The University of Texas Rio Grande Valley

BS in Biomedical Sciences
Mission 7: Anatomy & Physiology
Course Equivalency: 1110, 2101
Spring 2016: 1/18– 5/14

***This syllabus represents the current course plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.*

TEXTBOOK AND/OR RESOURCE MATERIAL

All required content for this course is paid for via course fees and is delivered via iPad, which will be issued to you at your orientation meeting for the program. This learning material will include carefully curated readings, video, interactives, animations, apps, and other sources.

The following materials, and many others, are included:

- Principles of Biology, Sapling Learning
- Anatomy and Physiology, OpenStax College, https://openstaxcollege.org/textbooks/anatomy-and-physiology
- Conceptos de Biología, OpenStax College, http://cnx.org/contents/e7a016d3-91fc-4ba0-9e05-a33e986f3d94:1/Conceptos-de-Biolog%C3%ADa
- Khan Academy, Anatomy and Physiology, https://www.khanacademy.org/science/health-and-medicine/human-anatomy-and-physiology
- Khan Academy, Anatomía y fisiología humana, https://es.khanacademy.org/science/health-and-medicine/human-anatomy-and-physiology
- Get Body Smart, http://www.getbodysmart.com/
- OSCE Skills App--This app gives you step-by-step illustrated instructions for a large number of Objective Structured Clinical Examinations of the kinds used to test future doctors on their competence in performing clinical skills.
- Medical Dictionary by Farlex App--This tool allows you look up comprehensive definitions of medical terminology, word parts, and topics. This is a rich tool to which you will likely refer throughout your studies and career.

COURSE DESCRIPTION AND PREREQUISITES

Welcome to the next step of your journey into the world of the biomedical sciences. As you reach each of your learning goals, you will develop the knowledge and skills needed for future courses. It will be a fascinating trip through one of the fastest growing areas of scientific study. In this mission, you will study:

- The Nervous System

- Anatomy of Neurons and Glial Cells
- Anatomy of the Central and Peripheral Nervous Systems
- Anatomy of the Brain

- The Integumentary and Musculoskeletal Systems
  - Anatomy of the Integumentary & Skeltetal Systems
  - Anatomy of the Muscular System
- The Cardiovascular Respiratory Systems and the Blood
  - Anatomy of the heart
  - Anatomy of Blood Vessels
  - Anatamoy of the Respiratory System
- The Endocrine & Reproductive Systems
  - Anatomy of the Endocrine System Part 1
  - Anatomy of the Endocrine System Part 2
  - Anatomy of the Male and Female Reproductive Systems
- The Urinary and Renal Systems
  - Body Fluids
  - Anatomy of the Uriniary and Renal Systems
- The Gastrointestinal System
  - Anatomy of the Gastrointestinal System
  - Nutritution and the Life Cycle

LEARNING OBJECTIVES/OUTCOMES FOR THE COURSE

As you complete the activities in this course, you will work toward demonstrating competence in each of these programmatic objectives:

- Apply knowledge of biology in defining and discussing basic biomedically-related science concepts. (Level 1)
- Describe the structure and function of the body and explain the basis of major pathologies and diseases at the molecular, cellular, organ, and system levels. (Level 1)

- Critically examine the science behind disease prevention and health promotion, especially as related to common chronic conditions. (Level 1)
- Recall the most relevant equations used in the biomedical sciences, describe the phenomenon they explain, and cite how and when they are applied. (Level 1)
- Describe the social and environmental determinants of health and their influences on healthcare and biomedical research; discuss related impacts on individuals, communities, and populations–regionally, nationally, and globally. (Level 1)
- Demonstrate a desire to help others as well as sensitivity to others' needs and feelings. (Level 1)
- Demonstrate knowledge of socio-cultural factors that affect interaction and behaviors, multiple dimensions of diversity, and strategies for interacting effectively with people from diverse backgrounds. (Level 1)
- Demonstrate ability to collaborate with others to achieve shared goals. (Level 1)
- Behave in an honest and ethical manner; cultivate personal and academic integrity; adhere to ethical principles; follow rules and procedures. (Level 2)
- Consistently fulfill obligations in a timely and satisfactory manner; take responsibility for personal actions and performance. (Level 2)
- Set goals for continuous improvement and for learning new concepts and skills; solicit and respond appropriately to feedback. (Level 2)
- Appropriately utilize campus, community, and other resources to aid in success in the university setting, including progressive awareness of how and when to seek academic assistance or other professional support. (Level 2)

GRADING POLICIES

You will demonstrate your achievement of program competencies by completing the following types of activities. You must receive at least a 70% to receive credit for demonstrating competence. The entire mission is worth 2,000 points.

You will complete the following kinds of activities as you work your way through the program:

Check for Understanding After you've read, you'll have an opportunity to check your understanding on the readings thru a brief quiz activity. Each check for understanding will be worth *40 points* and will make up 30% of your grade.

Homework will be completed on the unit level and will be worth 30% of your final grade. Each homework activity will be worth *40 points* each.

End of Mission Exams cover all the content in the Mission, and are taken after you have successfully completed all of the activities in the Mission and reviewed what you have learned. You will take this exam in class and not on TEx. *You can earn up to 800 points on the exam for a total of 40% of your final grade.* **No retake of the End of Mission Exam will be allowed.**

STAYING ON TRACK

The TEx app on your iPad will help you keep track of your schedule of activity due dates and will let you know if you begin to get off track. Your Instructional Facilitator and Instructors will also be monitoring your work and are there to help you; contact them immediately if you start to struggle. If you get behind, don't give up—work with them to make a plan to get back on track.

ABSENCE AND MAKEUP POLICY

Coached Study Hours and Class Activities are mandatory. If an excused absence is unavoidable and legitimate, at the Instructor's sole discretion, students may complete an alternate assignment.

