

Chemistry 131, CRN 85196
Bilger 150 MWF 10:30-11:20 pm
PREPARATION FOR GENERAL CHEMISTRY

INSTRUCTOR: Chester Dabalos (cdabalos@hawaii.edu)
OFFICE: Bilger 245B
OFFICE HOURS: MWF 9:30-10:20

COURSE DESCRIPTION

Provides background in algebra and elementary concepts of chemistry in preparation for General Chemistry I.

REQUIREMENTS

Textbook:

“Introductory Chemistry,” Custom Edition for the University of Hawaii-Mānoa by Cracolice and Peters

Online Assignment: OWLv2

Course: Chem 131

Course Key: E-24YE64ARSL7EF

Instructions for registration: <https://www.cengage.com/services/resource/6803>

Access code: To be purchased

For technical support email Jessica Hamad, jessica.hamad@cengage.com

Scientific Calculator (graphing calculators are not allowed)

STUDENT LEARNING OUTCOMES

The goals student learning outcomes for Chemistry 131 are:

- Understand atomic structure and compound formation.
- Appreciate trends in physical and chemical properties of elements based on the periodic table.
- Use conversion factors and rearrange equations to perform calculations.
- Balance chemical equations, classify reactions, predict products of precipitation reactions
- Know intermolecular forces in solids, liquids, and gases.
- Apply the mole concept in solving stoichiometry problems.

COURSE TASKS

Participate in class, online homework, and exams

Class participation includes:

- Reading the chapter in the book prior to coming to class
- Bringing the lecture notes (available on Laulima, please print and write your notes on them)
- Bringing a calculator (especially for exams)

GRADING

Grades will be determined from homework (online) and 4 exams.

<u>Evaluation</u>	<u>Date</u>	<u>Percent of Course Grade</u>
Homework	Online	20%
Exam 1: Topics 1-5	Wednesday, Feb 15	20%
Exam 2: Topics 6-8	Wednesday, Mar 15	20%
Exam 3: Topics 9-11	Wednesday, Apr 12	20%
Final Exam	Monday, May 8	20%

Exams will be taken from the book and from the on-line assignments. Final exam will be based from midterm exams.

BONUS: 2% incentive if all assignments are complete. Another 2% incentive if perfect attendance. Attendance will be through i-clicker. I will start checking attendance on January 18, 2017.

HOMEWORK

All homework is **online** (see schedule for deadlines). Check your browser requirements the first time you sign in to be sure you can view the problems correctly and submit your work. Contact C-engage technical support (see above) if you are 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. **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. You can (and are encouraged to!) re-work homework questions after the assignment has been submitted to help you study for the exams.

Late Policy

Deadlines will not be extended. Do not waste your time asking me for extension.

Never wait for the last minute for help. I can not answer emails a few hours before the deadline. Plan to email me before **5 pm** (on the day of the deadline) should you like to ask for assistance.

You should plan to **spend 1-2 hours outside of class every day** working on homework and reviewing the material covered in class. The best way to get better at chemistry is to **PRACTICE SOLVING PROBLEMS**.

EXAMS

All exams are in-class. Bring your own scientific calculator (there is no guarantee that I could lend you one during exams). Your phone is not a calculator, and you are not allowed to use your phone during an exam. Learn to use your calculator before coming to exams. I will not teach you to use the calculator during exam hours.

You are not allowed to talk to any student during the exam. You will be tried of cheating if you do so.

You can bring a 3" by 5" index card with anything written on it (equations, conversion factors and constants). For the finals a 4" by 6" index card is allowed.

Any type of academic dishonesty will result in failure of the course.

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

No-make up exams will be given. For missed exams, a medical note, police report, or obituary notice is required. You must notify me **at least an hour before the exam**. If you cannot provide this condition, a score of **zero** will be assigned.

The comprehensive final exam may be used to replace a zero should you miss an exam (not exams!) for a valid and documented excuse. Therefore, your final exam can weigh either 20% or 40% of your final grade. ***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 missed for a valid excuse or university sponsored/related travel.***

Bring your student ID to all exams! Asking someone to take the exam for you will be severely penalized.

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 (especially if we needed more time for a certain topic).
2. Disruptive behavior is not only rude to the instructor but to the rest of the class. Annoyance includes excessive comments, use of cell phones, etc...
3. Cheating will result in an **"F"** for the class. **No exceptions.**
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 Laulima.

ADVICE FOR CONTACTING ME (cdabalos@hawaii.edu)

- 1) Email is the best way to contact me, and I make every effort to answer student emails within 2 business days.
- 2) Per departmental policy, I will only respond to emails sent from an @hawaii.edu address.
- 3) If office hours do not work in your schedule, email me and we can set up a separate meeting time (preferably in the morning) to go over course material and answer questions.

COURSE SCHEDULE

CHEMISTRY 131 TENTATIVE SCHEDULE

Wk	Date	Day	Homework Due	Topics/Important Information
1	1/9	M		Discussion of Syllabus
	1/11	W		How to Study Chemistry
	1/13	F		Math Review
2	1/16	M		Martin Luther King Day
	1/18	W		Ch 1: Introduction to Chemistry
	1/20	F		
3	1/23	M	Ch 1	Ch 2: Matter and Energy
	1/25	W		
	1/27	F	Ch 2	Ch 3: Measurement and Chemical Calculations
4	1/30	M		
	2/1	W		
	2/3	F	Ch 3	Ch 5: Atomic Theory: Nuclear Model
5	2/6	M		
	2/8	W	Ch 5	Ch 11: Atomic Theory: Quantum Model
	2/9	F		
6	2/13	M	Ch 11	Review for First Exam
	2/15	W		First Exam (Topics 1-5)
	2/17	F		Discussion on First Exam
7	2/20	M		President's Day
	2/22	W		Ch 12: Chemical Bonding
	2/24	F		
8	2/27	M	Ch 12	Ch 13: Structure and Shape
	3/1	W		
	3/3	F		
9	3/6	M		
	3/8	W		
	3/10	F	Ch 13	Ch 15: Gases, Liquids and Solids
10	3/13	M	Ch 15	Review for Second Exam
	3/15	W		Second Exam (Topics 6-8)
	3/17	F		Discussion on Second Exam
11	3/20	M		Ch 6: Chemical Nomenclature
	3/22	W		
	3/24	F	Ch 6	Ch 8: Chemical Reactions
12	3/27-31			SPRING RECESS
13	4/3	M		
	4/5	W	Ch 8	Ch 9: Chemical Change
	4/7	F		
14	4/10	M	Ch 9	Review for Third Exam
	4/12	W		Third Exam (Topics 9-11)
	4/14	F		Good Friday
15	4/17	M		Discussion on Third Exam
	4/19	W		Ch 7: Chemical formula relationships
	4/21	F		
16	4/24	M	Ch 7	Ch 10: Quantity relationships in chemical reactions
	4/26	W		
	4/28	F		
17	5/1	M	Ch 10	Ch 17: Acid-base reactions
	5/3	W	Ch 17	Review for Final Exam
18	5/8	M		Final Exam (comprehensive)

STUDY GUIDE FOR CHEMISTRY COURSES

1) Study with others. Students who study and work on homework together understand the material better. 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.

4) Go ask questions. In addition to my office hours, you can get help at 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.)