

**Biology 101 – General Biology**  
PACE Spring 2016

**Instructor:** Mindy McDermott, PhD  
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**Office Hours:** By appointment or via email  
**Course Location:** Schofield Barracks  
**Course Meeting Times:** Thursdays 5:30-9:40PM

**Readings. Book: Audesirk et al. Biology: Life on Earth** (11<sup>th</sup> edition). You will also receive some printed and on-line materials during the semester that you will be expected to read. Attending class each scheduled day is very important. Exams will heavily emphasize material covered in class.

**Welcome.** This course introduces basic biological principles of the cellular basis of life, heredity, biotechnology, evolution, life diversity, and the future of biology. Biology 101 is a 3-credit introductory biological science course for those students desiring to fulfill credits leading to a non-science bachelor's degree at Chaminade University. Concurrent registration in Biology 101 Lab is recommended to fulfill a lab science requirement.

**Learning Outcomes.** On completion of this course, students will be able to:

- Understand the process of science
- Describe and utilize the scientific method
- Write a testable hypothesis for a given observation
- State the definition of a scientific theory and explain what distinguishes a scientific theory from the colloquial usage of the word "theory"
- Understand the basis of heredity
- Understand the chemical and physical principles that unite all life forms and of biological organization at the molecular, cellular, organism, and systems level
- Understand the principles of various techniques in modern biotechnology and be able to discuss the pros and cons of applications such as genetic engineering
- Understand what evolution is and our current understanding of the history of life
- Obtain an appreciation for life diversity
- Be familiar with taxonomy
- Discuss and identify ethical issues that new scientific technology raises
- Understand that progress in science depends heavily on the political, social, economic and cultural influences occurring within society at any given time
- Ask scientific questions of your world

**Course Website.**

Chaminade University uses the on-line Canvas platform. The Canvas link can be found on the Chaminade University homepage: [www.chaminade.edu](http://www.chaminade.edu). There you will find media including copies of any lecture slides used in the course, links to readings and other materials, and additional information to support the learning process.

**Lectures.**

1. Lecture topics and text assignments are listed in the course outline.
2. Examination dates are also listed in the course outline.
3. The instructor reserves the right to add, omit, or change the materials as needed.

## Course Assessment.

1. **Quizzes:** The quizzes will be given every week, unless an exam is scheduled, and cover material from the previous week's class.
2. **Exams:** Exams will cover lecture material and consist of a combination of true/false, multiple choice, matching, draw and label, short answer, and essay. Exams cover material from your readings, from any media presented, and from our lectures and discussions. You will be permitted to bring and use one hand-written note page (8 ½ X 11 inches, one side only): this may include anything you think will help you for the exam. You will turn in the hand-written note page along with your exam.
3. **Attendance:** Attendance is expected and essential for successful completion of the course. Assignments, quizzes, and tests cannot be made up without a valid excuse. Arrangements should be made *before* your absence. If you are absent, it is your responsibility to inform the instructor and to inquire about missed assignments, quizzes, and tests.
4. **Grading Procedure:** Grades will reflect an overall understanding of topics covered in lecture. Attendance and attentiveness in lecture will ensure satisfactory performance in the class. Demonstrating a thorough understanding of course material and meaningful participation in class discussions constitutes high achievement in the course. We will have in-class work to facilitate class discussion, which may include Internet searches, reviews of video, and group activities. Group activities may consist of brief oral reports or short written reports. For written coursework, you will be graded on your ability not only to answer the question but also in how effectively you can defend your answer/position using your knowledge of the subject & applying what you learned through the use of relevant facts and examples.