CALENDAR OF EVENTS

The UTRGV academic calendar can be found at http://my.utrgv.edu at the bottom of the screen, prior to login. Important dates for Spring 2016 include:

January 18 MLK Day; university closed

January 19 Classes Begin

Feburary 3 Census Day

March 14-18 Spring Break

April 13 Drop/Withdrawal Deadline

May 6-12 Final Exams

Date	Day	Activity	Points	Contact
1/19	Tuesday	The Term Begins! Intro to Mission 5: Integrated Body Systems 1 Intro video Module 1, Unit 1: Anatomy of Neurons and Glial Cells Check for Understanding 1.1	40	
1/20	Wednesday			
1/21	Thursday	1.1 Anatomy of Neurons and Glial Cells Homework	40	
1/22	Friday			
1/25	Monday	Module 1, Unit 2: Anatomy of the Central and		

		Peripheral Nervous System		
1/26	Tuesday	Check for Understanding 1.2	40	
1/27	Wednesday			
1/28	Thursday	1.2 Anatomy of the Central & Peripheral Nervous Systems Homework	40	
1/29	Friday			
2/1	Monday	Module 1, Unit 3: Anatomy of the Brain		
2/2	Tuesday	Check for Understanding 1.3	40	
2/3	Wednesday			
2/4	Thursday	1.3 Anatomy of the Brain Homework	40	
2/5	Friday			
2/8	Monday	Module 2, Unit 1: Anatomy of the Integumentary & Skeletal Systems		
2/9	Tuesday	Check for Understanding 2.1	40	
2/10	Wednesday			
2/11	Thursday	2.1 Anatomy of the Integumentary & Skeletal Systems Homework	40	
2/12	Friday			
2/15	Monday	Module 2, Unit 2: Anatomy of the Muscular System		
2/16	Tuesday	Check for Understanding 2.2	40	
2/17	Wednesday			
2/18	Thursday	2.2 Anatomy of Muscular System Homework	40	
2/19	Friday			
2/22	Monday	Module 3, Unit 1: Anatomy of the Heart		
2/23	Tuesday	Check for Understanding 3.1	40	
2/24	Wednesday			
2/25	Thursday	3.1 Anatomy of the Heart & Blood Homework	40	
2/26	Friday			
2/29	Monday	Module 3, Unit 2: Anatomy of Blood Vessels		
3/1	Tuesday	Check for Understanding 3.2	40	
3/2	Wednesday			

3/3	Thursday	3.2 Anatomy of Blood Vessels Homework	40	
3/4	Friday			
3/7	Monday	Module 3, Unit 3: Anatomy of the Respiratory System		
3/8	Tuesday	Check for Understanding 3.3	40	
3/9	Wednesday			
3/10	Thursday	3.3 Anatomy of the Respiratory System Homework	40	
3/11	Friday			
3/14	Monday	SPRING BREAK		
3/15	Tuesday	SPRING BREAK		
3/16	Wednesday	SPRING BREAK		
3/17	Thursday	SPRING BREAK		
3/18	Friday	SPRING BREAK		
3/21	Monday	Module 4, Unit 1: Anatomy of the Endocrine System- Part 1		
3/22	Tuesday	Check for Understanding 4.1	40	
3/23	Wednesday			
3/24	Thursday			
3/25	Friday			
3/28	Monday	Module 4, Unit 2: Anatomy of the Endocrine System- Part 2		
3/29	Tuesday	Check for Understanding 4.2	40	
3/30	Wednesday			
3/31	Thursday	4.1 & 4.2: Anatomy of the Endocrine Systme Homework	40	
4/1	Friday			
4/4	Monday	Module 4, Unit 3: Anatomy of the Male and Female Reproductive Systems		
4/5	Tuesday	Check for Understanding 4.3	40	
4/6	Wednesday			

4/7	Thursday	4.3: Anatomy of the Male and Female Reproductive Systems Homework	40	
4/8	Friday			
4/11	Monday	Module 5, Unit 1: Body Fluids		
4/12	Tuesday	Check for Understanding 5.1	40	
4/13	Wednesday			
4/14	Thursday	5.1: Body Fluids Homework	40	
4/15	Friday			
4/18	Monday	Module 5, Unit 2: Anatomy of the Urinary and Renal Systems		
4/19	Tuesday	Check for Understanding 5.2	40	
4/20	Wednesday			
4/21	Thursday	5.2: Anatomy of the Urinary and Renal Systems Homework	40	
4/22	Friday			
4/25	Monday	Module 6, Unit 1: Anatomy of the Gastrointestinal System		
4/26	Tuesday	Check for Understanding 6.1	40	
4/27	Wednesday			
4/28	Thursday	6.1: Anatomy of the Gastrointestinal System Homework	40	
4/29	Friday			
5/2	Monday	Module 6, Unit 2: Nutrition and Life Cylce		
5/3	Tuesday	Check for Understanding 6.2	40	
5/4	Wednesday			
5/5	Thursday	6.2: Nutrition and the life cycle homework	40	
5/6-5/12	Friday	**FINAL EXAM**	800	
5/14	Saturday			
Total			**2000**	

UTRGV POLICY STATEMENTS

Students With Disabilities:
If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time. Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu. Edinburg Campus: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.

Mandatory Course Evaluation Period:
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades.

Attendance:
Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV's attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

Scholastic Integrity:
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

Sexual Harassment, Discrimination, And Violence:
In accordance with UT System regulations, your instructor is a "responsible employee" for reporting purposes under Title IX regulations and so must report any instance, occurring during a student's time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual

harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

Course Drops:
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the "3-peat rule" and the "6-drop" rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.