

**Bossier Parish Community College
Master Syllabus**

Course Prefix and Number: BLGY 106

Credits Hours: 3

Course Title: Elements of Biology II

Course Prerequisites: None

Textbook: Hoefnagels, M.; Biology, The Essentials, 3rd edition

Course Description:

This course provides a sequence lecture course for Biology 105 and is a survey of broad biological principles for non-science majors. Topics include evolution and biological diversity including a survey of the basic concepts and principles of the five kingdom classification and basic knowledge of anatomy and physiology of the human body.

Learning Outcomes:

At the end of this course, the student will

- A. apply knowledge of the biology of microorganisms, fungi, plants, and animals;
- B. utilize basic knowledge of the anatomy and physiology of the human body; and
- C. integrate biological principles to interpret current scientific developments in biological science.

To achieve learning outcomes, the student will

1. describe the structure, reproduction, and importance of viruses as agents of disease. (A, C)
2. list the different types of bacteria and describe their diverse habitats. (A)
3. list unique features of each group of protists. (A)
4. describe representatives in the four divisions of fungi. (A)
5. list ways in which fungi are beneficial and detrimental to humans. (A, C)
6. describe the alternation of gametophytic and sporophytic generations in plants. (A)
7. list bryophytes and explain how they differ from vascular land plants. (A)
8. list vascular land plants and describe their special adaptations to terrestrial life. (A)
9. differentiate between gymnosperms and angiosperms. (A)
10. describe the structure and function of plant tissues. (A)
11. describe the parts of an Angiosperm flower. (A)

12. recognize key aspects of asexual and sexual reproduction, development, and growth in plants(A)
13. name the major phyla of animals and their classes. (A)
14. describe the body plan of each class and distinguish between simple and advanced characteristics. (A)
15. describe types of body symmetry and relate them to an animal's body. (A)
16. describe and give characteristics of the major vertebrates. (A)
17. explain the key characteristics of the major orders of mammals. (A)
18. describe how the human body is organized. (B)
19. discuss the principal tissues. (B)
20. recognize applications of medical technologies (e.g. MRIs, X-rays, radiation therapy) used on the human body (B)
21. identify the major bones of the axial and appendicular skeletons. (B)
22. explain the three kinds of muscle. (B)
23. name some of the major muscles. (B)
24. explain the circulatory system by tracing blood flow through the heart. (B)
25. recognize key aspects of internal transport and exchange in terms of the circulatory system (B)
26. discuss the mechanics of breathing. (B)
27. describe the human digestive system. (B)
28. describe the human reproductive system (B)
29. explain how the body eliminates waste. (B)
30. describe how the skin is the first line of the body defense system. (B)
31. describe how the cellular counter attack is the second line of the body defense system. (B)
32. describe how the immune system is the third line of the body defense system. (B)
33. explain the voluntary nervous system and the autonomic nervous system. (B)
34. describe the brain, spinal cord, and sensory organs. (B)
35. discuss the major endocrine glands. (B)
36. recognize the importance of homeostasis (B)
37. recognize the role of nutrition, disease, and medicine in the human body(A,B)
38. summarize a minimum of 3 biological science current event articles (C)

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 of 70% average on all tests (including the final exam)
- Students enrolled in this course in an online format will be required to take the final exam in a proctored environment; on the BPCC campus or with an approved proctor and must score a minimum of 50% on the final exam.

Course Grading Scale:

- A- 90% or more of total possible points and meets all course requirements
- B- 80% or more of total possible points and meets all course requirements
- C- 70% or more of total possible points and meets all course requirements
- D- 60% or more of total possible points and meets all course requirements
- F- less than 60% of total possible points or fails to meet all course requirements

Attendance Policy: The college attendance policy is available at

<http://www.bpcc.edu/catalog/current/academicpolicies.html>

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

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

Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

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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 N. Hendrix / April 2019