

Bossier Parish Community College
Master Syllabus

Course Prefix and Number: BLGY 120L

Credit Hours: 1

Course Title: Introductory to Human Anatomy and Physiology Lab

Course Prerequisites: Successful completion or current enrollment in BLGY 120

Textbook: BPCC

Course Description:

The laboratory exercises reinforce a survey of the structure and function of the organ systems of the human body, preceded by a brief consideration of cell structure and physiology, and the microscopic structure of tissues. Withdrawal from lecture mandates withdrawal from laboratory.

Learning Outcomes:

At the end of this course, student will

- A. apply the basic foundations of human anatomy and physiology to a specific set of lab skills and activities;
- B. analyze data generated from laboratory experiences and activities to reinforce concepts of human anatomy and physiology; and
- C. utilize laboratory equipment, including microscopes and supplies to perform selected procedures in the laboratory.

To achieve the learning outcomes, the student will

- 1. identify major parts, describe specific functions, and calculate total magnification of the microscope. (A,C)
- 2. prepare a wet mount microscope slide. (A,C)
- 3. demonstrate proficiency in using the compound microscope. (A,C)
- 4. identify the major body cavities on laboratory models. (A,C)
- 5. list the major organs in each system and locate them on the torso model. (A)
- 6. identify body regions and planes on models and diagrams. (A)
- 7. name and locate the major components of a cell on a model or diagram, and describe the general functions of these components. (A)
- 8. prepare a wet mount of cheek cells, stain the cells, and identify the major components. (A,B,C)
- 9. identify the stages of mitosis using models. (A,C)
- 10. describe the mechanisms of diffusion and osmosis. (B,C)

11. describe how solute size affects the process of diffusion through selectively permeable membrane. (A,B,C)
12. design a model of the DNA molecule and explain its role in the cell. (A,C)
13. design models of simple carbohydrates, lipids and proteins. (A,C)
14. measure the pH of various substances. (A)
15. identify epithelial, connective, muscle, and nervous tissue as related specific systems. (A,C)
16. identify the layers of the skin and accessory organs on a model. (A)
17. identify the major bones of the human skeleton: articulated and disarticulated. (A)
18. identify structures of a long bone; longitudinal section. (A,C)
19. use the microscope to distinguish between compact bone, spongy bone, and cartilage. (A,C)
20. identify major muscles of the human body on laboratory models. (C)
21. identify the major parts of the eye and ear on laboratory models and give the functions of each. (A)
22. demonstrate reflex actions. (A,C)
23. identify the major structures of the brain and spinal cord on laboratory models and give the functions of each. (A)
24. name and locate the major endocrine glands of the body on lab models. (A)
25. locate the major digestive organs on laboratory models and give the functions of each part. (A)
26. identify erythrocytes, thrombocytes, and the five types of leukocytes, using models and the microscope. (A,C)
27. demonstrate the ability to measure blood pressure using a manual sphygmomanometer and interpret the results. (A,B,C)
28. identify various structures, chambers, and blood vessels associated with the heart on laboratory models. (C)
29. list the parts in sequence as blood makes its circuit through the heart on the heart panel and model. (A)
30. recognize the anatomical differences between arteries and veins using the microscope and diagrams; locate brachial, radial, ulnar, and femoral arteries; locate medial cubital, cephalic, and basilic veins. (A,C)
31. differentiate between various blood types using ABO & Rh testing methods. (A,B,C)
32. identify the structures and organs of the respiratory system using lab models. (A)
33. measure and analyze various lung capacities. (A,B,C)
34. identify the major structures of a kidney and urinary system on lab models. (A)
35. perform a urinalysis and interpret the result. (A,B,C)
36. identify the major structures of the male and female reproductive system on a laboratory model. (A)

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 70% average on laboratory practical tests
- minimum 70% average on lab reports and quizzes

Course Grading Scale:

- A- 90% or more of total possible points and a minimum average of 60% on lab practical exams and minimum average of 60% on lab reports
- B- 80% or more of total possible points and a minimum average of 60% on lab practical exams and minimum average of 60% on lab reports
- C- 70% or more of total possible points and a minimum average of 60% on lab practical exams and minimum average of 60% on lab reports
- D- 60% or more of total possible points and a minimum average of 60% on lab practical exams and minimum average of 60% on lab reports
- F- less than 60% of total possible points or less than 60% average on lab practical exams or less than 60% average on lab reports

Attendance Policy: The college attendance policy is available at <http://catalog.bpcc.edu/content.php?catoid=5&navoid=369#class-attendance>

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

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COORDINATOR FOR SECTION 504 AND ADA

Angie Cao, Student and Disability Services Specialist

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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
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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: M. Persley: 4/12/2022