Exams**

Due to the nature of this course, all exams are cumulative and multiple choice. Regular Exams are worth 100 points, while the Final Exam is worth 200 points. 50% of all exams will come directly from the textbook problems.

Students must bring their *Student ID*, pencil(s) and a non-graphical scientific calculator to the exams. Sharing of supplies is forbidden.

Midterm Exam Dates: Exam I (Sep 20), Exam II (Oct 18), Exam III (Nov 15)

Final Exam Date: **Tues, Dec 11 (8:30-11:30AM)**

**Make Up Policy**

Make-ups are not allowed. There is absolutely no allowance to re-take anything for a better grade. If you have a scheduling conflict with any of the exams, signed documentation from your advisor, commander, coach, et cetera is needed to take an early exam and will be allowed on a case by case basis. Employment is not a reason to miss an exam.

**Attendance and Extra Credit**

Attendance is not taken in this course. Instead, there are five extra credit opportunities throughout the session.

These will take place during unannounced lecture times. Each extra credit is worth a 1% point increase of your final grade.

**Student ACCESS** (<http://honolulu.hawaii.edu/disability>)

Student ACCESS provides coordinated services to help students with documented disabilities achieve their educational goals. Students requiring disability accommodations should submit requests in advance to HCC's Student ACCESS Office with appropriate disability documentation. For more information visit the Student ACCESS web site or call 844-2392 (voice/text).

**Classroom Etiquette = Movie Theatre Etiquette**

### Cheating and Plagiarism

There is a zero tolerance policy on cheating and plagiarism. Integrity is hallmark in science and violations of the Student Conduct Code could result in an "expulsion." It is not worth the risk.

([www.studentaffairs.manoa.hawaii.edu/policies/conduct\\_code/](http://www.studentaffairs.manoa.hawaii.edu/policies/conduct_code/))

### Homework Problems

Homework is not collected in this course. At a minimum, students should do all Example problems within the chapter and all odd numbers in the Exercises (Questions and Problems) at the end of each chapter. Exams are derived directly from these homework problems.

*\*This course does not utilize [www.masteringchemistry.com](http://www.masteringchemistry.com) or i-clicker.*

### Very Tentative Weekly Schedule

<b>Week of</b>	<b>Chapter and Topics</b>
Aug 21	Ch 1, 2: Chemistry and Atoms
Aug 28	Ch 2, 3: Atomic Structure
Sep 04	Ch 4, 5: Chemical Bonds and Accounting
Sep 11	Ch 6, 7: Physical States and Attraction, Acid/Base
Sep 18	Ch 8: Oxidation/Reduction
<b>Sep 20</b>	<b>Exam I (Ch 1 – 6)</b>
Sep 25	Ch 9: Organic Chemistry
Oct 02	Ch 16: Biochemistry
Oct 09	Ch 10, 11: Polymers and Nuclear Chemistry
Oct 16	Ch 12: Earth
<b>Oct 18</b>	<b>Exam II (Ch 7 – 11, 16)</b>
Oct 23	Ch 13, 14: Air, Water
Oct 30	Ch 15, 17: Energy and Food
Nov 06	NO CLASSES: <i>Election Day</i>
Nov 08	Ch 17: Nutrition
Nov 13	Ch 18: Drugs Discovery Pipeline
<b>Nov 15</b>	<b>Exam III (Ch 12 – 15, 17)</b>
Nov 20	Ch 18: Drugs
Nov 22	NO CLASSES: <i>Thanksgiving</i>
Nov 27	Ch 19, 21: Health and Household Chemicals
Dec 04	Ch 21: Household Hazards
Dec 06	Final Exam Review
<b>Dec 11</b>	<b>Final EXAM, Tues, 8:30 – 11:30 AM (Cumulative)</b>