

# Louisiana Delta Community College

## Academic Affairs Master Syllabus

### Course Name: Principles of Biology I Laboratory

Course Number: BIOL 203

Lecture hours: 0                      Lab Hours: 1                      Credit Hours: 1

Textbook, Author, and Publisher: To be provided by College Campus

Instructor Information: To be provided by College Campus

Class Location: To be provided by College Campus

### Course Description:

Laboratory designed to accompany Principles of Biology I lecture (BIOL 201). Laboratory activities will cover the concept of scientific methodology, genetics, cell structure and development, evolution and ecology. Designed for students majoring in a science related field

Prerequisites: Eligibility for English 101 and Math 110. Enrollment in or completion of BIOL 201 with a grade of C or better.

Co-requisites: None

### Learning Outcomes:

On completion of this course, the student will be able to:

1. Explain characteristics of living organisms & their interactions within their environments
2. Construct and test hypotheses from collected data
3. Relate the theories of Darwin to the evolution of species of organisms
4. Describe the concept of atomic structure and the interaction of atoms
5. Identify types of bonding and what dictates atomic bonding
6. Relate water molecules at the atomic level to the processes of life
7. Identify the structure of proteins, lipids, carbohydrates, and nucleic acids
8. Compare and contrast various hypotheses related to the origin of life and cells
9. Compare and contrast passive and active transport
10. Compare and contrast aerobic and anaerobic respiration
11. Describe the role of chloroplast to photosynthesis
12. Explain how photosynthesis converts light to chemical energy
13. Define the phases of mitosis and distinguish characteristics of each phase
14. Describe chromosome structure and division during mitosis
15. Compare and contrast meiosis and mitosis
16. Describe the positive and negative aspects of gene therapy
17. Identify the chemical nature of nucleic acids and the structure of DNA
18. Identify the differences between prokaryotic and eukaryotic gene expression
19. Appropriately utilize information from the human genome project
20. Identify and relate the mechanisms of organism development to vertebrates, insects, plants, and nematodes
21. Identify the stages of cancer growth

**Assessment Measures:** To be provided by College Campus

**Library Resource Center:**

The Delta Library and Learning Resource Center is committed to providing quality information and learning resources and services, including technology, in supporting the overall mission of Delta Community College and its commitment to lifelong learning.

**Special Accommodations:**

Louisiana Delta Community College complies with Section 504 of the Rehabilitation Act, as well as the Americans with Disabilities Act. Students with disabilities who attend the Monroe campus may make a request by contacting the Director of Counseling and Disability Services (See College Directory for contact information.) at the beginning of each semester. Reasonable accommodations will be attempted for students with documented disabilities. If an impairment is identified later in the semester, a non-retroactive accommodation plan will be developed. Students at satellite campuses should contact the Coordinator of Student Affairs at their particular campus.

**Title IX:**

Louisiana Delta Community College is committed to protecting the rights of students, which includes compliance with Title IX requirements. As such, the institution and members of our community will not tolerate the offenses of dating violence, domestic violence, sexual assault, and stalking. Students with Title IX concerns should contact the College's Title IX Coordinator (See College Directory for contact information.) Students are required to complete Sexual Assault Awareness and Prevention Online Training. Access to this online course will be sent out through the Delta email account.

**Student Code of Conduct:**

Louisiana Delta Community College encourages an environment of academic integrity and mutual respect. Students should read and follow both academic and behavioral expectations identified in the Code of Student Conduct that can be found online at [www.ladelta.edu](http://www.ladelta.edu). Students are expected to act with integrity, respect the rights of others, and conduct themselves in a professional manner. The Honor Code prohibits academic misconduct such as cheating, engaging in unauthorized collaboration, and plagiarism. Violations of the Code of Student Conduct may result in disciplinary action as provided in the Code. Incidents are reported through the online Student Conduct system.