Course title and number: **Independent Research IV**  
BMED 3224-13R

Instructor: Md Saydur Rahman, Ph.D. - Assistant Professor  
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Office Phone: 956-882-5041  
Office Hours: Tue: 8:00-11:30 am, 1:00-230 pm  
Email: md.rahman@utrgv.edu

Contract with Instructor: If you have any questions (e.g., research, assignment, grades, etc.) to the content of this course, please contact me via email (please use your UTRVG email), phone or come to my office. I will be most happy to assist you anytime (time permitting); however, it may be easiest to contact me during office hours.

**This syllabus represents the current course plans and objectives. As we go through the semester, those plans may need to be change to enhance the class learning opportunity. Any changes made will be updated in the syllabus and communicated to the students.**

### COURSE INFORMATION

**Materials – Journals, Readings, Supplementary Readings:**

*Research materials*: No textbook is required, internet resources and research materials (research protocol, research papers) will be provided by instructor.  
*Readings*: Supplemental reading materials or references will be provided.

**Course Description**
The students will be introduced to topics on different aspects of research and taught how to design and execute a project and how to analyze and present the data obtained.

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

- **5A**: Describe the basic principles of scientific method including common research approaches, methods and designs.
- **5B**: Review and evaluate prior research and related literature, and defend a rationale for which sources should be referenced.
- **5C**: Identify and develop biomedical science questions as they emerge in case-based, lab and clinical activities and identify and apply relevant evidence to answer those questions.
- **5D**: Engage in scholarly inquiry, and contribute to the discovery and dissemination of biomedical knowledge.
- **6B**: Utilize mathematical, algorithmic, statistical, and logic tools to explain causes and effects and to solve problems.
- **6D**: Identify the bias, limitations and pitfalls of biomedical research and be able to take these into account when drawing conclusions from a given research study.
- **7A**: Use information technology for gathering and processing biomedical or scientific information; managing information; and assimilating evidence from scientific studies.
- **7B**: Identify and appraise sources of scientific and biomedical information, assimilate evidence from the literature and apply that evidence to the resolution of knowledge gaps.
- **9.A**: Demonstrate a desire to help others and sensitivity to others’ needs and feelings.
- **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.
- **9.C**: Demonstrate ability to work collaboratively with others to achieve shared goals.
• 10.A: Behave in an honest and ethical manner; cultivate personal and academic integrity and adhere to ethical principles and follow rules and procedures.
• 10.B: Consistently fulfill obligations in a timely and satisfactory manner; take responsibility for personal actions and performance
• 10.C: Set goals for continuous improvement and for learning new concepts and skills; solicit and respond appropriately to feedback
• 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.
• 11A: Effectively and confidently convey information to others through powerful written communication in academic, professional and informal communication settings
• 11.B: Analyze and interpret a variety of text and other media, using a range of theoretical approaches and disciplinary modes of inquiry
• 12.A: Effectively and confidently convey information to others through oral communication in academic, professional and informal communication settings.

**Departmental Learning Outcomes**

Departmental learning outcomes that are met by this course are:
• Students will be able to demonstrate a substantial factual knowledge base and a grasp of the major concepts of biomedical research and able to relate them to the medical field
• Students will perform satisfactorily in standardized graduate examinations
• Students will be able to research a topic using standard electronic and non-electronic methods
• Students will be able to communicate complex scientific ideas, concepts, and theories by oral and written means
• Students will appreciate the role of research in the biological, biomedical, and clinical sciences

**Course Pre-Requisites, Co-Requisites, and/or Other Restrictions**
• Enrollment in this course requires completion of BMED 3121 and 3122 for BMED 3223
• Enrollment in this course requires completion of BMED 3121, 3122 and 3223 for BMED 3224

**Grading Policy/Assessment**

<table>
<thead>
<tr>
<th>Assignment Type</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaged Scholar Symposium Abstract</td>
<td>20%</td>
</tr>
<tr>
<td>Engaged Scholar Symposium Poster Presentation</td>
<td>30%</td>
</tr>
<tr>
<td>Lab Meeting Oral Presentation</td>
<td>20%</td>
</tr>
<tr>
<td>Final Written Report (Journal article format)</td>
<td>30%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
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**Grading Policies:**
The following scale is adhered to strictly.

