Biology 2251K Human Anatomy/Physiology I

Biology Department, College of Arts and Sciences, Valdosta State University Section A (53456) (4 credit hours)

Summer Semester, 2024

Instructor - Dr. J. Mitchell Lockhart

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Office Hours: As posted or by appointment

**Course hours**: Lecture – Face to face (9:35-11:05AM, MTWRF, BSC 1023), possible asynchronous.

Most lectures may be available on Blazeview in Kaltura

Lab – Face to face (11:30-1:20 MTR, BSC 1203), possible asynchronous info

**Textbook** - G.J. Tortora and B. Derrickson, *Principles of Anatomy and Physiology*, 15th Ed.

Or 16<sup>th</sup> Ed. (Required). WileyPlus is used for the course and is *Mandatory*.

Day One option is available.

**Laboratory Textbook** – All labs will be available online FREE.

Dissection kit is required.

**Course Description**: This course is the first in a two-part series. In BIOL 2651 we will introduce human anatomy and physiological principles with emphasis on the following: cell and tissue organization, plus skeletal, muscular, and nervous systems and special senses. In each system, we will cover the basic structure and function of the components of that system.

Pre-Requisite: None

Attendance: MANDATORY! I do keep track of who is and isn't attending lecture and laboratory. This course has a considerable amount of new concepts and terminology and it is in your interest to attend class regularly. Any student disrupting the classroom and affecting the learning experience of others will be asked to leave. Along these lines, NO cell-phones, beepers, and/orassociated earpieces or headphones are allowed either in the lecture room or laboratory. If you bring them to class, they must be turned **OFF** (not on vibrate) and placed out of view. Students are not permitted to leave the lecture or laboratory rooms to receive messages during regular course time. My policy is not to give a warning, rather, if a cell-phone or beeper activates during lecture/laboratory or you attempt to view or send messages, you will lose one LETTER GRADE from your final grade. Viewing a cell-phone or pager that activates on "silent" mode during a quiz or exam will be treated as an instance of CHEATING and handled accordingly (in addition to the above penalty). Those wishing to utilize laptop computers as part of the class are required to sit in the first few rows of the classroom. Viewing any material other than class material will result in the same penalties above. University guidelines dictate that students missing 20% of lecture or laboratory sessions for this class are subject to receiving a grade of "F" regardless of their standing in the course.

If students must be absent due to a quarantine or isolation requirement for COVID-19, they must report this situation via the COVID Self Reporting Link in MyVSU and through the <u>Dean of Students Office</u>.

From the Valdosta State University Catalog:

Whether online or face-to-face, a student who misses or does not participate in more than 20% of the scheduled course or course activities could be subject to receiving a failing grade in the course.

The University does not issue an excuse to students for class absences. In case of absences as a result of illness or special situations, instructors may be informed of reasons for absences, but these are not excuses.

<u>I will enforce this absence limit</u>, therefore after 6 lecture absences (for any reason) a student will be assigned an F for the course. After 3 laboratory absences (for any reason), a student will be assigned an F for the course. Repeated tardiness will be dealt with by administratively withdrawing the student(s) from the course AND/OR mandatory first of class quizzes for the entire class.

Students With Documented Disabilities: Students requiring accommodations or modifications because of documented disabilities should discuss this need with Dr. Lockhart at the beginning of the semester. Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farber Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: access@valdosta.edu.

Assessment: For the lecture grade, four exams plus a comprehensive final will be given. Questions will be based on material covered in lecture and in my notes. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the professor NO LATER than one week following return of the exam. I also will occasionally give unannounced quizzes to ensure that everyone is on time, attending class, and keeping up with lecture material. NO make-up lecture exams or quizzes will be given for any reason. Should you miss an exam for ANY reason, you may take the comprehensive final to replace the missed exam grade.

For the laboratory grade, 4 lab practicals will be given. The **Lab practicals cannot be** made up. If a lab practical is missed, you will receive a zero for that lab grade.

NOTE: All exams will be online. You are required to have lockdown browser with camera access.

The final grade will be a combination of your final lecture score and laboratory score. score. Lecture will comprise 55% and lab will comprise 35%. The lecture final will be comprehensive and **OPTIONAL**. For those wishing to better their grade, this exam score will replace the lowest written exam score received during the semester.

10% of your grade will be successful completion of WileyPlus assisgnments.

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

**Privacy Act**: Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, given to friends, or given to relatives.

Title IX: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, <a href="titleix@valosta.edu">titleix@valosta.edu</a>, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Student Opinion of Instruction Statement: At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators, and they will be able to access results only after they have submitted final grades. Before final grade submission, instructors will not be able to see any responses, but they can see the percentage of students who have or have not completed their SOIs. While instructors will not be able to see student names, an automated system will send a reminder email to those who have yet to complete their SOIs. Students who withdraw or drop a course will also be sent invitations to complete the Dropped Course Survey. Complete information about the SOIs, including how to access the survey, is available on the SOI Procedures webpage.

