### Bio& 241 – Human Anatomy and Physiology I

**Class Time:** Lecture – Two 1 and 1/2-hour lectures per week Laboratory – Two 2-hour laboratories per week

#### Credits: 5 quarter-hours

**Subject Matter:** An integrated study of the human body's structure and function. This class will cover the following systems: Integumentary, Skeletal, Muscular, Nervous, and Sense Organs.

#### Instructor:

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## Classroom Decorum:

#### Student Responsibilities in this class:

□ Behave toward others in a professional manner

□ Avoid personal attacks, harsh criticism, and objectionable language while communicating with others

- □ Pay attention to the course calendar; keep up with the course work
- □ Actively participate in all course activities.
- □ Seek assistance from instructors when needed.
- □ Take control of your attitude, time, and performance

In order for learning to take place, students must feel safe; this safety is due **all** students, not only those who share your values and beliefs. For this reason, courtesy, thoughtfulness, and acceptance are essential in our discussions in and out of the classroom. Acceptance should not be confused with agreement; one need not agree with a person to listen, and one must listen well in order to disagree respectfully. Every student in this course has a voice and so deserves the courtesy of attentive listening and the freedom to express diverse ideas.

If anyone has a health condition or disability, which may require accommodations in order to effectively participate in this class, please contact me after class or contact Disability Support Services in **Building 17-201**, **Phone 533-4166**. Information about disability will be regarded as confidential

You are expected to take the responsibility to form the **good study habits** that are the hallmark of a good student. **Be organized!** Read the text information **before** the subject is considered in class. Regularly **study** and **review** your text, lecture and laboratory notes. **Good lecture notes are a MUST!** Plan to study and then **do it every day!** Regular organized study is much more important than the total number of hours that you study right before an exam. Remember that you begin the course with a perfect score. You are responsible for maintaining that score during the quarter by mastering the material presented in the lecture, laboratory and text. As a guide the expected study time outside of class for any college course is **two hours for every hour in class per week** – or about 14 hours of study outside of class per week. **DO NOT CRAM!** The formation of study groups is highly recommended.

Attitude and focus are very important to your being a successful student. In the daily grind of the high-speed word we live in, it can become difficult to stay focused on why you're taking an Anatomy and Physiology class, why you are going to college, or what your long-range goals are? As a student, it's important that you keep a positive attitude and keep focused on

#### Instructor Responsibilities in this class:

- □ Act in a professional manner.
- □ Facilitate a positive learning environment.
- □ Help guide students in their quest to gain knowledge
- □ Establish well-defined student goals.
- □ Maintain an environment that facilitates open communication
- □ Share knowledge.
- □ Offer constructive guidance
- □ Provide a course calendar of events and due dates for exams and other assignments.
- □ Inform students of their performance and grades in a timely manner.

#### Labs:

Labs are critically important to the learning process. A Chinese proverb observes "*I* hear, and I forget. I see, and I remember. I do, and I understand." Lectures and PowerPoints provide "*I hear and I see*." The Laboratory portion provides students with the opportunity to "*do and understand*." During the laboratory portion of the class, students will be divided into teams of two. Each team will be assigned a laboratory station, microscope and equipment kit. You will be responsible for the items assigned to your team. Do not use other equipment without the permission of the instructor. Please keep the laboratory clean. Neatness and cleanliness are part of good laboratory technique. You will be downgraded 5% of the points for a particular test if you fail to maintain a clean work area or fail to care for materials properly. Wash all glassware, dry it, and return all materials and equipment to the proper place. Organize work time so there is time to clean up properly at the end of each lab. Do not leave all the dirty work for your partner. Always bring both your textbook and laboratory manual to laboratory classes.

**Early Alert Program:** This class is part of the Early Alert Program. If we observe that you are struggling academically (for example, poor attendance, low scores, missing assignments, lack of participation), we will submit an Early Alert for you, and a member of the Early Alert team will contact you and connect you with appropriate campus resources to support you in meeting your academic goals. This alert is a heads-up for you and indicates that I am concerned about your progress. The noted issues need to be addressed immediately so that you can be successful. If you are contacted about an Early Alert, please respond as soon as possible so that you can get the resources, support, and strategies you need to be successful in this and other classes. You may also refer yourself or a friend who might be struggling. Just click the green EA button on the SFCC homepage and complete the form.

#### Use of the Cadaver Lab at SFCC:

One of the most important books in the history of medicine is an anatomical treatise published in 1543, *De Humani Corporis Fabrica*, based on dissections of the human body. Prior to Vesalius work, anatomical texts were based largely on dissections of nonhuman animals. Although cadaver dissection was not new in the time of Vesalius, having the physician-teacher actually perform the dissection in the theatre surrounded by students was. Because of a new building and cadaver lab, you have the opportunity to participate in a rich tradition and experience a privilege shared by few. Cadavers are referred to as "human anatomical specimens", a description that seems inadequate for such a valuable gift to your education. Working with human material requires respect and sensitivity.

