

Alabama Community College System

BIO 102 Introduction to Biology II

I. BIO 102 Introduction to Biology II—4 Semester Hours

II. Course Description

This is an introductory course designed for non-science majors. It includes evolutionary principles and relationships, environmental and ecological topics, phylogenetics and classification, and a survey of biodiversity. A 120-minute laboratory is required.

III. Prerequisite

BIO 101

IV. Textbook

Due to the varied selection of quality college-level textbooks, each college will select the textbook needed to meet the requirements of this course.

V. Course Learning Outcomes

By the end of the course, students will be able to:

- 1. Describe the major concepts of the theory of evolution and its relationship to today's diverse life forms.
- 2. Describe how organisms are scientifically classified.
- 3. Identify and give examples of the major clades and their ecological roles.
- 4. Compare the morphology and physiology of major clades.
- 5. Describe the interconnectedness of life as demonstrated through ecological interactions.
- 6. Identify and describe the principles of population dynamics.

VI. Course Outline of Topics

Lecture Outline:

- 1. Origin of life
- 2. Evolutionary theory
- 3. Speciation and population dynamics
- 4. Phylogenetics and classification
- 5. Viruses
- 6. Prokaryotes

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- 7. Eukaryotic diversity
- 8. Fungi
- 9. Plantae
- 10. Animalia
- 11. Ecosystem and community ecology
- 12. Biogeochemical and energy cycles
- 13. Contemporary environmental issues

Lab Outline:

- 1. Evolution
- 2. Classification
- 3. Viruses
- 4. Prokaryotes
- 5. Eukaryotic diversity
- 6. Fungi
- 7. Plantae
- 8. Animalia
- 9. Ecology

VII. Evaluation and Assessment

Grades will be given based upon A = 90 - 100%, B = 80 - 89%, C = 70 - 79%, D = 60 - 69%, and F = below 60%.

VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. Statement on Discrimination/Harassment

It is the official policy of the Alabama Community College System and entities under its control, including all Colleges, that no person shall be discriminated against on the basis of any impermissible criterion or characteristic, including, without limitation, race, color, national origin, religion, marital status, disability, sex, age, or any other protected class as defined by federal and state law. (ACCS Policies 601.02 and 800.00)

X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College.

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