Grades will be based on the following system & scale:

### Grade Scale:

90% & above	= A
80 - 89%	= B
70 - 79%	= C
60 - 69%	= D
59% & below	= F

### Grading System:

Quizzes/Assignments	20%
Position Paper	20%
Exam 1	20%
Exam 2	20%
Exam 3	20%

## Policy Reminders and Notices.

1. It is the general policy of Chaminade Natural Science & Mathematics Department that personal electronics are not permitted in the classroom, but discretion is permitted to the instructor. As your instructor, I encourage you to bring your laptops, tablets, or smartphones, subject to restrictions imposed by Schofield Barracks policy. The use of electronic devices is to facilitate and enhance your learning about subjects in the class. Other uses of electronic devices are discouraged.
2. You are also expected to have read and to abide by the "Student Rules of Conduct" which are available in your copy of Chaminade University's Student Handbook. See also the PACE website for more information.
3. You will not be provided access to a computer for this course. You may bring and use your laptops or tablets to lecture for the purpose of taking notes. However, on exam days, you may not use any electronic devices including smartphones, tablets, or laptops.
4. You may not record audio, images, or video in the classroom without expressed permission of the instructor.
5. The University provides a Chaminade email address for all students. Official Chaminade communications will be sent to the students' Chaminade email address, and instructors will use only this email to communicate with students. It is the responsibility of the student to check their email frequently. Report email-related problems to the Helpdesk at 808-735-4855 or [helpdesk@chaminade.edu](mailto:helpdesk@chaminade.edu).

6. You are encouraged to work together; however, all graded material must be your own. Cheating in the form of plagiarism (offering of work of another as one's own, SH, p. 33), collusion, and deception will not be tolerated and will negatively affect your grade. The University is an academic community with high professional standards. Academic dishonesty seriously disrupts and subverts a teaching environment. Academic dishonesty includes, but is not limited to, cheating defined by giving/receiving unauthorized assistance during an examination, obtaining information about an examination before it is given, using inappropriate/prohibited sources of information during an examination, altering answers after an examination has been submitted, and altering the records on any grade. (Refer to the CUH catalog for further information).
7. Title IX Declaration: Chaminade University of Honolulu (CUH) recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical abuse, or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical abuse, and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment. Should I learn of any sexual misconduct, physical abuse, and/or psychological abuse, I must report the matter to the Title IX Coordinator. Should you want to speak to a confidential source, you may contact the following: Chaminade Counseling Center at 808-735-4845, any priest serving as a religious confessor, or any ordained religious leader serving in the sacred confidence role.
8. In accordance with several federal and state laws, including the Americans with Disabilities Act (ADA) of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on the basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center at 808-735-4845 for further information. Students with special needs who meet criteria for the Americans with Disabilities Act provisions must provide written documentation of the need for accommodations from CUH Counseling Center (Dr. June Yasuhara, 808-735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations.

**General Course Schedule (subject to change).**

<b>Week</b>	<b>Thursday</b>	<b>Topics</b>	<b>Readings</b>
1	Jan 12	Course Overview; Process of Science; Elements & Molecules of Life	Chapters 1 - 3
2	Jan 19	Cellular Structure & Function; Energy in Cells <b>Quiz 1</b>	Chapters 4, 7, 8
3	Jan 26	DNA & Chromosomes; Cell Division; Mendelian Genetics <b>Quiz 2</b> Review	Chapters 9 -12
4	Feb 2	<b>Exam 1</b> Mutations and Genetic Disorders; Biotechnology	Chapters 12, 14
5	Feb 9	History of Life; Origin of Species/Principles of Evolution <b>Quiz 3</b>	Chapters 15 - 18
6	Feb 16	Diversity of Animals; Systematics; Animal Behavior <b>Quiz 4</b> Review	Chapters 19, 24, 25, 26
7	Feb 23	<b>Exam 2</b> Ecosystems & Marine Biology	Chapter 28, 29, 30
8	March 2	Global Change & Threats to Biodiversity <b>Quiz 5</b>	Chapter 30 & 31
9	March 9	Human Impact & The Environment; Conservation Biology <b>Quiz 6</b>	Chapter 31 Lecture Notes
10	March 16	Forensic Biology; The Biological Future <b>Quiz 7</b> Review	Lecture Notes
11	March 23	<b>Exam 3</b>	