Our cadavers are obtained from the Willed Body Programs either at the University of Washington School of Medicine or Washington State University/WWAMI Medical Education Program. Persons donating their body receive no financial compensation; this is truly their ultimate gift to your education. Hence it is imperative that proper respect be paid to the cadaver

at all times. The cadavers are returned to the Universities for cremation once SFCC has finished with them.

## General Rules for Use of the Cadavers:

**Care of Cadavers:** The cadaver has to be kept moist at all times. The cadaver is covered with sheets moistened with embalming fluid. Only uncover the area you are studying. Occasionally mist the area you are working on using the spray bottle containing water. When you are through, replace the sheets and cover the entire body with the plastic sheet and make sure the body bag is zipped up. Close covers to dissection tables.

Laboratory Access: The lab is locked when not in use. Only students enrolled in the course are allowed in the lab. DO NOT BRING IN FRIENDS OR VISITORS!

**Professional behavior:** No body parts, tissue, etc. will be removed from the lab. Disrespect for the cadaver will not be tolerated. You will observe professional conduct while in this lab and outside of the lab particularly if you discuss anything related to the cadaver in a public place. Photographs may not be taken in the lab. *Failure to follow these rules and/or unprofessional behavior will result in your dismissal from A&P class.* 

## Laboratory Safety:

**a.** Attire: Cadavers are embalmed with a fluid containing glycerin, ethyl alcohol and phenol. Physical contact of your skin and clothing with the cadaver should be avoided. You are required to wear disposable gloves at all times while working in the lab and a disposable long-sleeved lab coat while working with the cadaver. Contact lenses should not be worn in the lab. Lenses can absorb chemical vapors; if you must wear contacts, you are required to purchase and wear vapor proof goggles.

b. Personal Items: Only your textbook and lab manual are allowed in the lab. Leave all backpacks or other personal items in the outer lab where there are hooks provided.
c. Food: Food and drinks are not allowed in the lab at any time.

**d. Tissues**: All tissues removed from the cadaver must be collected and placed in the designated containers near the tables. These containers are sent back with the cadaver for cremation. Do not place any human tissue in a garbage can. Do not discard paper towels, gloves, etc. in these containers; use the garbage cans. When you are through for the day, drain the excess liquid that has accumulated on the dissection table into the bucket located under the table. Wipe up any fluid on the floor.

# If unsure of anything, ask first before you make a mistake. Always remember that working with human material requires respect and sensitivity.

## **COURSE LEARNING OUTCOMES**

By the end of this course students should be able to do the following:

1. Recognize and use vocabulary specific to the human body and human health.

2. Recognize the characteristics of the major tissue groups found in the human body and understand their functions.

- 3. Recognize all the major bones and their processes.
- 4. Understand the basic physiology of bone tissue and control mechanisms.
- 5. Recognize the major skeletal muscles, their actions, origins and insertions.
- 6. Understand basic physiology of muscle tissue.
- 7. Recognize the organs and various components of the nervous system.
- 8. Understand the basic physiology of nervous tissue.

9. Recognize the various components of general and special sensory apparatus and their basic functions.

10. Perform laboratory exercises related to the above course learning objectives, record observations, gather and analyze data, and properly use microscopes for viewing histology slides.

#### Exams and Course Grades:

Each of our 4 units in Biol 241 will be completed by a lab and lecture exam, each about 100 multiple choice points. Lab exams cannot be made up, so please make arrangements prior to the exam date. I do not dispute grades 2 weeks after the grade is provided.

Within each unit you will also be able to earn up to 125 points on assignments and inclass questions and participation. Assignments are each worth 25 points, usually about 4 assignments per unit, and the remaining 25 points for the unit can be earned by completing inclass/review questions and in-class participation. If you complete all assignments and inclass/review questions for the unit, you will receive an extra credit 15 points.

### Total Biol 241 grade break down:

In-class review questions/Assignments: 125 points available for each unit → 500 total points Opportunity for 60 points extra credit if all questions and assignments are attempted.
1 Lab exam for each unit → ~400 points
1 Lecture exam for each unit → ~400 points
Paper → 250 points
Total points: ~1550 points

After each set of exams your grade at that point in the quarter will be posted on an excel spreadsheet on my webpage. To view grade you will be given a "grade code name" to view grades anonymously.

Amygdala Buccinator Duodenum Epicondyle Femur Glabella Gustatory Gyrus Hallux Hyoglossus Ileum Ilipsoas Jejunum Keratin

Melanocyte Meninges Merkel Mitochondria Necrosis Pectineus Platysma Purkinje Sphincter Synapsis

Your grade code:

#### Personal honesty and integrity:

Personal honesty and integrity are the most important attributes of any professional. If you're taking this class, you're most likely planning on entering a professional program that expects those attributes. We **should not** need to address cheating, however, so we know everyone is on the same page: **Cheating** in any form will not be tolerated. Students caught cheating will receive a **zero for the test**. If caught a second time the student will receive a **zero for the class** and will be subject to disciplinary action as detailed by the **Student Code of Conduct**.