OST 599 – Biomedical Research
Spring Semester - 2022
Updated: 10.15.21 PR

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Notice to Students: Although Elective syllabi at MSUCOM have a consistent format; vitally important details differ by Elective. For this reason, you must read the syllabus thoroughly at the onset of each elective to understand what educational activities will be provided and what is expected of you.
Section 1 – Course Information

Elective Description
Biomedical Research is a 2-3 credit hour course that provides students with biomedical research experience. Directed research enables medical students to test and compare different theories and approaches. It will allow medical students to explore different methods in order to determine better modalities for patient care and therapy. Students are enrolled in 3 credits (8-10 hours research per week for a semester) or 2 credits (6-4 hours research per week for a semester).

Course Goals
1. Provide biomedical research experience
2. Basic Science, translational, clinical, bioinformatics, epidemiology or public health research may be pursued
3. Medical research topic is arranged with a basic scientist or clinician researcher, Research Mentor

Course Coordinator
(Note - Preferred method of contact is shown in italics)
Name: Furqan B. Irfan, MBBS (MD), PhD
Phone: (517) 353-7785
Email: irfanfur@msu.edu (preferred method)
Address: Room 325A, West Fee Hall, 909 Wilson Road, East Lansing, MI 48824

Staff or Student Coordinator
Name: Michelle Volker, CHRS, CFMLAS
Phone: 517-884-3827
Email: volkerm@msu.edu (preferred method)
Address: 909 Wilson Rd, 317 West Fee Hall, East Lansing, MI 48824

Curriculum Assistant (CA)
Name: Patty Roberts
Phone: 517-204-4803 (cell)
Email: robe1204@msu.edu (preferred method)
Address: 909 Wilson Rd, 317 West Fee Hall, East Lansing, MI 48824

Instructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furqan B. Irfan, MBBS (MD), PhD</td>
<td><a href="mailto:irfanfur@msu.edu">irfanfur@msu.edu</a></td>
<td>(517) 353-7785</td>
<td>EL, DMC</td>
</tr>
<tr>
<td>Carolina Restini, PhD</td>
<td><a href="mailto:restinic@msu.edu">restinic@msu.edu</a></td>
<td>(517) 353-7145</td>
<td>DMC, MUC</td>
</tr>
<tr>
<td>Janice Schwartz, PhD</td>
<td><a href="mailto:schwa317@msu.edu">schwa317@msu.edu</a></td>
<td>(517) 884-9671</td>
<td>DMC</td>
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Lines of Communication
- For administrative aspects of the Course: contact the course coordinator.
- For content questions relating to a specific lecture or topic: contact the faculty presenter for that specific portion of the course or your SE MI on-site instructor.
For absences/missed exams (see excused absence information below)

Office Hours
Questions concerning may be discussed individually by making an appointment with the Course Coordinator, Furqan Irfan, Room 325A, West Fee Hall, 909 Wilson Road, East Lansing, MI 48824, by phone at (517) 353-7785 or via e-mail: irfanfur@msu.edu. The course coordinator is generally available M-F, 8 am - 5 pm or by appointment.

Textbooks and Reference Materials

Required
- None

Recommended
- None

Optional

Elective Schedule
- This elective is presented for a semester. General scheduling for the educational activities of this elective are as follows:

<table>
<thead>
<tr>
<th>Day/Date</th>
<th>Times (if applicable)</th>
<th>Required Activities</th>
<th>Specific Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be determined</td>
<td>Days and Times determined by Research Mentor</td>
<td></td>
<td></td>
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</table>

Required Exams/Assessments

The activities required for successful completion of this elective are listed below:

<table>
<thead>
<tr>
<th>Required (if applicable)</th>
<th>Projected Points</th>
<th>Material to be Covered</th>
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<tr>
<td>Student must provide a report on the research project at the end of the semester by email to: <a href="mailto:COM.research@msu.edu">COM.research@msu.edu</a></td>
<td>Provide a narrative report of 2-3 paragraphs indicating what you did in qualitative and quantitative terms, e.g., “I examined 250 charts of previous patients that had condition XX and recorded how many of them had a high score on Y, but exhibited a low score on Z, etc.” Indicate the results and relevance of these findings to the hypothesis that the Investigator is addressing.</td>
<td></td>
</tr>
<tr>
<td>Research Mentor must provide a Student Evaluation at the end of the semester by email to:</td>
<td>Did the student actively participate in the research project you assigned him/her? Did they carry out the research in as you expected? Did they put in the hours they had agreed to? Were you satisfied with the student?</td>
<td></td>
</tr>
</tbody>
</table>
COM.research@msu.edu  Based on this experience, are you willing to have other medical students participate in short-term projects with you?

