

# Pensacola State College Section Syllabus

## BSC 1005 Introduction to Biology

**Instructor:** Iris Knoebl

**Office:** Building 17, Room 1758

**Email:** iknoebl@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; 9780135204320 or 9780138276577; 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:**

Your grade will be evaluated upon your score on the following assignments: Homework from "Mastering", 4 exams (there is an optional comprehensive Final Exam) and weekly threaded discussions. There will also be other random assignments posted in each module. Be sure to check in often to keep up with assignments.

**Homework assignments** through Mastering will be worth 20 points. You should access the Mastering homework (HW) through the link in each module. You should also complete the reading assignments that are also available through the links in each module. The deadlines for the homework assignments are on the course schedule, and also on each assignment.

**Exams and Discussions cannot be made up and will not be accepted late for any reason. If you miss an exam, you will have to take the optional Final Exam to replace the missed grade. Missed discussions will receive a score of 0 bonus points.**

**Exams will be taken online.** Be sure to review how exams will be conducted. Each exam will be worth 100 points. I will also drop your lowest exam score or a missed exam and replace it with the Optional Final Exam score. The Optional Final Exam is a Comprehensive Exam. If you do not miss any exams, you do not have to take this exam. If you do miss an exam, you must take the Comprehensive Final. If you don't do well on an exam, you may take

the Comprehensive Final to replace your lowest exam score. It will not hurt you to take the final, it can only help you.

The exam questions will include multiple choice, short answer, fill in the blank, discussion and/or labeling. In the event that you perform poorly on an exam, you will have the opportunity to take an optional comprehensive exam during the Final Exam Week to replace the low score, or a missed exam. The comprehensive exam will be worth 100 points and will be drawn from the material covered on previous exams. You will have 60 minutes to complete the exams. **YOU MAY NOT USE NOTES OR ANY OTHER SOURCES FOR EXAMS. Students are expected to do their own work. Students are not to use notes, books, other websites, other people, or any other study aid while completing the exams. Be sure to read the requirements for taking exams. All exams will be given through the online proctoring app – Proctorio. You should have already made sure that you can take exams on your computer via Proctorio by taking the Syllabus Quiz as soon as possible.**

**\*\*\*Do not open the exams until you are ready to take them. Once you open them – that is it. Your time starts at that moment and continues to count down.**

**IMPORTANT: The computer will score your exam after you submit it. I will grade discussion postings and some of the exam questions manually. This may take 5-7 days. Please be patient!**

### **Threaded Discussions:**

To have an interactive class experience (as you might have in a face-to-face class) we will have five discussions. The discussions can be found in the "Discussions" tab in Canvas. You have the opportunity to earn up to 5 bonus points per discussion. To gain full credit for each discussion, you must provide a well thought out answer, and either respond to the postings of at least one other student **or** raise another question. I will be using the Turnitin Plagiarism App to check all discussion responses for originality. Spell all words correctly and include the required number of words. Sentences should begin with capital letters and end with the correct punctuation. Remember, the word "I" should be capitalized, "you" is not spelled "u." These are not text messages. Use proper language and punctuation.

### **Grading Scale:**

100 - 90	A	77 - 70	C
89 - 88	B+	69 - 68	D+
87 - 80	B	67 -60	D
79 -78	C+	59 and below	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.