Chemistry 100, CRN 75656
Bilger 150 MWF 10:30-11:20 am
CHEMISTRY and SOCIETY

INSTRUCTOR: Dr. Amanda Fenner (afenner@hawaii.edu)
OFFICE: Bilger 247B, email is the best way to contact me.
OFFICE HOURS: Thurs 1:30-2:30 pm and Fri 11:30-12:30 or by appointment

COURSE DESCRIPTION

Focuses on the fundamental principles of chemistry and the impact of chemistry in society.

TEXT BOOK, MASTERING CHEMISTRY

Required: **"Chemistry for Changing Times," 14th Edition** by John W. Hill and Terry W. McCreary.

Required: **MasteringChemistry**: www.masteringchemistry.com

Course ID: **CHEM100FA15**

Access code: This comes free with a new book. If you buy a used book that does not come with a code, you will need to purchase instant access during registration ($66 or $111.50 with eTextbook)

Textbook: Choose **Hill/MCreary /Kolb "Chemistry for Changing Times, 14/e"**

See "Chem100_Textbook_MasteringChemistry" on Laulima Announcements page for more information.

For technical support with MasteringChemistry, go to http://247pearsoned.custhelp.com/
or email Jessica Hamad, Jessica.Hamad@pearson.com

STUDENT LEARNING OUTCOMES

The goals student learning outcomes for Chemistry 100 are:

- Understand atomic structure
- Understand formation of chemical bonds, predict shapes of molecules
- Balance chemical equations
- Use the mole concept in solving stoichiometry problems
- Apply chemical knowledge to current societal concerns

COURSE TASKS

Participate in class, online homework, and exams

Class participation includes:

- Actively contributing to class discussion
- Working constructively during in-class case studies
- Taking notes
- Asking questions

GRADING

Grades will be determined from homework (MasteringChemistry), in class participation and 4 exams.

Evaluation	Date	Percent of Course Grade
Homework & Participation	Online and in class	25%
Exam 1, Ch 1-3	Friday, Sept 18th	18.75%
Exam 2, Ch 4-6	Wednesday, Oct 14th	18.75%
Exam 3, Ch 13-15	Monday, Nov 9th	18.75%
Final Exam, Ch 17-19	Monday, Dec 14th	18.75%

HOMEWORK www.masteringchemistry.com

All homework is online and will be available at least 3 days before the due date. Check your browser requirements the first time you sign in to Mastering Chemistry to be sure you can view the problems correctly and submit your work. Use the campus computers in the library or contact Pearson technical support if you hare having trouble.

All homework is due **11:59 pm** on its due date. Start working on the homework before the due date! If you get the answer wrong the first time on multiple choice or open-answer questions, you can still get partial credit for figuring out the right answer.

Late Policy

Assignments lose 25% every day they are late. This is prorated, so if you turn in an assignment 1 hour late, you will only lose ~1%. Late penalties are only applied to the questions that are completed late, not the whole assignment.

Use the hints! There is no penalty for opening a hint and no penalty for getting a hint wrong. Use the hints to help you get more points on the problems. There is also no bonus for not using hints. You can (and are encouraged to!) re-work homework questions after the assignment has been submitted to help you study for the exams.

PARTICIPATING IN CLASS

Case Studies

This class focuses on applying what we will learn about chemistry to events you may encounter outside the classroom. You are expected to prepare for case studies by reading the provided material and looking up whatever extra information you may need to work through the problem. You earn participation points by attending class and contributing constructively to the discussions.

EXAMS

All exams are in-class. You may use your own calculator (scientific, not graphing) and a periodic table that will be made available to you. Your phone is not a calculator, and you may not have your phone out during an exam. You may not use notes or talk to any student during the exam. You are expected to uphold the University of Hawaii Student Conduct Code. Any type of academic dishonesty including cheating or plagiarism will result in failure of the course.

There will be 3 midterm exams (Exams 1-3) and a final exam.

No-make up exams will be given. For missed exams these require a medical note, police report, obituary notice and you must notify me that day or before, ***and not afterwards***. If you cannot provide this statement, a score of zero will be assigned.

The final exam may be used to **replace your lowest Normalized score from midterm exams 1-3**, or serve to replace a zero should you miss an exam for a valid and documented excuse. Therefore, your final exam can weigh between 18.75% and 37.5% of your final grade, whichever is to your advantage. ***Please be aware – this is not a free license to skip a midterm exam at will. Midterm exam replacement will only happen for an exam you have taken (or missed for a valid, verified medical excuse or university sponsored/related travel)***. Do not plan to leave Honolulu before your Final Exam.

Bring your student ID to all exams!

KOKUA www.hawaii.edu/kokua

If you are a student with a disability, please contact KOKUA to make arrangements to provide you with the best learning environment possible. I will be happy to work with you and KOKUA to address your access needs.

OTHER POLICIES

1. Topics and exam schedule are listed on pg 3, although this may be modified at the instructor discretion
2. Disruptive behavior is not only rude to the instructor but the rest of the class. The instructor reserves the right to remove the student. This includes, excessive and rude comments, cell phones, sleeping, eating/drinking in class, etc...
3. Cheating will result in an "**F**" for the class so please don't do it.
4. Changes in schedule that are announced in class will also be posted to Laulima Announcements. You are responsible for these whether present in class or not.
5. Class announcements, including lecture notes, will be posted on the Announcements page on Laulima. I do not usually check the messages on Laulima, so if you need to contact me, use my UH email.

