



PENSACOLA STATE COLLEGE

SYLLABUS

Introduction to Biology

BSC1005-D9115

Spring 2026, Session A

Instructor: Juline Smith

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Last Date of Drop/Add: January 15, 2026

Last Date for Student to Withdraw: April 6, 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 (Physical 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) 4-chapter tests, (2) homework, (3) classroom assignments, (4) optional final exam.

Grading Scale

>90%	A
88 – 89%	B+
80 – 87%	B
78 – 79%	C+
70 – 77%	C
68 – 69%	D+
60 – 67%	D
59% and below	F

Points Breakdown:

Exam 1 - 4	400 points
Homework	278 points
Class Assignments	72 points
TOTAL	750 points

*All points totals are approximate

Instructor Requirements:

Reading Summaries:

Reading Summary for Unit 1 Exam (Intro to Science, Cells, Nutrition and Diabetes):

Core Issues: Nutrition (CI.1) and Diabetes (CI.7)

Chapter 1: An Introduction to the Science of Life - Sections 1-5, 8,

Chapter 2: The Chemistry of Life - Sections 1, 2, 7-12

Chapter 3: The Cell: The Fundamental Unit of Life - Sections 1- 8

Chapter 4: Energy and Life - Sections 7, 9,10

Chapter 11: Human Body Systems - Sections 1- 7, 14

Reading Summary for Exam 2 (CV Disease, Cancer, Vaccines, MRSA):

Core Issues: Cancer (CI.2), Vaccines (CI.5), MRSA (CI.4)

Chapter 2: The Chemistry of Life - Sections 8, 10,11

Chapter 3: The Cell: The Fundamental Unit of Life - Section 1

Chapter 5: Chromosomes and Inheritance - Sections 1- 5

Chapter 6: DNA: The Molecule of Life - Sections 10-12

Chapter 7: Darwinian Evolution - Sections 2- 3

Chapter 8: Biodiversity 1: Microscopic Organisms - Sections 2, 4, 5, 9- 11

Chapter 11: Human Body Systems - Sections 1- 3, 8- 13

Reading Summary for Exam 3 (Sexual Reproduction and Meiosis, Genetic Testing & DNA Profiling):

Chapter 3: The Cell: The Fundamental Unit of Life - Section: 1

Chapter 5: Chromosomes and Inheritance - Sections: 1, 2, 6- 16, 18

Chapter 6: DNA: The Molecule of Life - Sections: 1 -4, 6, 10, 13- 19

Chapter 11: Human Body Systems - Sections: 13- 18

Reading Summary for Exam 4 (Weird Life, Plants, Climate Change):

Core Issues: Climate Change (CI.10)

Chapter 1: An Introduction to the Science of Life - Section 1.7

Chapter 4: Energy and Life – Sections 3, 4, 6

Chapter 7: Darwinian Evolution - Section 12

Chapter 8: Biodiversity 1: Microscopic Organisms – Sections 6, 7

Chapter 9: Biodiversity 2: Fungi and Plants - Sections 1-3, 6-12

Chapter 10: Biodiversity 3: Animals – Sections 1 - 11

Chapter 12: Ecology - Sections 1-3, 8, 12-19

Evaluation:

Your final grade will be based on the following components:

- **Active Reading Guides (ARG)** – typically due Wednesday night
- **Mastering Biology Homework Assignments** – typically due Sunday night
- **Four (4) Unit Exams**
- **Occasional Threaded Discussions**
- **Random Topic Driven Assignments** (added throughout the semester)
- **Optional Comprehensive Final Exam** (see below for details)

You are expected to log in **regularly** and stay up to date with all posted assignments and due dates.

Homework Assignments

- Homework is completed through **Mastering Biology** and accessed **via Canvas modules**.
- Each homework assignment is worth **10 points**.

- **Do not use the “Access Pearson” tab** in the Canvas navigation. Using that path may result in your scores not being recorded in the Canvas gradebook.
- Active Reading Guide (ARG) assignments are also embedded within modules—click directly on each assignment to complete it. Each Active Reading Guide will be worth **10 points**.
- **Deadlines** for homework are listed both in the course schedule and within each assignment.

Exams

- Each **Unit Exam** is worth **100 points** and must be completed online through **Proctorio**.
- You will have **60 minutes** to complete each exam.
- Exams will include **multiple-choice, short answer, fill-in-the-blank, labeling, and/or discussion questions**.
- You **may not use notes, books, other websites, other people, or any study aids**. Exams must be completed **independently**.
- **Once an exam is opened, your time begins immediately. You must complete the exam in one sitting.**

Missed Exams:

- If you miss an exam, it **cannot be made up**.
- Your only option is to take the **optional comprehensive Final Exam** during Final Exam Week to replace the missed or lowest exam score.

Optional Comprehensive Final Exam

- The **Final Exam** is optional and worth **100 points**.
- It will cover content from all four units.
- If taken, it will replace your **lowest** exam score—or a **missed** exam.
- **Taking the final can only help your grade**—if your final score is lower than your other exams, it will not be counted.

Discussions & Random Assignments

- Discussions and other assignments will be assigned periodically.
- Missed discussions **cannot be made up** and will receive a **score of 0**.

Grading and Feedback

- Your **exam scores** will be automatically calculated upon submission.
- I will manually grade **discussions** and certain **exam questions**, which may take **5–7 days**. Thank you for your patience.

Threaded Discussions

To foster an interactive learning environment similar to a face-to-face class, we will have occasional online discussions related to the current unit topics. These discussions are one of the few opportunities to earn **bonus (extra credit) points**, with up to **5 points available per discussion**.

To receive full credit, you must:

- Submit an original post of **at least 150 words** that is thoughtful and relevant.
- Respond to another student’s post or pose a new, insightful question with a reply of **at least 50 words**.
- Use proper spelling, grammar, and punctuation.
- Start sentences with capital letters, capitalize “I,” and avoid texting shorthand (e.g., do not use “u” for “you”).

Remember, these are academic discussions, not casual text messages, so use clear and professional language.

Bonus Points (Extra Credit)

Throughout the course, you will have chances to earn **bonus credit**. To stay updated on these opportunities, check Canvas **every few days**, including your messages and modules. Bonus activities are available for a **limited time only**, so regular monitoring is important to avoid missing out.

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.