

Bio& 242 – Human Anatomy and Physiology II

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. Major emphasis will be on the Endocrine, Cardiovascular, Lymphatic, Respiratory, Digestive, urinary, and Reproductive Systems

Course Regulation, Requirements and Procedures:

Attendance and Participation:

As the instructor for this class, I respect the fact that college students are adult learners. With this respect comes the obligation that students demonstrate the attributes that make for a successful college student. Successful students attend class, make a point to be on time to class, come prepared for class, and are active participants in their educational process.

Each week there will be activities that require active participation in class such as laboratory exercises and in lectures. My expectations are that you will attend class and be an active learner. Failure to do so will have negative consequences for your grade. Missed information from class and missed opportunity to participate in classroom activities will result in your becoming hopelessly behind, which usually results in low performance on lecture tests and lab tests.

No unexcused absences allowed during testing days!! Please see the instructor preferably before any absence, if it's possible not before the absence, then immediately after returning to class. Missed Lecture exams (excused absences only) must be made up within one week after returning to class. **Lab Exams cannot be made up for any reason. You must check with me before you miss the exam to see if you can take the exam during another class.**

Classroom Decorum:

Some general classroom rules: Please be **on time** to class and **do not** leave early. It is disruptive to the rest of the students and in fact rude to arrive after class has begun or to leave before the session has ended. Please do not visit during instructor lectures or viewing of videos during class time; it is rude and disruptive to other students. Reserve your visitation to planned activities that require group discussion, such in the laboratory. If you want to visit with your friends, go to the student union for a cup of coffee; **do not** come to class.

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 goals, 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 world 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 your goals. A quote from, *A Summer Day*, a poem by Mary Oliver, helps me to stay focused and helps reinforce a positive attitude, maybe it'll help you as well. **"....and what will you do with your one precious life."**

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. The Chinese proverb observes ***"I hear, and I forget. I see, and I remember. I do, and I understand."*** Lectures and PowerPoint's 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.

COURSE LEARNING OUTCOMES

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

1. Demonstrate skill in using laboratory equipment.
2. Recognize and use vocabulary specific to the human body and human health.
3. Recognize the characteristics of the major tissue groups found in the human body and understand their functions.
4. Recognize all the major organs and components of the Digestive System and understand the functions.
5. Recognize the major organs and components of the Respiratory System and understand their functions.

6. Recognize the major organs and components of the Urinary System and understand their functions.
7. Recognize the major organs and components of the Endocrine System and understand their functions.
8. Recognize the major organs and components of the Reproductive System and their functions.
9. Recognize the major organs and vessels of the Cardiovascular System and understand their functions.

Perform laboratory exercises related to the above course learning objectives, record observations, gather and

Exams and Course Grades:

Four written examinations covering lecture and text material will be given during the quarter. Four laboratory exams will test your knowledge of laboratory techniques, principles, and understanding of the experiments performed, as well as anatomical knowledge gained through dissection and use of other study aids related to the human body. Most Labs will have a Short quiz that you will take at WileyPLUS. These quizzes will become available at the completion of the particular lab and will be open for use for about 48 hours. Please make sure to do these quizzes in time. You can still take a missed quiz but quiz points will be reduced by 50% if you take it late. These quizzes will vary between 16 and 37 questions depending on the lab. All quizzes will be weighted at (.5 pts) per question for calculation of your total points for the quarter.

Your course grades will be basis on your total points derived from lecture and laboratory exams points and the WileyPLUS quizzes. 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", which you can find on my webpage.

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. I should not need to address cheating, because I enter my relationships with students expecting you to have developed personal integrity and ethical behavior. However, so I 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 in the student Code of Conduct.