Coronavirus Resources: VSU cares about student success both on and offline, and a variety of resources are available to help students both academically and personally during the Fall 2020 semester.

One of the best resources is VSU's Coronavirus FAQ page located at <a href="https://www.valdosta.edu/health-advisory/faq.php">https://www.valdosta.edu/health-advisory/faq.php</a>. Information is available there about a variety of topics in VSU's return-to-campus plan. A website devoted to the health and wellness of VSU students can be seen at <a href="https://www.valdosta.edu/administration/finance-admin/campus-wellness/student-resources.php">https://www.valdosta.edu/administration/finance-admin/campus-wellness/student-resources.php</a>.

You can find information, including how you can access the Brightspace Pulse app that will allow you to view BlazeVIEW on your smartphone at <a href="https://www.d2l.com/products/pulse/">https://www.d2l.com/products/pulse/</a>. In BlazeVIEW, all VSU students have a course with guides for how to use tools in BlazeVIEW; search for "VSU BlazeVIEW Student Tutorial 2020."

Face Coverings: As the Blazer Creed articulates, members of the VSU community are expected to live by the high standards of civility, integrity, and citizenship and embrace their responsibility as a member of the Blazer community. In recognition of this responsibility, and in response to the best available science and current guidance from the Centers for Disease Control and Prevention and the Georgia Department of Public Health, every student must wear a face covering that covers their nose and mouth at all times while in any campus building, including in this classroom. This requirement is intended to protect the health and safety of all VSU students, the instructor, and the entire university community. Anyone attending class without a face covering will be asked to put one on or leave. Students should also be sure they maintain a distance of at least six feet away from their fellow students and instructor and are seated in a seat that is designated to ensure that distance. Students who refuse to wear face coverings appropriately or adhere to other stated requirements may face disciplinary action for Code of Conduct violations.

#### Virtual Proctored Exams:

### USING LOCKDOWN BROWSER AND A WEBCAM FOR ONLINE EXAMS

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be built into your computer or can be the type that plugs in with a USB cable. Watch this short video (<a href="http://www.respondus.com/products/lockdown-browser/student-movie.shtml">http://www.respondus.com/products/lockdown-browser/student-movie.shtml</a>) to get a basic understanding of LockDown Browser and the webcam feature. A student Quick Start Guide (<a href="http://www.respondus.com/products/monitor/guides.shtml">http://www.respondus.com/products/monitor/guides.shtml</a>) is also available.

### Respondus LockDown Browser with Monitor

Using Respondus LockDown Browser and Monitor for Proctored Online Exams

To help ensure academic integrity, this course requires the use of Respondus LockDown Browser and a webcam for online exams. The webcam can be built into your computer or can be the type that plugs in with a USB cable. Watch this <u>short video</u> to get a basic understanding of LockDown Browser and the webcam feature. A student Quick Start Guide is also available.

## **System Requirements**

Respondus LockDown Browser must be installed on the computer you will use to take the quiz. Visit the eLearning Respondus webpage to confirm that your computer meets the system requirements for using Respondus LockDown Browser and Monitor. For instructions on how to install the Respondus LockDown Browser, see the Installation Instructions.

**NOTE**: Respondus LockDown Browser and Respondus Monitor may not function properly on devices or networks with institutional security settings managed by third-party organizations. For students who can access VSU's campus, appropriate devices such as laptops and webcams can be checked out from Odum Library's New Media Center (NMC). The NMC is located on the first floor of Odum Library, Room 1240. Their hours of operation and equipment loan procedures and policies are available on the <a href="New Media Center">New Media Center</a> website. Alternatively, students may <a href="reserve rooms in the NMC">reserve rooms in the NMC</a> or utilize any open study rooms outside the NMC that may meet their needs. For more information about Study Rooms, visit <a href="Odum Library Study Rooms">Odum Library Study Rooms</a> and Spaces and check the <a href="Library Hours of Operation">Library Hours of Operation</a>.

Additionally, if you plan to use Respondus Monitor on a VSU campus computer, such as VSU's Odum Library's lab computers, you will not need to download LockDown Browser. Instead, select "Launch" when prompted.

### **Respondus Proctoring Consent Form**

You will need to complete the Respondus Proctoring Consent Form during the first week of class, and then, if you consent to use Respondus, you must complete the practice quiz to test your equipment. The class will have a test run with the system during <instructors indicate practice test availability here.>

If you are unable to access the appropriate equipment or if you prefer to use an on-site testing option, further information is available on the Respondus Proctoring Consent Form in BlazeVIEW.

If you experience technical difficulties prior to beginning your Respondus test, contact your instructor and the Center for eLearning. For technical difficulties during your proctored examination, contact <a href="Respondus Technical Support">Respondus Technical Support</a> and your instructor immediately.

