

**Bossier Parish Community College**  
**Master Syllabus**

**Course Prefix and Number:** BLGY 105L

**Credit Hours:** 1

**Course Title:** Elements of Biology I Lab

**Course Prerequisites/Corequisite:** BLGY 105

**Textbooks:** None

**Course Description:** Laboratory designed to supplement BLGY 105 for non- science majors. Withdrawal from lecture mandates withdrawal from laboratory.

**Learning Outcomes:**

At the end of this course students will:

- A. demonstrate competency in the use of basic biological laboratory equipment; and
- B. integrate data collected in the lab to interpret and support basic biological principles.

To achieve the learning outcomes, the student will:

1. practice safety and standard precautions in the laboratory. (A)
2. identify the parts of compound light and dissection microscopes and give the function of each part. (A)
3. utilize the compound light and dissection microscopes to study specimens in the laboratory. (A)
4. use scientific method to collect data and solve problems in a laboratory setting. (A,B)
5. identify hypotheses, theories, and laws, and their role in scientific inquiry. (A,B)
6. explain the role of the elements of experimental design, including dependent and independent variables, controls, sources of error, and drawing conclusions. (A,B)
7. describe the unique properties of water. (A,B)
8. demonstrate knowledge of the pH scale in relation to acids and bases. (A,B)
9. identify applications of chemical and physical principles related to common consumer products. (A,B)
10. utilize various metric measuring devices to accurately collect data. (A)
11. identify the cell life cycle stages of plants and animals. (A)
12. demonstrate the process of mitosis. (B)
13. describe the differences and similarities of mitosis with meiosis. (B)
14. demonstrate knowledge of the movement of molecules. (A,B)
15. summarize the processes of photosynthesis and respiration. (A,B)
16. utilize Punnett squares to solve basic problems in genetics. (B)
17. describe the steps of DNA replication and protein production. (B)
18. demonstrate knowledge in the evolutionary process. (B)
19. identify macromolecules utilizing testing techniques. (A,B)

20. explain how anatomical data, the fossil record, and embryology support the theory of evolution. (A,B)

**Course Requirements:** To earn a grade of “C” or higher the student must earn 70% of the total points for the course and meet all of the following course requirements.

- minimum average of 60% on lab practical exams

**Course Grading Scale:**

- A- 90% or more of the total points possible for the semester; and meet all minimum course requirements
- B- 80% or more of the total points possible for the semester; and meet all minimum course requirements
- C- 70% or more of the total points possible for the semester; and meet all minimum course requirements
- D- 60% or more of the total points possible for the semester; and meet all minimum course requirements.
- F- less than 60% of the total points possible for the semester; and/or failure to meet one or more of the minimum course requirements

**Attendance Policy:** The college attendance policy is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, certification exams and/or clinical fees.

**Nondiscrimination Statement**

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA

Angie Cao, Student and Disability Services Specialist

Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111

318-678-6511

[acao@bpcc.edu](mailto:acao@bpcc.edu)

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

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Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Reviewed by Jamie Adams, Spring 2019