Lecture Schedule: Bio& 242 Human Anatomy and Physiology 2 Gary Blevins

Fall Quarter, 2017: (M/W 11:00 – 12:30 Lectures)

Room: 11:30 & 1:30 Rm 141

Gary.Blevins@sfcc.spokane.edu

Date:	Lecture Topic	Reading in Text Pages:*
09/	20 Unit1/Lecture 1 Upper Digestive system	886-932
	25 Unit1/Lecture 2, 3 Histology of Digestive system	
	27 Unit1/Lecture 3, 4 Large Intestine, Pancreas, Liver and Gall Bladder	
10/	2 Unit1/Lecture 4, 5 Metabolism of Carbohydrates, Lipids, and Proteins; Bioenergetics	941-967
	4 5 Metabolism of Carbohydrates, Lipids, and Proteins; Bioenergetics	941-967
	9 Lecture Exam #1	
	11 Unit2/Lecture 1 Urinary System Anatomy	979-1016
	16 Unit2/Lecture 1, 2 Physiology of Urine Formation	
	18 No Class	
	23 Unit2/Lecture 2 Respiratory System Anatomy	840-876
	25 Unit2/ Lecture 3 Fluid, Electrolyte, and Acid Base Dynamics	1023-1036
	30 Lecture Exam #2	
11/	1 Unit3/Lecture 1 Composition of Blood Blood Clotting and Typing	661-682
	6 Unit3/Lecture 2 Anatomy of the Heart and Cardiac Physiology	668-716
	8 Unit3/Lecture 2, 3 Blood Vessels; Physiology of Circulation	729-788
	13 Unit3/Lecture 3, 4 Physiology of Circulation, Lymphatic system	799-804
	15 Lecture Exam #3	
	20 Unit4/Lecture 1A, 1B Endocrine System	615-648
	22 Holiday: No class	
	27 Unit4/Lecture 2, 3 Male Reproductive Anatomy and Physiology	1041-1052
	29 Unit4/Lecture 3, 4 Female Reproductive Anatomy and Physiology;	1054-1074
	4 Unit4/Lecture 4, 5 Human Development, Pregnancy hormones	1089-1113
	6 Open	
	13 11:30 Lecture Exam #4	

Lab Schedule: Bio& 242 Human Anatomy and Physiology 2 Gary Blevins

Fall 2017, Labs: (T/TH 10:30 – 12:30)

Room: 28/134

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Date: Topic of Investigation Supportive material in lab Atlas

09/	21	Unit1/Lab1 Digestive System Gross Anatomy (<i>WP quiz</i>)	137-150
	26	Unit1/Lab2 Histology of the Digestive System (<i>WP quiz</i>)	137-150
	28	Unit1/Lab3 Chemical Digestion of Foodstuffs (<i>Lab report</i>) Enzymatic Action	
10/	3	Unit1/Lab4 Liver and the Pancreas (<i>WP quiz</i>)	148-150
	5	<u>Lab Exam #1</u>	
	10	Unit2/Lab1 Urinary System Anatomy (<i>WP quiz</i>)	151-155
	12	Unit2/Lab2 Urinalysis (<i>Lab report</i>)	
	17	Unit2/Lab3 Respiratory System Anatomy (<i>WP quiz</i>)	134-136
	19	Unit2/Lab4 Physiology of Respiration	
	24	Open	
	26	<u>Lab Exam #2</u>	
	31	Unit3/Lab1 Blood Histology and Blood Typing Blood Hemoglobin and Hematocrit (<i>Lab report</i>)	129
11/	2	Unit3/Lab2 Human and Sheep Heart Anatomy (<i>WP quiz</i>)	121-125
	7	Unit3/Lab3 Cardiovascular Physiology	122
	9	Unit3/Lab4 Human Blood Vessel Anatomy (<i>WP quiz</i>)	121, 127-129
	14	Open	
	16	<u>Lab Exam #3</u>	
	21	Unit4/Lab1 Endocrine Gland Anatomy & Functions (<i>WP quiz</i>)	113-115
	23	Holiday No class	
	28	Unit4/Lab2 Reproductive Anatomy (<i>WP quiz</i>)	156-164
	30	Unit4/Lab3 Gametogenesis and hormones (<i>WP quiz</i>)	165
	5	Unit4/lab4 Survey of Embryonic Development (<i>WP quiz</i>)	166-168
	7	<u>Lab Exam #4</u>	

***Lab Guide:** You will be given lab handouts for each Lab.

Altas: *A Photographic Atlas for the Anatomy and Physiology Laboratory*, 7th ed., 2003, Van De Graff and Crawley, Morton Publishing.

Textbook: *Principles of Anatomy and Physiology, 14th Edition*, by Tortora & Derrickson, John Wiley and Sons, 2014.