PENSACOLA STATE COLLEGE

SYLLABUS
Introduction to Biology
BSC1005-D9164
Summer 2026, Session A

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Last Date of Drop/Add: May 14, 2026
Last Date for Student to Withdraw: July 13, 2026
Final Exam Date: TBD

Class Meeting Time: Online (asynchronous)
Class Location: Canvas

Course Description: This course applies the scientific method to critically examine and explain the natural world including but not limited to cells, organisms, genetics, evolution, ecology, and behavior.
Credit Hours: 3 credit hours
Semesters Offered: Fall, Spring, Summer
Course Designations: College Transfer. Meets AA General Education Core, Natural Sciences (Biological Sciences) requirement.

General Education Core Course Standard: Per Florida Statute 1007.25, "Natural science courses must afford students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena."

Required Textbooks and Instructional Materials: *Biology The Core* (LL w/Access); Simon, Eric; 9780135437186; Pearson; 3rd, 2025 or *Biology The Core* (Modified Mastering w/ Pearson eText Student Access); Simon, Eric; 9780138276577; Pearson; 3rd; 2025
The educational materials used in this course, including textbooks and ancillary materials, are intended for educational purposes only. All opinions represent those of the author(s) and not necessarily those of Pensacola State College, or the instructor.

Course Learning Outcomes:
1. Become familiar with the principles of biology including the cell theory, cellular processes, theory of heredity and evolution, and the major groups of organisms.
2. Describe the levels of organization of life.
3. Identify characteristics of living organisms.
4. Describe the structure of an atom.

5. Explain the various types of chemical bonds and how they are formed.
6. Relate chemistry and chemical processes to living organisms.
7. Differentiate between organic and inorganic molecules that are important for the survival of living organisms.
8. Explain the cell theory.
9. Distinguish among various cell types including prokaryotes and eukaryotes.
10. Identify major cellular organelles and their functions.
11. Explain the function of the cell membrane including the various types of transport across the cell membrane.
12. Compare and contrast mitosis and meiosis.
13. Explain the basic concepts of heredity.
14. Describe the basic structure and function of DNA and RNA.
15. Explain the process of protein synthesis.
16. Discuss cellular respiration and photosynthesis.
17. Distinguish between anaerobic and aerobic respiration
18. Evaluate evolution and the role of random mutation and natural selection to the adaptation of organisms.
19. Describe species and speciation.
20. Relate the importance of other living organisms to the existence of humans.
21. Categorize living organisms according to domain, kingdom, and phyla.
22. Identify the major organs, functions, and homeostatic imbalances of the human body systems.
23. Compare human body systems to the systems of other living organisms.
24. Evaluate the effect of various human practices on the environment.

General Education Student Learning Outcomes:
1. Critical Thinking: The student analyzes, evaluates, and, if necessary, challenges the validity of ideas, principles, or data in order to develop informed opinions, probable predictions, or defensible conclusions.
2. Scientific and Mathematical Literacy: The student properly identifies and applies scientific or mathematical principles and methods.
3. Information Literacy: The student effectively locates, evaluates, and applies information from a variety of sources.

Methods of Evaluation:
At minimum, the instructor will cover content which aligns with statewide and institutional learning outcomes for the course. The instructor will measure student performance using the following:

Grade calculation: Your final grade is based on your (1) Exams, (2) Quizzes, (3) Mastering Bio homework, (4) On-line activities, (5) discussions (6) GLO Assignment, (7) Citizen Science Project (8) Final Exam.

Points break-down:

Grading Scale:		**Grading Calculation: %=(points earned/points possible)x100**	
90% - 100%	A	**Quizzes** (4 x 20 points) (best 3 of 4 scores)	60 points
88% - 89.9%	B+	**Exams** (5 x 100 points) (best 4 of 5 scores)	400 points
80% - 87.9%	B	**Discussions** (best 5 of 6 scores)	500 points
78% - 79.9%	C+	**Mastering Bio Homework (14 x 20)** (best 13 out of 14)	260 points
70% - 77.9	C	**GLO Assignment** (1 x 20 points)	25 points
68% - 69.9%	D+	**Citizen Science Project** (1 x 100 points)	100 points

60% - 67.9%	D	**On-line Activities** (4 x 20 points each)	80 points
0% - 59.9%	F	***Totals Points Possible***	***1425 points***

Attendance Policy and Withdrawal from the Course: You are expected to log-in to this course at least twice per week and complete your assignments. If you fail to log-in or turn in your assignments these are considered absences. If the student no longer wishes to be enrolled in the class, the student should contact the Registrar's Office on campus and withdraw from the class. The instructor of this course will not withdraw students for non-attendance. However, after the 70% point in the course, if a student has stopped attending and/or completing assignments, the instructor will assign you an F2 failing grade. This F grade will appear on your college transcript, which is your permanent academic record for the college. The last date for student withdrawal from the course this semester is July 13, 2026.