**Cheating:** Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

Important Dates: Mid-Term - To be determined, Final Exam - June 14, 9:30-11:30AM

\* The Instructor reserves the right to modify the above contents with proper notification.

### **Course Outcomes: Course:**

By the end of BIOL 2651, students who successfully complete the course should have:

- 1. Gained factual knowledge, to include anatomy and physiological terminology, methods, and principles, about Anatomy and Physiology I. (DO 2,3,5; VSUGEO 5)
- 2. Learned fundamental principles, generalizations, or theories of Human Anatomy and Physiology I. (DO 2,3,5; VSUGEO 5)
- 3. Learned to apply course material (to improve thinking, problem-solving, and decisions) in Human Anatomy and Physiology I. (DO 2,3,5; VSUGEO 5)
- 4. Developed specific skills, competencies and points of view needed by professional in the fields most closely related to Anatomy and Physiology I. (DO 2,3,5; VSUGEO 5)
- 5. Acquired an interest in learning more by asking questions and seeking answers about Anatomy and Physiology I. (DO 2,3,5; VSUGEO 5)

### Department:

- 1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.
- 2. Describe the evolutionary processes responsible for biological diversity, explain the phylogenetic relationships among the major taxa of life, and provide illustrative examples.
- 3. Demonstrate an understanding of the cellular basis of life.
- 4. Relate the structure and the function of DNA/RNA to the development of form and function of the organism and to heredity.
- 5. Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities, and ecosystems; andto human impacts on these systems and the environment.

## **Valdosta State University General Education Outcomes:**

- Students will demonstrate understanding of the society of the United States and its ideals.
   They will possess the requisite knowledge of the society of the United States, its ideals, and its functions to enable them to become informed and responsible citizens. They will understand the connections between the individual and society and the roles of social institutions. They will understand the structure and operational principles of the United States government and economic system. They will understand United States history and both the historical and present role of the United States in the world.
- 2. Students will demonstrate cross-cultural perspectives and knowledge of other societies. They will possess sufficient knowledge of various aspects of another culture, including the language, social and religious customs, aesthetic expression, geography, and intellectual and political history, to enable them to interact with individuals within that society from an informed perspective. They will possess an international viewpoint that will allow them to examine critically the culture of their own nation and to participate in global society.
- 3. <u>Students will use computer and information technology when appropriate</u>. They will demonstrate knowledge of computer concepts and terminology. They willpossess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.

- 4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.
- 5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.
- 6. Students will demonstrate knowledge of diverse cultural heritages in the arts, the humanities, and the social sciences. They will develop understanding of the relationships among the visual and performing arts, literature and languages, and history and the social sciences. Students will be versed in approaches appropriate to the study of those disciplines; they will identify and respond to a variety of aesthetic experiences and engage in critical thinking about diverse issues. Theywill be able to identify the components of and respond to aesthetic experiences in the visual and performing arts. They will develop knowledge of world literature within its historical and cultural frameworks. They will understand modem issues within a historical context and the role of the individual in various forms of societies and governments.
- 7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written. and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis.

  They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems.
- 8. Students will demonstrate knowledge of principles of ethics and their employment in the analysis and resolution of moral problems. They will recognize and understand issues in applied ethics. They will understand their own value systems in relation to other value systems. They will judge values and practices in a variety of disciplines.

## **BIOL 2251 Human Anatomy and Physiology I** Dr. J. Mitchell Lockhart

## Tentative Lecture Outline - This is the order in which we will cover topics.

TOPIC	TEXT CHAPTERS
Introduction to the Human Body	1
Chemical Level of Organization	2
Cellular Level of Organization	3
Tissue Level of Organization	4
Integumentary System	5
Bone Tissue	6
Skeletal System: The Axial Skeleton	7
Skeletal System: The Appendicular Skeleton	8
Articulations	9
Muscle Tissue	10
Muscular System	11
Nervous Tissue	12
Spinal Cord and Spinal Nerves	13
Brain and Cranial Nerves	14
The Special Senses	17
Autonomic Nervous Systems*	15
Sensory, Motor, and Integrative Systems*	16

**Lecture Exams:** Final Exam: 1 – May 16

2 - May 27

3 – June 4

4 – June 13

June 14, 9:30-11:30AM

# **Tentative Laboratory Schedule**

Date	Topic
May 9	Introduction & Microscope Basics
May 13	Tissues and Skin
May 14	Tissues and Skin
May 16	Tissues and Skin
May 20	LAB PRACTICAL #1
May 21	Skeletal System
May 23	Skeletal System
May 27	Skeletal System
May 28	LAB PRACTICAL #2
May 30	Muscular System
June 3	Muscular System
June 4	LAB PRACTICAL #3
June 6	Sheep Brain
June 10	Cow Eye
June 11	LAB EXAM 4