Welcome to Fundamentals of Biochemistry

Biochemistry 141

Brad Ashburn, Ph.D.
Course Syllabus • Leeward Community College
Course Title: Fundamentals of Biochemistry
Course Number: 54543, 54545, 54546
Course Location: Online
Course Website: www2.hawaii.edu/~bashburn/bioc141

Instructor: Brad Ashburn, Ph.D.
Office Location: Physical Science 202
Office Hours: TR 1:00-4:00 pm or by appointment (subject to change)
Available for online office hours by appointment
Email Address: bashburn@hawaii.edu
Office Phone: 808-455-0262

Prerequisite: CR in MATH 82 or equivalent or higher

Textbook: Chemistry: An Introduction to General, Organic and Biological Chemistry by K.C. Timberlake
The Leeward CC Bookstore sells a looseleaf version of the most recent edition. An older edition of the textbook would be fine. The Pearson online access code is not required.

Course Description:
First semester of a two semester course sequence covering the fundamentals of general, organic and biological chemistry. Emphasis on chemical reactions, principles and concepts as they apply to living systems.

Student Learning Outcomes:
1. Utilize precise chemical language to communicate chemical and biochemical concepts and results.

2. Analyze and apply appropriate procedures for solving chemical and biochemical-related calculations using dimensional analysis.

3. Analyze and apply appropriate procedures for solving chemical and biochemical-related calculations involving gases, liquids, solids, and solutions.

4. Relate the location of an element in the periodic table to its electron configuration, number of subatomic particles, and subsequent chemical reactivity based on periodic trends.

5. Describe ionic and covalent bonding theories and apply them to the construction of proper Lewis structures and prediction of molecular characteristics.

6. Relate chemical and biochemical concepts, theories and laws to everyday phenomena.
Exams: All exams are cumulative but will focus on recent material. **Exams must be taken at a UH campus Testing Center** or if you are out-of-state, an instructor-approved Testing Center. Further details are provided on the course website.

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>Sept 18-22</td>
<td>100 pts</td>
</tr>
<tr>
<td>Exam 2</td>
<td>Oct 23-27</td>
<td>100 pts</td>
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<tr>
<td>Exam 3</td>
<td>Dec 4-14</td>
<td>100 pts</td>
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Quizzes: There will be 12 module quizzes worth 20 points each. The lowest two quiz scores will be dropped. The quizzes are taken on Laulima and are open notes/textbook BUT there is a 30 minute time limit so you must be prepared or else you may run out of time. The due dates will be posted in Laulima. The instructor is not responsible for any technical issues related to your internet connection, computer or Laulima. If you need assistance with Laulima, please click on the link at the bottom of Laulima entitled “Request assistance.” All quizzes are taken electronically using the Quizzes and Exams tool on Laulima.

Grades: Final Grades will be determined out of the 500 points available. Raw scores counted for course grade. No grading curve. The tentative scale will be used:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>450-500</td>
<td>90-100%</td>
</tr>
<tr>
<td>B</td>
<td>400-449</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>350-399</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>300-349</td>
<td>60-69%</td>
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<tr>
<td>F</td>
<td>0-299</td>
<td>59% or below</td>
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Course Policies: • No make up quizzes/exams will be given except for documented medical emergencies.
• All missed quizzes/exams are counted as zero points.
• Plagiarism in any form is considered academic dishonesty.
• Academic dishonesty will not be tolerated and may result in judicial proceedings in accordance with UH policy.

Students with Disabilities Statement: Leeward Community College abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, which stipulate that no student shall be denied the benefits of an education "solely by reason of a handicap." Students with documented disabilities who believe that they may need accommodations in this class are encouraged to contact the Coordinator of the KAKO'O 'IKE (KI) program as soon as possible to ensure that such accommodations are implemented in a timely fashion. The
SI office is located in L-208, across from the elevator in the library building or call for information at 455-0421.

**Student Assessment Notification:**
With the goal of continuing to improve the quality of educational services offered to students, Leeward CC conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

**UH Emergency Notification:**
The UH Alert emergency notification system is the primary communication tool used to alert the Leeward Community College community of an immediate threat to the safety and security of our students and employees. UH Alert is also used to announce campus closures.

You must register online to receive the UH Alert service. UH Alert includes automated emergency messages sent via email and text message alerts sent to mobile phones. All students, faculty and staff are encouraged to sign up online at: [https://www.hawaii.edu/alert](https://www.hawaii.edu/alert)

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**TITLE IX SYLLABUS STATEMENT 2017**

The University of Hawaii is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. If you or someone you know is experiencing any of these, the University has staff and resources on your campus to support and assist you. Staff can also direct you to resources that are in the community. Here are some of your options:

If you wish to remain **ANONYMOUS**, speak with someone **CONFIDENTIALLY**, or would like to receive information and support in a **CONFIDENTIAL** setting, contact:

**Dr. Nadine Shigezawa** (for Veteran students only)
Email: nadine.shigezawa@va.gov
Phone: 455-0672
Location: Veteran’s Resource Center, BS 103

**Dr. Amy Humphrey**, Mental Health Counselor
Email: amyh3@hawaii.edu
Phone: 455-0516
Location: Counseling Office, AD 208
If you wish to **REPORT** an incident of sex discrimination or gender-based violence including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence or stalking as well as receive information and support, contact:

**Mark Lane**  
Title IX Coordinator  
AD 111  
tel 808-455-0213  
email marklane@hawaii.edu

**Kami Kato**  
Deputy Title IX Coordinator for Students  
AD 225A  
tel 808-455-0236  
email kamik@hawaii.edu

**Lori Lei Hayashi**  
Deputy Title IX Coordinator for Employees  
AD 121  
tel 808-455-0277  
email lhayashi@hawaii.edu

As a member of the University faculty, I am **required to immediately report** any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University’s Title IX resources and the University’s Policy, Interim EP 1.204, go to: [http://www.hawaii.edu/titleix](http://www.hawaii.edu/titleix)