

MISSION SYLLABUS

Mission 4—Immunology and Microbiology

BS in Biomedical Sciences

Mission 4—Immunology and Microbiology

Mission Equivalency: 1106 & 1107 3BR&4BR

SPRING 2017

Working document

***This syllabus represents the current mission 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.*

Announcements and instructions from the professor delivered by the blackboard will override instructions from TEx.

TEXTBOOK AND/OR RESOURCE MATERIAL

All required content for this mission is paid for via mission 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 website.
<http://www2.saplinglearning.com/introductory-biology>. Accessed May 6, 2016.
- Boundless. Boundless website.
<https://www.boundless.com/microbiology/textbooks/boundless-microbiology-textbook/>.
Accessed August 3, 2016.
- Zabriskie JB. *Essentials of Clinical Immunology*. New York, NY; Cambridge University Press; 2009.
- Biology. OpenStax College website. <https://openstaxcollege.org/textbooks/biology>.
Accessed May 6, 2016.
- Biology. Khan Academy website. <https://www.khanacademy.org/science/biology>. Accessed May 6, 2016.

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MISSION 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 necessary to contribute to the health and well being of many members of your community. You will also learn what the professionals in the field know about the inner workings of the human body and medicine. It will be a fascinating trip through one of the fastest growing areas of scientific study. In this mission, you will study:

- Immunology
 - o Role of the Immune System and Innate Defense
 - o Adaptive Immunity–Antigen Recognition and Adaptive Immune Response
- Microbiology
 - o Life in a Single Cell–Prokaryotes
 - o Eukaryotes and Acellular Entities

Prerequisite:

Successful completion (grade C or higher) of Mission 1 and 2.

LEARNING OBJECTIVES/OUTCOMES FOR THE MISSION

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

- 1.B: Apply knowledge of biology/immunology in defining and discussing basic biomedically-related science concepts. (Level 2)
- 2.B: Critically examine the science behind disease prevention and health promotion, especially as related to common chronic conditions. (Level 1)
- 4.A: Describe the social and environmental determinants of health and their influences on healthcare and biomedical research and discuss related impacts on individuals, communities, and populations - regionally, nationally and globally. (Level 1)
- 9.A: Demonstrate a desire to help others and sensitivity to others' needs and feelings (Level 2)
- 9.B: Demonstrate knowledge of socio-cultural factors that affect interaction and behaviors; multiple dimensions of diversity; strategies for interacting effectively with people from diverse backgrounds. (Level 1)

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- 10.A: Behave in an honest and ethical manner; cultivate personal and academic integrity and adhere to ethical principles and follow rules and procedures. (Level 2)
- 10.B: Consistently fulfill obligations in a timely and satisfactory manner; take responsibility for personal actions and performance. (Level 2)
- 10.C: Set goals for continuous improvement and for learning new concepts and skills; solicit and respond appropriately to feedback. (Level 2)
- 10.D: Appropriately utilize campus, community, and other resources to help one succeed 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.

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

Checks for Understanding (CFUs) are quiz-like questions with dynamic feedback so you and your instructors can monitor your progress and understanding of key concepts. These key concepts are foundational and key to your success in the biomedical sciences. *You may receive up to 5% of your total grade.*

Contextualized Performance-based Assessment (PBA/iRAT) activities require you to apply content and concepts you have learned to aspects of human biology and health. **Quizzes** consists of questions with dynamic feedback designed to determine your knowledge and skills such as problem solving. Some of these assessments will be done in class and they will be graded by your instructor. *In this Mission, you can earn up to 40% of your total grade.*

Coach Study Hours (CSH) are included as part of your attendance and participation for the mission. You can earn up 5% of your total grade.

Midterm is a comprehensive exam that covers all the content learned in Module 1, Units 1 and 2, and Module 2, Units 1 and 2. *You may receive on the midterm 20% of your total grade.*

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 TEx. *You can earn up to 30% of your total grade.*

No retake of the End of Mission Exam will be allowed.

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Point conversion for grade

A	90-100%
B	80-90%
C	70-80%
D	60-70%
F	Below 60%

STAYING ON TRACK

The TEx app on your iPad and the Blackboard announcements 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, 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 Fall 2016 include:

- March 13- 18** Spring Break
- April 13** Drop/ Withdrawal Deadline
- April 14 – April 15** Easter Holiday. No classes.
- May 4** Study Day; no classes
- May 5- 11** Final Exams

Note: Face-to-face and CSH days and times may vary.

Date	Day	Activity	Contact
03/06	Week 1	Module 1 Introduction to Microbiology and Immunology	

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	Mon	Learn about Unit 1 Microbiology	
	Tue		
	Wed		
03/09	Thur	CFU 1 is due at 11pm	
03/10	Fri	Face-to-face PBA/iRAT	Professor
* Dates/ Day varies		Q&A	IF
03/20	Week 2	Module 1 Introduction to Microbiology and Immunology	
	Mon	Learn about Unit 2 Immunology	
	Tue		
	Wed		
03/23	Thur	CFU 2 is due at 11pm	
03/24	Fri	Face-to-face PBA/iRAT	Professor
* Dates/ Day varies		Q&A CSH	IF
03/27	Week 3	Module 2 Viral structure and adaptive immunity	
	Mon	Learn about Unit 1 Viral structure	
	Tue		
03/29	Wed		
03/30	Thur	CFU 3 is due at 11pm	
03/31	Fri	Face-to-face PBA/iRAT	Professor
* Dates/ Day varies		Q&A CSH	IF
04/03	Week 4	Module 2 Viral structure and adaptive immunity	
	Mon	Learn about Unit 2 Role of adaptive immunity	

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	Tue		
	Wed		
04/06	Thur	CFU 4 is due at 11pm	
04/07	Fri	Face-to-face PBA/iRAT	Professor
* Dates/ Day varies		Q&A CSH	IF
04/10	Week 5	Module 3 Parasites and Immune system	
	Mon	Learn about Unit 1 Parasites	
	Tue		
	Wed		
04/13	Thur	CFU 5 is due at 11pm	
04/14	Fri	No class	
* Dates/ Day varies		Q&A SLM/CSH	IF
04/17	Week 6	Midterm	
	Mon		
	Tue		
	Wed		
04/20	Thur		
04/21	Fri	Midterm/ Face-to-face	Professor
04/24	Week 7	Module 3 Parasites and Immune system	
	Mon	Learn about Unit 2 Immune system in action	
04/27	Thur	CFU 6 is due at 11pm	
04/28	Fri	Face-to-face PBA/iRAT	Professor
05/05- 05/11	Week 8	Final exam week	
* Dates/ Day varies		Final	Professor

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UTRGV POLICY STATEMENTS

STUDENTS WITH DISABILITIES: Required on all syllabi. Do not modify.

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 ability@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 ability@utrgv.edu.

Mandatory Mission Evaluation Period:

Students are required to complete an ONLINE evaluation of this mission, 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 mission 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 mission 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

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harassment about which she/he becomes aware during this mission 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 missions during their undergraduate career. Missions dropped at other Texas public higher education institutions will count toward the six-mission drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.