ADVICE FOR CONTACTING ME (afenner@hawaii.edu)

1) I realize that many questions you have are time-sensitive. Email is the best way to contact me, and I make every effort to answer student emails within 2 business days. Quick questions are welcome 5 min before and after class.
2) In addressing your email, titles can be confusing. The correct way to address me is "Dr. Fenner."
3) When you send an email, be sure to note that you are in Chem 100.
4) Per departmental policy, I will only respond to emails from an @hawaii.edu address.
5) Emails asking questions about homework problems should include the title of the homework assignment (i.e. Ch 2) along with the problem number. You are also encouraged to send photo of work you have done on the problem; this will help me determine where you may be having trouble.
6) If office hours do not work in your schedule, email me and we can set up a separate meeting time to go over course material and answer questions.

COURSE SCHEDULE

CHEMISTRY 100 TENTATIVE SCHEDULE

Wk	Date	Day	Homework Due	Chapter	Topics/Important Information
1	24-Aug	M		1	Science and Technology
	26-Aug	W		1	Matter and its Changes
	28-Aug	F		1	Case Study: PCBs
2	31-Aug	M		1	Measurements
	2-Sep	W	Ch 1:A	2	Atomic Theory
	4-Sep	F	Ch 1:B	2	Moles and Molar Mass
3	7-Sep	M		NO CLASS	*Labor Day*
	9-Sep	W	Ch 2	2/3	Atomic Structure
	11-Sep	F		3	Nucleus
4	14-Sep	M	Ch 3:A	3	Electrons
	16-Sep	W	Ch 3:B	Review Ch 1-3	*Practice Exam I*
	18-Sep	**F**		**Exam 1**	**Ch 1-3**
5	21-Sep	M		4	Chemical Bonds
	23-Sep	W		4	Molecules and Shapes
	25-Sep	F	Ch 4:A	4	Polar and Nonpolar
6	28-Sep	M		4	Case Study: Martian Molecules
	30-Sep	W	Ch 4:B	5	Balancing Equations
	2-Oct	F		5	Molar Conversions
7	5-Oct	M	Ch 5:A	5	Solutions
	7-Oct	W	Ch 5:B	6	Intermolecular Forces
	9-Oct	F		6	Ideal Gas Law
8	12-Oct	M	Ch 6	Review Ch 4-6	*Practice Exam II*
	14-Oct	**W**		**Exam 2**	**Ch 4-6**
	16-Oct	F		13	Air
9	19-Oct	M	Ch 13:A	13	Air
	21-Oct	W		13	Case Study: Smoke Free
	23-Oct	F	Ch 13:B	14	Water
10	26-Oct	M		14	Water
	28-Oct	W		14	Water
	30-Oct	F	Ch 14:A	15	Energy
11	2-Nov	M	Ch 14:B	15	Energy
	4-Nov	W		15	Case Study: TBA
	6-Nov	F	Ch 15	Review Ch 13-15	*Practice Exam III*
12	9-Nov	**M**		**Exam 3**	**Ch 13-15**
	11-Nov	W		NO CLASS	*Veterans Day*
	13-Nov	F		17	Food
13	16-Nov	M	Ch 17:A	17	Food
	18-Nov	W		17	Case Study: Benign Burger
	20-Nov	F	Ch 17:B	18	Drugs
14	23-Nov	M		18	Drugs
	25-Nov	W	Ch 18:A	18	Drugs
	27-Nov	F		NO CLASS	*Non Instructional Day*
15	30-Nov	M		18	Case Study: TBA
	2-Dec	W	Ch 18:B	19	Fitness and Health
	4-Dec	F		19	Fitness and Health
16	7-Dec	M		19	Fitness and Health
	9-Dec	W	Ch 19	Review Ch 17-19	*Practice Exam IV*
18	14-Dec	**M**	**9:45-11:45 am**	**Final Exam**	**Ch 17-19**

STUDY GUIDE FOR CHEMISTRY COURSES

1) Study with others. Students who study and work on homework together understand the material better. It makes sense; **when you understand something well enough to explain it to someone else, then you really know the material**. Work with others on the homework, compare your answers, and talk about what is the right answer. Obviously, you cannot work together on the exams, but working through the problems with others will help you do better on the exams. Note: working together is not the same thing as copying someone's work. Learn to solve the problems on your own in this class and build a strong foundation for your future chemistry courses.

2) Think of chemistry as something you can learn to do well. While it may seem that chemistry is something you either "get" or "don't get," psychology research has demonstrated that not only can you get better at chemistry by practicing, but that if you believe that you can develop your chemistry skills, you will get better. Sure, some people will understand the material easier and faster than others, but by doing the practice problems online and in your book**, you can get better at chemistry**.

3) Practice, practice, practice. Do the assigned homework online, and then do unassigned problems in your book for fun. Work on the in-class problems and ask questions if you do not understand the answer. As Greg LeMond said, "It doesn't get any easier, you just get faster." And from Eddy Merckx, "Ride lots." Although in our case, it's "practice chemistry lots."

4) Go ask questions. In addition to my office hours, you can get help at the Learning Emporium and through the Learning Assistance Center. UH Manoa provides FREE tutoring M-F 9-5 pm in the **Learning Emporium** in Bilger Addition 209. (Note, Bilger Addition is connected to Bilger Hall by double doors on each floor. Bilger Addition has labs around the outside of the hallway; the Learning Emporium is in the center on the second floor.)