

**THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY**

**BMED 1109-01: Introduction to Evolutionary Medicine**

**SYLLABUS – SPRING 2016**

**INSTRUCTOR & OFFICE HOURS:**

Dr. Hongxing Lu

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**OFFICE HOURS:**

M W 10 AM – 12 PM

**MEETING TIMES AND LOCATION:**

W 9:00AM- 10:40 PM

Biomed Research Prof Bldg # 99 1.207

Brownsville Campus,

**TEXTBOOK AND/OR RESOURCE MATERIAL:**

Evolutionary Medicine 1st Edition (2015)

By Stephen C. Stearns, Ruslan Medzhitov

ISBN-10: 1605352608

ISBN-13: 978-1605352602

**COURSE DESCRIPTION:**

Human diseases have both proximate (mechanistic) and ultimate (evolutionary) causes. The common medical approach has been to ignore the ultimate causes and, instead, focus on the proximate. Thus, we may understand the physiological processes but not the evolutionary significance. In this course, we will focus on the evolutionary causes of disease. The primary goal of this course is to teach research skills while sharpening understanding and application of Darwinian thought. To this end, students will generate hypotheses, collect and analyze data to test these hypotheses, and present the information in both oral and manuscript form

**PRE-REQUISITES/ CO-REQUISITES:**

Consent of advisor

**COURSE LEARNING OUTCOMES:**

This course aims to provide students with a basic understanding of

1. Be able to search the literature to find publications in evolution and medicine.
2. Be able to describe how an evolutionary perspective can help a clinician or researcher
3. Learn to critique and evaluate evolutionary medicine hypotheses.
4. Recognize evolutionary problems in medicine
5. Understand the categories (subtypes) of evolutionary medicine hypotheses.
6. Learn to develop a novel hypothesis in evolutionary medicine.

**GRADING POLICIES: (PASSING GRADE FOR THIS COURSE IS C)**

		Score Range	Grade
Attendance	20%	90-100	A

Presentation	20%	80-89	B
Writing projects	60%	70-79	C
		60-69	D
		<60	F

### **COURSE IMPORTANT DATES:**

The UTRGV academic calendar can be found at <http://my.utrgv.edu> (Important dates for Spring 2016):

March 21	Classes begin
May 5th	Study day
May 6-12	Final Exams
May 14th	Commencement

### **CALENDAR OF ACTIVITIES**

<b>WEEK</b>	<b>DATE</b>	<b>TOPICS</b>	<b>Reading Assignments (Done Before Class)</b>
1	3/23	Introduction	
2	3/30	Bacteria and Antibiotics	Writing 1
3	4/6	Fever	Writing 2
4	4/13	Life history theory and the evolution of aging	Writing 3
5	4/20	Evolution Cancer	Writing 4
6	4/27	Evolution and Obesity	Writing 5
7	5/4	Evolution and Diabetes	Writing 6

### **ATTENDANCE POLICY:**

Attendance is mandatory. Any disrespect will imply a reduction of 10% of the final grade.

There will be no makeup assignments given regardless of circumstance for this course.

### **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](mailto: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](mailto: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. Online evaluations will be available May , 2016. 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](http://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.