Chemistry 131, CRN 96960
PREPARATION FOR GENERAL CHEMISTRY

INSTRUCTOR: Chester Dabalos (cdabalos@hawaii.edu)
OFFICE: Bilger 247B

COURSE DESCRIPTION

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

REQUIREMENTS

Textbook: "Introductory Chemistry," by Cracolice and Peters

Online Work (includes assignments, quizzes and exams): OWLv2
To login: check "Laulima OWL Registration" powerpoint in your Laulima
For technical support: email Jessica Hamad (jessica.hamad@cengage.com)

Scientific Calculator and a handy Periodic Table of Elements

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
- Apply the mole concept and unit analysis in solving stoichiometry problems.

COURSE TASKS

Read and listen to powerpoint lectures. Watch the online videos.
Accomplish homeworks, quizzes and exams using OWLv2.
Ask for consultation using an on-line tool. Email me for details.

GRADING

Grades will be determined from homeworks, quizzes and three exams.

Evaluation	Percent of Course Grade
Homeworks	10%
Quizzes	15%
Exam 1:	25%
Exam 2:	25%
Finals:	25%

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.

A homework will require the previous homework as a prerequisite, where a minimum of 70% is needed. Three tries will be allowed to obtain the minimum score. All homework is due **11:50 pm** the day before the exam. Start working on the homework before the due date! You can (and are encouraged to!) re-work homework questions after the assignment has been submitted to help you study for the exams.

Quizzes will available from 1pm to 5pm on the assigned date (see schedule) and will have a time limit. In contrast to homeworks, quizzes will have a time limit and only one try is allowed. Use quizzes to prepare you for the exam.

There is an exam for every module. You have the option of reporting to class for the exam (details will be announced later) or taking the exam in a UH or a community college testing center, where you will be proctored. A password will be mailed a minute before the exam starts. You can bring a 3" by 5" index card with anything written on it (equations, conversion factors and constants). **No-make up exam will be given**. For missed exams, a medical note, police report, or obituary notice is required. The final exam may be used to replaced the missed exam, given a valid and documented reason.

Late Policy

Deadlines will not be extended. Do not waste your time asking me for extension (except with valid medical reasons).

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.

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 schedule are listed on the next page, 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 and any other form of academic dishonesty will result in an "**F**" for the class.
4. Announcements will be sent by email.
5. 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.

COURSE SCHEDULE

CHEMISTRY 131 TENTATIVE SCHEDULE

Wk	Date	Day		Topics/Important Information
1	7/2	M		Math Review I
	7/3	T		**Module I;** States of Matter; Physical vs Chemical Change; Pure Substances and Mixtures
	7/4	W		Independence Day (no classes)
	7/5	R	HMWK_1	Scientific Notation; Significant Figures; Units and Conversion
	7/6	F		Temperature; Density; QUIZ_1
2	7/9	M	HMWK_2	Dalton's Atomic Theory; Subatomic particles; Isotopes
	7/10	T		Atomic Mass; Avogadro's Number
	7/11	W	HMWK_3	Chemical Families; Intro to Periodic Table; Electron Configuration
	7/12	R	HMWK_4	Trends in Periodic Table; Metals vs non-metals; QUIZ_2
	7/13	F		**EXAM_1**
3	7/16	M		Math Review II
	7/17	T		**Module II;** Ionic vs Covalent Compounds; Electronegativity and Polarity
	7/18	W		Lewis Structure
	7/19	R	HMWK_5	VSEPR
	7/20	F		Nomenclature of ionic and covalent compounds
4	7/23	M	HMWK_6	Nomenclature of acids; Dissociation of acids; polyatomic ions; QUIZ_3
	7/24	T		Molar masses; Avogadro's number
	7/25	W	HMWK_7	Molecule-mole relationships
	7/26	R	HMWK_8	% composition; Empirical vs molecular formula; QUIZ_4
	7/27	F		**EXAM_2**
5	7/30	M		Math Review III
	7/31	T		**Module III;** Types of chemical reactions
	8/1	W	HMWK_9	Writing and balancing chemical equations; Energy in reactions
	8/2	R		Units of Concentration
	8/3	F	HMWK_10	Dilutions; pH scale QUIZ_5
6	8/6	M		Percent yield;
	8/7	T	HMWK_11	Limiting reagent
	8/8	W		Individual Gas Laws; Combined Gas Laws
	8/9	R	HMWK_12	Ideal Gas Equation; QUIZ_6
	8/10	F		**FINAL EXAM** (cumulative)