



Anatomy & Physiology Lab II (BIOL 2102)

Credit: 1 semester credit hour (2 hour lab)

Prerequisite: BIOL 2101 and Biol 2301.

Co-requisite: BIOL 2302.

Course Description

Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized.

Required Textbook and Materials

1. *Human Anatomy & Physiology Laboratory Exercises – Level 2: Using Medical Case Studies and Crime-Scene Investigative Approaches*, Stephanie A. Lanoue, 1st edition, Kendall-Hunt 2010. ISBN: 978-0-7575-7810-6
2. Regular (non-mechanical) #2 pencils.
2. Calendar for recording assignment due dates, tests, projects, etc.
3. Small 0.5” - 1” spine notebook with pocket (three ring for binding lab quizzes, laboratory exercises and extra notes)
4. 3-hole punch
5. Pens, colored pencils and/or highlighters of various colors
6. Digital camera for taking pictures of the anatomical models in lab.

Objectives

Course Objectives

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

1. Know and identify the parts of the endocrine, circulatory, lymphatic, respiratory, digestive, urinary and reproductive systems.
2. Know and explain the physiology of the endocrine, circulatory, lymphatic, respiratory, digestive, urinary and reproductive systems.
3. Identify items important in nutrition and metabolism.

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. Chap 15 Endocrine

1. Structures
2. Functions
3. Diagnose different diseases

B. Chap 16 Blood

1. Types of blood cells
2. Solve a crime based on a blood type

C. Chap 17 The Cardiovascular System: The Heart

1. Structures
2. Functions
3. Blood Flow
4. Electrical Conduction
5. Deduce what is wrong with a patient's heart by the ECG strip

D. Chap 18 The Cardiovascular System: Blood Vessels

1. Name the major arteries on a model
2. Name the major veins on a model
3. Demonstrate how to take blood pressure with a sphygmomanometer

E. Chap 19 The Lymphatic System

1. Structures
2. Functions
3. Diseases

F. Chap 21 The Respiratory System

1. Structures
2. Functions
3. Use a spirometer to measure your lung capacity

G. Chap 22 The Digestive System

1. Structures
2. Functions
3. Analyze a victim's last meal by running forensic tests

H. Chap 23 Nutrition, Metabolism, and Body Temperature Regulation

1. Current nutritional trends
2. Problems
3. Reading labels

I. Chap 24 The Urinary System

1. Structures
2. Functions
3. Diagnose what is wrong with various patient's by their urine samples

J. Chap 25 Fluid, Electrolyte, and Acid-Base Balance

1. Fluid balance
2. Role of the brain
3. Are all sports drinks the same

K. Chap 26 The Reproductive System

1. Structures
2. Functions

Grading Scale

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

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Your semester average is based upon 4 grades:
2. All of your grades for this course will be entered into the Black Board platform.
 - 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=**600 points**
 - 4 or 5 quizzes will be given. They will be averaged together and will count for **200 points**.

Notebook grade.= **200 points**

Possible 1000 points

Course Requirements

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

NOTE this course is web enhanced. Black Board will be utilized to find syllabus and other items of interest.

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 on 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 major tests. There are no makeups. All students must be present for the Final Exam.

Fall 2013 drop without penalty date is November 1, 2013. *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.

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

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DO NOT EMAIL ME ON BLACKBOARD

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Office hours- See door schedule.