

THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY
College of Health Affairs
Department of Health & Biomedical Sciences

BMED 1104 *Intro to Molecular Biology* – Fall 2015

Instructor	Ms. Ifelayo Adefuye
Office/Phone	TBA
Email	Ifelayo.adebye@utrgv.edu
Class Schedule	S 10:50am – 12.30pm, BRHB. 1.207 (BMED 1104-08)
Office Hours	M - W 2:00 pm – 4:00 pm or by appointment

Textbook and/or Resource Material

Principles of Biology – Nature Education (e-book), 1st edition.
You may already have this book from one of the other BMED courses.
<http://www.nature.com/principles/student-catalog>
Chapters of this text that are used for this class will be explained in class

Format:

Active learning, lecture and discussions.

Course Description

This course will be an introduction to molecular biology as it is needed to understand the human body in health and disease. The course will introduce DNA and RNA, their structure and function, and how cells synthesize and replicate these macromolecules. The information flow from DNA (genes) to protein, transcription, translation and gene expression will be explained. Chromosomal structure and mutations will be studied. Furthermore, molecular techniques used to study the molecular biology of humans or their pathogens are introduced.

Learning Objectives/Outcomes for the Course

At the end of this course, students that successfully complete all course objectives are expected to:

1. Have improved critical thinking skills applied to biomedicine and be able to interpret and draw conclusions from hypothetical scenarios
2. Be familiar with the terminology of the field, including names of important molecules and distinguish their roles within the cell
3. Be capable of understanding and applying the scientific method on experimental scenarios pertaining to the course
4. Read and understand scientific literature in the field
5. Link concepts learned to other disciplines within the biomedical sciences
6. Communicate, understand, and apply the information learned throughout the course

Class Schedule* Subjected to changes*

Day	Date	Activities
Sat	09/05/2015	Introduction to Nucleic Acids, DNA and RNA
Sat	09/12/2015	DNA synthesis and repair, Mutations with examples. Gene, chromosome and genome structure
Sat	09/19/2015	How DNA stores information. Transcription and translation.
Sat	09/26/2015	Analyzing molecular data, cloning and engineering genes
Fri	10/02/2015	Midterm exam
Sat	10/03/2015	prokaryotic gene expression
Sat	10/10/2015	eukaryotic gene expression
Sat	10/17/2015	other molecular elements, non-coding RNA, transposons etc.
Fri	10/23/2015	Final Exam

Assessment

Midterm term -20%

Final Exam -20%

Attendance- 10%

Quiz -10%

4 assignments – 40% (10% for each assignment)

Students are expected to prepare for class and follow instructions for posted assignments or readings. Students have to come on time for the exams. As soon as the first student turns in an exam no new exams will be handed out. Students cannot leave the class room during the exams and are not allowed to use ANY electronic devices or written materials such as cell phones, ipads, computers, tablets, ipods, books, notes etc. The instructor will inform students when a calculator can be used. No late work will be accepted for any assignments. Not following those rules will result in 0 points or be dropped from the course. Students are required to frequently check the course page on blackboard for any updates regarding exams and course content. No additional extra credit projects, papers etc. will be accepted as a substitute at the end of the semester. Cell phones should be turned off and completely packed away during class times and exams.

Grading Policies

Grade	Range %	Grade Points
A+	98-100	4.00
A	93-97.9	4.00
A-	90-92.9	3.67

B+	87-89.9	3.33
B	83-86.9	3.00
B-	80-82.9	2.67
C+	77-79.9	2.33
C	70-76.9	2.00
D	60-69.9	1.00
F	59 and Under	0.00

Attendance Policy:

It is required that you attend all classes, midterm and final exam and class exercises. There will be no make-ups for quizzes, midterm exam or assignments. The final can only be made up if a substantial excuse (documented from doctor etc) is provided. It is expected that you show up for class on time since no exams or assignments will be handed out after the first person has finished.

Calendar of Activities

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 2015 include:

August 31	Classes Begin
September 7	Labor Day Holiday; university closed
September 16	Last day to drop a class before it appears on the transcript and counts toward the "6-drop" limit. Last day to receive a 100% refund for dropped classes (other policies apply when a student is withdrawing from all classes).
November 18	Drop/Withdrawal Deadline; last day for students to drop the course and receive a DR grade. After this date, students will be assigned a letter grade for the course that will count on the GPA.
November 26-27	Thanksgiving Holiday; university closed
December 10	Study Day; no classes
December 11-17	Final Exams

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. Online evaluations will be available Nov. 18 – Dec. 9, 2015. 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.