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| **Chemistry 131, CRN 75344**  **Bilger 152 MWF 2:30-3:20 pm**  **PREPARATION FOR GENERAL CHEMISTRY** |
| **INSTRUCTOR: Chester Dabalos (**[**cdabalos@hawaii.edu**](mailto:cdabalos@hawaii.edu)**)**  **OFFICE: Bilger 247B**  **OFFICE HOURS: MWF 2:00-2:20 and 3:30-4:00; by appointment** |

Before finalizing your registration for Chem 131, you are advised to try taking the Placement Exam (<http://manoa.hawaii.edu/chem/academics/undergraduate/placement-exam/>). If you score 16/25 or above, then you may register for Chem 161.

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| **COURSE DESCRIPTION** |

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

*Credit allowed for only one of CHEM 100, 131, 151, 161, 171, or 181A.* Upon taking CHEM 161, the course credit for 131 will be removed from your record and will not count toward their graduation requirements or GPA.

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| **REQUIREMENTS** |

**Textbook: “Introductory Chemistry,” Custom Edition for the UH-Mānoa** by Cracolice and Peters

**Online Assignment: OWLv2**

**Course: Chem 131 Course Key: TBA Access code**: To be purchased

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

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

**Scientific Calculator** (graphing calculators are not allowed)

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| **STUDENT LEARNING OUTCOMES** |

The goals student learning outcomes for Chemistry 131 are:

* Understand atomic structure and compound formation.
* Predict trends in physical and chemical properties using the periodic table and structure
* Assign names of simple inorganic compounds
* Interpret chemical formula and equations
* Use unit analysis and conversion factors to solve stoichiometry problems.

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| **COURSE TASKS** |

**Participate in class, online homework, and exams**

Class participation includes:

* Reading the pertinent chapter and lecture material prior to coming to class
* Bringing a portable periodic table of elements and calculator

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| **GRADING** |

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

Evaluation Date Percent of Course Grade

Homework Online 20%

Exam 1: Topics 1-5 Wednesday, Sept 27 20%

Exam 2: Topics 6-8 Wednesday, Oct 25 20%

Exam 3: Topics 9-11 Wednesday, Nov 15 20%

Final Exam Monday, Dec 11 20%

The final exam will be based from midterm exams and from the topics after the third exam. The ratio is about 1:1.

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| **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 at around **11:50 pm** on its due date. Start working on the homework before the due date!

A 2% incentive, to the total grade, will be awarded if all assignments are (>60%). Use the homeworks to your advantage. Many students are spared from getting an “F” because of this policy.

**Late Policy**

Deadlines will not be extended except for valid and documented reasons. 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.

Plan to **spend 1-2 hours outside of class every day** working on homework and reviewing the material covered in class. I guarantee that you will not learn to solve a problem by just watching someone solve it.

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| **EXAMS** |

All exams are in-class. Bring your own scientific calculator (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 accused 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). You may use both sides. For the finals a 4” by 6” index card is allowed.

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

**No-make up exams will be given**. For missed exams, a medical note, police report, or obituary notice is required to be excused. 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. Depending on the need of the class, I may use your final exam as well to replace the lowest midterm score.

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

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| **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.

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| **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.

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| **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.

**Go ask questions**. In addition to my office hours, you can get help at the **Learning Emporium** in Bilger Addition 209. Try the **Learning Assistance Center** (LAC) located in the Student Success Center in Sinclair Library as well.

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| **COURSE SCHEDULE** |

CHEMISTRY 131 TENTATIVE SCHEDULE

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| **Wk** | **Date** | **Day** | **Homework Due** |  | **Topics/Important Information** |
| 1 | 8/21 | M |  |  | Discussion of Syllabus |
|  | 8/23 | W |  |  | How to Study Chemistry |
|  | 8/25 | F |  |  | Math Review |
| 2 | 8/28 | M |  |  | Ch 1: Introduction to Chemistry |
|  | 8/30 | W |  |  |  |
|  | 9/1 | F | Ch 1 |  | Ch 2: Matter and Energy |
| 3 | 9/4 | M |  |  | Labor Day |
|  | 9/6 | W |  |  |  |
|  | 9/8 | F | Ch 2 |  | Ch 3: Measurement and Chemical Calculations |
| 4 | 9/11 | M |  |  |  |
|  | 9/13 | W | Ch 3 |  | Ch 5: Atomic Theory: Nuclear Model |
|  | 9/15 | F |  |  |  |
| 5 | 9/18 | M | Ch 5 |  | Ch 11: Atomic Theory: Quantum Model |
|  | 9/20 | W |  |  |  |
|  | 9/22 | F | Ch 11 |  |  |
| 6 | 9/25 | M |  |  | Review for First Exam |
|  | **9/27** | **W** |  |  | **First Exam (Topics 1-5)** |
|  | 9/29 | F |  |  | Discussion on First Exam |
| 7 | 10/2 | M |  |  | Ch 12: Chemical Bonding |
|  | 10/4 | W |  |  |  |
|  | 10/6 | F | Ch 12 |  | Ch 13: Structure and Shape |
| 8 | 10/9 | M |  |  |  |
|  | 10/11 | W |  |  |  |
|  | 10/13 | F |  |  |  |
| 9 | 10/16 | M | Ch 13 |  | Ch 15: Gases, Liquids and Solids |
|  | 10/18 | W |  |  |  |
|  | 10/20 | F | Ch 15 |  | Ch 6: Chemical Nomenclature |
| 10 | 10/23 | M |  |  | Review for Second Exam |
|  | **10/25** | **W** |  |  | **Second Exam (Topics 6-8)** |
|  | 10/27 | F |  |  | Discussion on Second Exam |
| 11 | 10/30 | M |  |  |  |
|  | 11/1 | W | Ch 6 |  |  |
|  | 11/3 | F |  |  | Ch 8: Chemical Reactions |
| 12 | 11/6 | M | Ch 8 |  | Ch 9: Chemical Change |
|  | 11/8 | W | Ch 9 |  |  |
|  | 11/10 | F |  |  | Veterans’ Day |
| 13 | 11/13 | M |  |  | Review for Third Exam |
|  | **11/15** | **W** |  |  | **Third Exam (Topics 9-11)** |
|  | 11/17 | F |  |  | Discussion on Third Exam |
| 14 | 11/20 | M |  |  | Ch 7: Chemical formula relationships |
|  | 11/22 | W | Ch 7 |  |  |
|  | 11/24 | F |  |  | Non-instructional Holiday |
| 15 | 11/27 | M |  |  | Ch 10: Quantity relationships in chemical reactions |
|  | 11/29 | W |  |  |  |
|  | 12/1 | F |  |  |  |
| 16 | 12/4 | M | Ch 10 |  |  |
|  | 12/6 | W |  |  | Review for Final Exam |
| 17 | **12/11** | **M** |  |  | **Final Exam (comprehensive) at 2:15-4:15** |