- 60 – 100% = P
- <60.0% = F
Calendar of Activities:
The UTRGV academic calendar can be found at [http://my.utrgv.edu](http://my.utrgv.edu) at the bottom of the screen, prior to login. Important dates for Spring 2019 include:

- Jan. 14 (Mon.) Spring classes begin
- Jan. 17 (Thurs.) Last day to add or register for Spring classes
- Jan. 18 (Fri.) Last day to withdraw (drop all classes) and receive an 80% refund
- Jan. 21 (Mon.) Martin Luther King Jr. Holiday. No classes.
- Jan. 28 (Mon.) Last day to withdraw (drop all classes) and receive a 70% refund
- Feb. 4 (Mon.) Last day to withdraw (drop all classes) and receive a 50% refund
- Jan. 30 (Wed.) Census Day (last day to drop without it appearing on the transcript)
- Feb. 11 (Mon.) Last day to withdraw (drop all Spring classes) and receive a 25% refund
- Mar. 11 – Mar. 16 (Mon. – Sat.) Spring Break. No classes.
- April 10 (Wed.) Last day to drop a class (grade of DR) or withdraw (grade of W)
- April 19 – April 20 (Fri. – Sat.) Easter Holiday. No classes.
- May 2 (Thurs.) Study Day. No classes.
- May 3 – 9 (Fri. – Thurs.) Final Exams May 9 (Thurs.) Spring classes end; Official last day of the term
- May 10 - May 11 (Fri. – Sat.) Commencement Exercises
- May 13 (Mon.) Grades Due at 3 p.m.

COURSE REQUIREMENTS

Instructional/Research Methods:
Research in laboratory, field work, lecture, discussion on published research paper, and PowerPoint presentations.

Activities:
*Laboratory/Field Research, and Homework Assignments:* Students are required to attend laboratory/field research work in every week at least 8 hours depend upon research work. Homework may be assigned with specific research topics as well as a due date and time. Late homework will not be accepted. The value (percentage of your final grade) of each homework assignment will be set at the time of the assignment. I reserve the right to modify the schedule and assignments.

Expectations:
- Be punctual and attend in lab/research discussions.
- Be attentive and participate in lab/research discussions.
- Be respectful to lab mates.
- Complete assignments on time.
- Achieve an average grade of ≥60% according to the grading basis (please see below)

COURSE SPECIFIC PROCEDURES AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures:
*Responsible Use of Technology Resources:* It is expected that all students will only use laptop computer, iPad, and other technology in class. Answering a cell phone, listening to music, texting, or using a laptop computer for unrelated matters to the course may be grounds for dismissal from class and/or other penalties. Students are not allowed to use video, nor audio recording devices of any kind during class time without prior consent of the instructor.

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.

Pregnancy, Pregnancy-related, and Parenting Accommodations
Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) are encouraged to contact Student Accessibility Services for additional information and to request accommodations.

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. 15 – Dec. 5. 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.
Student Service:
Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Students Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email (ucentral@utrgv.edu) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions. Students seeking academic help in their studies can use university resources in addition to an instructor’s office hours. University Resources include the Learning Center, Writing Center, Advising Center and Career Center. The centers provide services such as tutoring, writing help, critical thinking, study skills, degree planning, and student employment. Locations are:
- Learning center: BSTUN 2.10 (Brownsville) or ELCTR 100 (Edinburg)
- Writing center: BLIBR 3.206 (Brownsville) or ESTAC 3.119 (Edinburg)
- Advising center: BMAIN 1.400 (Brownsville) or ESWKH 101 (Edinburg)
- Career center: BCRTZ 129 (Brownsville) or ESSBL 2.101 (Edinburg)

I have read and understand the information and UTRVG policies in this syllabus and will abide by those policies. YES___, NO____.
If your answer is NO, please explain why or ask any questions:

Your name: __________________________________________________________, Student ID: _____________________________

Your signature:______________________________________________________, Date: ____________________________