



## **Anatomy & Physiology Lab I (BIOL 2101)**

**Credit:** 1 semester credit hour (2 hours lab)

**Prerequisite:** Passed the Reading/Writing Sections of COMPASS or any other accepted test.

**Co-requisite:** BIOL 2301

### **Course Description**

The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses.

### **Required Textbook and Materials**

1. *Human Anatomy and Physiology Laboratory Exercises Level 1: Using Crime Scene Investigative Approaches*, Stephanie. A. Lanoue, 1st edition. Kendall-Hunt Publishing, 2009. **ISBN-13:** 978-0757566257. \*NOTE: This book is mandatory to pass the lab class; you will complete your labs (write) in it and turn it in for a grade.
2. Regular (non-mechanical) #2 pencils.
3. Calendar for recording assignment due dates, tests, projects, etc.
4. Small 0.5' - 1" spine notebook with pocket (three-ring for binding lab quizzes, extra notes)
5. 3-hole punch
6. Pens, colored pencils and/or highlighters of various colors

### **Objectives**

#### **Course Objectives**

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

1. Apply appropriate safety and ethical standards.
2. Locate and identify anatomical structures.
3. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
4. Work collaboratively to perform experiments.
5. Demonstrate the steps involved in the scientific method.
6. Communicate results of scientific investigations, analyze data and formulate conclusions.

7. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

## **Core objectives**

1. **Critical Thinking Skills:** To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication Skills:** To include effective development, interpretation and expression of ideas through written, oral, and visual communication
3. **Empirical & Quantitative Skills:** To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusion
4. **Teamwork:** To include the ability to connect choices, actions, and consequences to ethical decision-making
5. **Personal Responsibility:** To include ability to connect choices, actions and consequences to ethical decision-making

## **Course Outline**

### **A. Human Body Intro**

1. Regional and Descriptive Terms that describe the human body
2. Planes of the Body

### **B. Cells**

1. Structures
2. Functions
3. Mitosis

### **C. Tissues**

1. Main types of epithelial tissue
2. Other tissues of the body

### **D. Integumentary System**

1. Skin
2. Appendages

### **E. Bones and Skeletal System**

1. Basic Shapes of Bones
2. Bone Markings

### **F. The Skeleton**

1. Bones of the axial skeleton
2. Bones of the appendicular skeleton

### **G. Joints**

1. Synovial joints
2. Other joints
3. Movements of Joints

### **H. Muscles and Muscle Tissue**

1. Intro
2. Characteristics of Muscle Tissue

3. Related muscle terms

I. Muscular System

1. Major muscles (anterior)
2. Major muscles (posterior)

J. Fundamentals of the Nervous System

1. Neurons
2. Neuroglia

K. Central Nervous System

1. Structures of the Brain
2. Functions

L. Peripheral Nervous System

1. Structures of Eye and Ear
2. Functions

### Grading Scale

A	900 – 1000 points
B	800 – 899 points
C	700 – 799 points
D	600 – 699 points
F	599 points or less

### Course Evaluation

Final grades will be calculated according to the following criteria:

1. Your semester average is based upon 4 grades:

4 exams (practicals) One exam will be dropped. (*NOTE: If you miss a test due to an excused/documentated absence, the missed test will be your dropped test. You are not allowed to miss more than one exam per semester.*) 3 tests=**300 points**

4 or 5 quizzes will be given. They will be averaged together and will count for **200 points**.

Notebook grade.= **300 points**

Group Assignment “What Are The Bones Telling Us” (**Common Assignment**) **200 pts**

**Possible 1000 points**

### Course Requirements

1. Quizzes
2. Practical Exams
3. Completed Laboratory Manual (must purchase book, complete it and turn it in).
4. Group Assignment (Common Asssignment)

## Course Policies

1. **No Cell Phones.** Students that use their cell phones for any purpose during class time will have their phone confiscated. First offense is a verbal warning. The second offense is dismissal from class for the duration of the semester.

2. **Late assignments will not be accepted.** Students will receive a zero for assignments not completed.

3. **No makeup exams.**

4. **Discipline Policy.** In the case of disruptive behavior, the instructor reserves the right to ask you to leave the classroom. Examples include side conversations, excessive talking in class, passing written notes to another classmate, chatting on cell phones or text messaging, loud yawning, gum popping, etc. a. The instructor may not allow you to return to class if disruptive behavior continues.

5. **Food and/or Drinks are not allowed in the classroom.** LIT Policy prohibits food and drinks in the Multi Purpose Building classrooms.

6. **Attendance Policy.** Roll will be taken daily. Your attendance is documented by signing your initial on the class roll every day. Do not initial/sign the roll for another student.

### 7. Class Arrival Times

a. **Tardy.** Please be prompt! Students are expected to be in your seat, on time, when roll is taken. On test days, the instructor reserves the right not to administer a test to a student who arrives more than 15 minutes late.

b. 4 tardies = 1 absence

c. **Class Departure Time.** Students are required to stay the entire length of each lecture class unless dismissed, as a class, by the instructor. Do not ask to “leave class early” for doctor’s appointments, picking up children from day care/ school, etc. Pre-arrange for these things ahead of time. Students are expected to be in class the entire class period.

d. **Class Absence.** It is the student’s responsibility to obtain missed lecture notes and class handouts. The instructor will not supply notes or handout to students that are absent. Xerox machines are available in the first floor of the MPC.

e. **Absence on a Test Day.** If you miss a quiz, it is your dropped quiz for the semester. If you miss a second quiz, you must make it up within 1 week. No exceptions. You are not allowed to miss more than 2 quizzes for the semester. A zero will be permanently recorded after 1 week. If you miss a major test, It will be your dropped test. Do NOT miss the tests. There are no make ups. All students must be present for the Final Exam.

Spring 2018 Final drop date is 11/01/2018 No exceptions to these dates.

Very important! If you are not passing at the time of the first drop date, I recommend that you drop the class and take it again at a later date.

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## **Disabilities Statement**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office located in the Cecil Beeson Building, room 116B.

## **Contact Information**

Instructor-Dr Bryan Barron

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Office hours- see door schedule

**Please do not email me on Black Board. Direct all student / Teacher correspondence to the Above email.**

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