Pensacola State College Section Syllabus
BSC 1005 Introduction to Biology

Instructor: Jeffery Wooters

Office: Building 17, Room 1750

Email: jwooters@pensacolastate.edu

Credits 3

Course Description: Surveys biological principles as they apply to lifestyle choices, health and nutrition, bioenergetics, environmental impact, heredity, physiology, and organismal change over time as well as the application of these principles to issues of current interest. Not recommended for biology majors.

Offered: FA, SP, SU.

Distribution: Meets AA General Education Core, Natural Sciences (Biological Sciences) requirement.

Textbooks:

Biology the Core (Print or eText) w/ Mastering Access Card; Simon, Eric; 9780135308714; 3rd; Pearson; 2020

Special Requirements:

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.

General Education Student Learning Outcomes:

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.

Scientific and Mathematical Literacy: The student properly identifies and applies scientific or mathematical principles and methods.

Information Literacy: The student effectively locates, evaluates, and applies information from a variety of sources.

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.

Methods of Evaluation:

Grade calculation: Your final grade is based on your (1) chapter tests, (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:

1. **Exams** 4 x 100 points each =	400 points
2. **Quizzes** 4 x 20 points each =	80 points
3. **Homework on Mastering Biology** 15 x 20 points each =	300 points
4. **On-line Activities** 4 x 20 points each =	80 points
5. **On-line Discussions** 5 x 20 points each =	100 points
6. **GLO Assignment** 20 points x 1 =	20 points
7. **Citizen Science Project**: 1 x 100 points each =	100 points
8. **Final Exam** 1 x 100 points =	100 points
	Total = 1180 points

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% and lower = F

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.

Flexibility :

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.

ADA Statement :

Students with a disability that falls under the Americans with Disability Act or Section 504 of the Rehabilitation Act, it is the responsibility of the student to notify Student Resource Center for ADA Services to discuss any special needs or equipment necessary to accomplish the requirements for this course. Upon completion of registration with the Student Resource Center for ADA Services office, specific arrangements can be discussed with the instructor.

Equity 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 Institutional Equity and Student Conduct, 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.

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.