Required Proctoring Arrangements
None are applicable to this elective.

Elective Grades

- **P-Pass**—means that credit is granted and that the student achieved a level of performance judged to be satisfactory by the instructor. To obtain a “P” grade for this course, a student must have completed the elective and submitted a satisfactory student research report and student evaluation by the Research Mentor.

- **N-No Grade**—means that no credit is granted and that the student did not achieve a level of performance judged to be satisfactory by the instructor. A student who does not complete the elective and/or fails to submit a satisfactory student research report and student evaluation by the Research Mentor will receive an “N” grade.

- Remediation - Since all of the Electives in the MSUCOM curriculum are optional, Students are not required to remediate the elective if an “N” grade is received.

Student Evaluation of the Course
We want your feedback on how to improve this course.

- Informal Feedback: Feel free to approach the Course Coordinator, Dr. Irfan, or any of the other course faculty with your reactions and suggestions. Or write out your comments and email them to the Course Coordinator or Faculty. From time to time, we may also convene focus groups of students, as an additional way to elicit your opinions and suggestions.

- Formal Evaluation (if applicable): In addition to the above, we ask every student in the class to complete formal on-line Elective evaluation upon conclusion of the Elective. Student Elective evaluations are highly recommended [or required]. Student feedback provides Elective Coordinators with valuable information regarding their performance, the performance of their instructors and the quality of the Elective. The information gained from these evaluations is used to continuously improve future offerings of this Elective.
Section 2 – Policies

Please refer to the MSUCOM Student Handbook for these and other policies.

Academic Honesty and Professionalism

Every student is responsible for their behavior and is expected to adhere to all MSU and MSUCOM policies of academic honesty and professionalism, as outlined in the MSUCOM Student Handbook and the MSU Medical Student Rights and Responsibilities. These documents may be found on the MSUCOM website. Additional guidance on academic integrity may be found on the MSU Ombudsperson’s website at https://ombud.msu.edu/resources-self-help/academic-integrity.

Incidents of academic dishonesty or professional misconduct will be addressed by the faculty, administration, or staff; such action may include, but is not limited to: giving a failing grade, referring a student for judicial review, directing the student to the Associate Dean of Medical Education, evaluation by the Committee on Student Evaluation, and other actions outlined in the Medical Student Rights and Responsibilities document.

Types of Class Sessions

MSUCOM designates lectures and other class sessions by their delivery method. While additional terms may be used in a specific course, the following will provide general guidance to the type of session:

- Live or livestream lecture: broadcast at a designated time; intended to be viewed synchronously
- Online Lecture: recorded content, may be viewed asynchronously
- Webinar: more interactive session where student participation is expected
- Lab: may refer to on-site clinical skills training or online lab session; see details

Changes to Course Schedule or Requirements

Due to external circumstances, the course requirements published in the course syllabus and/or course schedule may be subject to change. Timely notification Communication regarding changes will be provided to enrolled students via the course D2L site and/or email. Any changes made will consider the MSU Code of Teaching Responsibility and the MSU Medical Students Rights and Responsibilities.

Mandatory and Optional Class Sessions

All lectures and other class sessions are considered to be integral to the course, and students are expected to attend, view, or participate in each session. Some sessions are designated as “mandatory” in that attendance at the session on the scheduled date and time is required. Depending on the course, a student may earn points for attending or participating in a mandatory session or may lose points for failing to attend or participate. Availability of make-up points for missed sessions is at the discretion of the course coordinator. Optional class sessions are offered by faculty to assist students in learning or reviewing course content.

Absences from Mandatory and Examinations/Assessments

It is the responsibility of the student to know which class sessions are deemed as mandatory and comply with the MSUCOM policy regarding absences from mandatory sessions and examinations. This policy may be found in the MSUCOM Student Handbook on the MSUCOM website. Requests for an excused absence must be submitted via the student portal.

Computer-Based Testing

It is the responsibility of each student to know and comply with the MSUCOM policy on computer-based testing. This policy may be found in the MSUCOM Student Handbook on the MSUCOM website.

Administration of quizzes, examinations, and other assessments may be self-proctored, virtual proctored, or classroom proctored. Regardless of the proctoring method, you are expected to take the exam in a quiet,
private setting. Just like in a proctored exam, you are not to access notes, textbooks, references, your phone, or other materials, and you are not to interact with fellow students or others. Remember that integrity is defined as what you do when no one is looking.