Instructor Requirements:

Required Reading:

All reading comes from the required text: *Biology the Core*, 3rd edition by Eric Simon. Pearson, 2020.

Unit 1 Topics:

Intro to Science and Cells – sections from Chapters 1 and 3
Nutrition – sections from Chapters 1-2 and 11
Diabetes – sections from Chapters 1, 4, and 11
Cardiovascular Disease – sections from Chapters 2 and 11

Unit 2 Topics:

Cancer – sections from Chapters 1 and 5-6
MRSA – sections from Chapters 1, 3 and 7-8
Viruses and Immunity – 1, 7-8 and 11

Unit 3 Topics:

Reproduction and Meiosis – sections from Chapters 5 and 11
Genetic Testing – sections from Chapters 5-6
DNA Profiling – sections from Chapters 3 and 5-6

Unit 4 Topics

Weird Life – sections from Chapters 7-10
Plants and Photosynthesis – sections from Chapters 4 and 9
Human Impact on the Environment – sections from Chapters 1 and 12

Student Expectations: Students enrolled in this course can expect the following:

1. Clearly identified course objectives;
2. Productive class meetings;
3. A positive learning environment;
4. Opportunities for appropriate student participation;
5. Effective instruction;
6. Positive and appropriate interactions;
7. Assistance with meeting course objectives during and beyond class hours;
8. Evaluation of student performance and appropriate and timely feedback; and
9. Clear and well-organized instruction.

Academic Dishonesty Statement: Pensacola State College is committed to upholding the highest standards of academic conduct. All forms of academic dishonesty, to include plagiarism and cheating, are prohibited. Penalties for academic dishonesty include but are not limited to one or more of the following: the awarding of no credit on the assignment, a reduction in the course grade, or the assignment of a final course grade of F and removal from the course. See the College Catalog for more details: Academic Integrity

ADA Statement: Students with a disability that falls under the Americans with Disability Act Amendments Act of 2008 or Section 504 of the Rehabilitation Act should contact the Student Resource Center for ADA Services to discuss academic accommodations. Appropriate academic accommodations are determined on an individual basis with careful consideration of the course learning outcomes and the documentation of the disability. For more information, students should visit the Student Resource Center for ADA Services on the Pensacola campus in building 6, room 603; call 850-484-1637; email ADAservices@pensacolastate.edu; or complete the online intake form in the ADA Services app within the MyPSC apps dashboard.

Emergency Statement: In the case of severe weather or other emergency, the College administration maintains communication with appropriate state and local agencies and makes a determination regarding the cancellation of classes. Notices of cancellation will be made through the College's PSC Alert system and on the College's website.

Flexibility Statement: It is the intention of the instructor to accomplish the objectives specified in the course syllabus. However, circumstances may arise which prohibit the fulfilling of this endeavor. Therefore, this syllabus is subject to change. When possible, students will be notified of any change in advance of its occurrence.

Non-Discrimination Statement: Pensacola State College does not discriminate against any person on the basis of race, color, ethnicity, religion, sex (as defined by applicable federal and state law), national origin, age, disability, genetic information, pregnancy, or marital status in its educational programs, activities, or employment. For inquiries regarding the College's nondiscrimination policies, contact the Civil Rights Compliance Officer at (850) 484-1759, Pensacola State College, 1000 College Blvd., Pensacola, Florida 32504.

Security Statement: Pensacola State College is committed to encouraging all members of the College community to be proactive in personal safety measures. In case of emergency, students should ensure that they are aware of the building exit closest to each of their classrooms, as well as all alternative building exits in case circumstances require using a different route.

Student Email Accounts: Pensacola State College provides an institutional email account to all students enrolled in courses for credit. PirateMail is the official method of communication, and students must use PirateMail when communicating with the College. In cases where companion software is used for a particular class, email may be exchanged between instructor and student using the companion software.