



PENSACOLA STATE COLLEGE

SYLLABUS

Principles of Biology

BSC1010-P1282

Spring 2026, Session A

Instructor: Robyn Ludlum

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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: Tuesday, Thursday | 9:30 AM - 10:45 AM

Class Location: Pensacola Campus, Building 17, Room 1707

Prerequisites: Placement at the college level or completion of the appropriate exit-level developmental course(s) with a grade of C or better.

Course Description: In this course students will apply the scientific method to critically examine and explain the natural world. This course will cover molecular biology, cellular biology, genetics, metabolism, and replication.

Credit Hours: 3 credit hours

Semesters Offered: Fall, Spring

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 w/ Connect Access* (PSC custom); Raven, Peter, et al.; 9781265251185; McGraw Hill; 13th edition; 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. Understand the scientific method and hypothesis testing.
2. Evaluate the molecular structure of water and its importance as a biological molecule.
3. Describe the molecular structure of biological molecules (proteins, fats, carbohydrates and nucleic acids) and their role in biological systems.
4. Appreciate the structure of the cell and the functions of organelles.

5. Understand the structure of nucleic acids and the processes of replication, transcription and translation.
6. Identify cellular metabolism, enzyme function, cellular respiration, and photosynthesis.
7. Explain diffusion, osmosis, and cell membrane function, including protein channels and carriers.
8. Describe the cell cycle and cell cycle control.
9. Become familiar with simple and complex inheritance patterns.
10. Understand the genetic variation produced by meiosis and sexual life cycles.
11. Appreciate the regulation of gene expression.
12. Explain cellular communication and signal transduction.

General Education Student Learning Outcomes: (if applicable)

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:

Evaluation: Four bonus quizzes (online), four homework study assignments, four hour-long exams and a comprehensive final exam will be given during the semester. Quizzes, assignments and exams may include multiple-choice, matching, fill in the blank, short answer, and essay questions. Each quiz will be worth up to **4 bonus** points added to the next exam. Each bonus quiz (on eLearning/CANVAS) will unlock **one** week before the exam and lock on midnight the day of the exam.

Each homework study assignment will be worth **25** points and submitted online **two days** before the next exam. The four study assignments will equal another exam grade in points.

The first four exams will be given online, outside normal class time and you will have three days in which to take it. We will also be utilizing Proctorio® software for each exam, so a webcam with functioning camera and microphone is required. Each exam will be worth 100 points. **NO make-up quizzes or exams will be permitted!**

The Final exam will be given in class according to the exam schedule and will be worth 100 points – 90 points from multiple choice questions and 10 points from an assigned case study. *The final exam grade may be substituted for a lower or missed grade on a previous exam.* All students must take the final exam. Students are responsible for any notes or work missed.

Final Grades: The number of points earned by the student from the four study assignments (100 points), four hour-long exams (400 points), and the comprehensive final exam (100 points) will be totaled, and the sum divided by **600 (the total possible points for the course)**. Final grades will be assigned using the following scale.

Grading scale:

90 - 100% = A	70 – 77.9% = C
88 – 89.9% = B+	68 – 69.9% = D+
80 – 87.9% = B	60 – 67.9% = D
78 – 79.9% = C+	59.9% and lower = F

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, national origin, sex, disability, age, ethnicity, religion, marital status, pregnancy, sexual orientation, gender identity or genetic information in its programs, activities, and employment. For inquiries regarding the College's nondiscrimination policies, contact the Executive Director of Equal Opportunity Compliance, 1000 College Blvd., Building 5, Pensacola, Florida 32504, 850.484.1759.

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.