You are also expected to not record, photograph, take screen shots, make notes of, or otherwise attempt to make a copy of any exam item for any purpose, including your personal use. A student who is discovered to have cheated or breached exam security will be subject to formal disciplinary action, up to and including dismissal from MSUCOM.

If you have concerns or evidence of an exam security breach on this or any exam, you may report that to an MSUCOM administrator or through the online concern form.

**Medical Student Rights and Responsibilities**

If problems arise between instructor and student, both should attempt to resolve them by informal, direct discussions. If the problems remain unsolved, the Associate Dean for Medical Education and/or the MSU Ombudsperson may be consulted. The MSU Medical Student Rights and Responsibilities (MSRR) document defines processes for additional steps, including submission of a formal grievance. The MSSR may be found in the MSUCOM Student Handbook and online at splife.studentlife.msu.edu.

**iClicker Reef/(iClicker Student) Policy**

It is your responsibility to know and comply with the iClicker Reef (iClicker Student) Policy. This policy may be found in the MSUCOM Student Handbook. If you forget your device or if it does not work, for whatever reason, no make-up experiences will be provided, and no points will be given.

If iClicker Reef/Iclicker Student is used to take attendance for an on-campus event, you will be expected to arrive to the physical location on time and to stay for the duration of the assigned activity. If iClicker Polling is used to take attendance for an online event, you will be expected to start the session at the scheduled time and participate for the duration of the assigned activity.

As a matter of professionalism, please note that under no circumstances should you provide access to your iClicker Reef/Student account to another student by sharing your device and/or account login, nor should you accept another student’s device or login credentials to access iClicker Polling on their behalf. Answering questions or checking in for attendance on behalf of another student by using their device or account is considered to be academic dishonesty and may result in disciplinary action up to and including dismissal from the college.

**Remediation**

The MSUCOM Policy for Retention, Promotion and Graduation requires successful completion of each required course to progress in the curriculum. Remediation is not available for preclerkship electives.

**Student Safety and Well-being**

The MSUCOM website and Student Handbook provide information on student safety, campus security, access to medical care and counseling services, and to policies on injuries and exposures. If you have an injury or acute illness on campus, an incident report should be completed. The form is available on the MSUCOM intranet or from Academic Programs.

**Academic Support Resources at MSUCOM**

As a way to acclimate you to the curriculum at MSUCOM, we have created a program called On Target: [https://michiganstate.sharepoint.com/sites/OnTargetforAcademicSuccess](https://michiganstate.sharepoint.com/sites/OnTargetforAcademicSuccess)
On this site you will find semester roadmaps which gives a general overview of each semester, tools needed to be successful in the curriculum and targeted resources for your unique learning situation. In each semester’s road map, you will also find course expectations, tips for success, potential trouble spots, longitudinal course integration, and specific course study guides.

**Requests for Accommodations**
Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities (RCPD) at 517-884-7273 or online at rcpd.msu.edu. Once eligibility for an accommodation has been determined, you may be issued a Verified Individualized Services and Accommodation (VISA) form. Each VISA includes an expiration date; to request an accommodation, you must have an active VISA. You may work with RCPD to renew a VISA.

During the preclerkship curriculum, the college will help to coordinate accommodations for additional testing time. Provide your VISA to Nancy Thoma, thoman@msu.edu, A333 East Fee Hall at the start of the term and/or at least two weeks prior to the assessment event (test, project, labs, etc.). Requests for accommodations received with less notice will be honored whenever possible. You may choose whether or not you wish to use accommodations for a particular event. For other accommodations, you may also review your VISA with the course coordinator and curriculum assistant assigned to that course.

**Title IX Notifications**
Michigan State University is committed to fostering a culture of caring and respect that is free of relationship violence and sexual misconduct, and to ensuring that all affected individuals have access to services. For information on reporting options, confidential advocacy and support resources, university policies and procedures, or how to make a difference on campus, visit the Title IX website at titleix.msu.edu.

Limits to confidentiality. Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, you should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of MSU community members and others. Instructors must report the following information to other University offices (including the Department of Police and Public Safety):

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child;
- Allegations of sexual assault, relationship violence, stalking, or sexual harassment; and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the MSU Counseling and Psychiatric Services.

**Addendum: Course Schedule**
The course schedule for the current semester will be posted to D2L. Changes to the course schedule will be noted on the class academic calendar (“Google calendar”) and communicated to students via D2L and/or email. The schedule for the most recent offering of this course will be posted on the MSUCOM website under Current Students/Preclerkship Curriculum.