

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: Johnson, G.B.; Essentials of The Living World, 3rd edition

Course Description:

This course, for non-science majors, provides a sequence lecture course for Biology 105. The curriculum includes a survey of the basic concepts and principles of the five kingdom classification, including 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. name the major phyla of animals and their classes. (A)

13. describe the body plan of each class and distinguish between simple and advanced characteristics. (A)
14. describe types of body symmetry and relate them to an animal's body. (A)
15. describe and give characteristics of the major vertebrates. (A)
16. explain the key characteristics of the major orders of mammals. (A)
17. describe how the human body is organized. (B)
18. discuss the principal tissues. (B)
19. identify the major bones of the axial and appendicular skeletons. (B)
20. explain the three kinds of muscle. (B)
21. name some of the major muscles. (B)
22. explain the circulatory system by tracing blood flow through the heart. (B)
23. discuss the mechanics of breathing. (B)
24. describe the human digestive system. (B)
25. describe the human reproductive system (B)
26. explain how the body eliminates waste. (B)
27. describe how the skin is the first line of the body defense system. (B)
28. describe how the cellular counter attack is the second line of the body defense system. (B)
29. describe how the immune system is the third line of the body defense system. (B)
30. explain the voluntary nervous system and the autonomic nervous system. (E)
31. describe the brain, spinal cord, and sensory organs. (B)
32. discuss the major endocrine glands. (B)

Course Requirements

- minimum of 70% average on all tests (including the final exam)
- summarize a minimum of 3 biological science current event articles

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

R.Johnson, spring 2011