



*Course title	Introduction to Research		
Course number	MHUM822.D		
	<input type="checkbox"/> Year round		
*Term/Course Availability	X Other: Course will be available all year EXCEPT June, July and December 15th to January 14th. No more than 2 students scheduled each week.		
*Number of weeks	2 weeks		
	<input type="checkbox"/> Clinical	<input type="checkbox"/> Non-Clinical	X Research
*Course Type (check all that apply)	<input type="checkbox"/> On-line	<input type="checkbox"/> Self-Directed	<input type="checkbox"/> Longitudinal
	<input type="checkbox"/> International	<input type="checkbox"/> Open to Non-TAM COM Students (VSAS)	<input type="checkbox"/> Other- Click or tap here to enter text.
Additional description on type of course	Students will have flexibility with learning modules, and will be asked for their input on modules to tailor to their needs/interests during the elective. Additionally students will be working towards having a sample protocol ready by the end of the rotation.		
*Meeting times and location	1st Roberts, BUMC, and other buildings depending on project		
	X Matriculation to medical school		
	<input type="checkbox"/> Completion of Pre-clerkship (or basic science) Curriculum		
*Prerequisites	<input type="checkbox"/> Completion of the following clerkships <input type="checkbox"/> EM, <input type="checkbox"/> IM, <input type="checkbox"/> FM, <input type="checkbox"/> OB/GYN <input type="checkbox"/> PED, <input type="checkbox"/> PSY, <input type="checkbox"/> RAD <input type="checkbox"/> SURG, <input type="checkbox"/> Other: Click or tap here to enter text.		
*Enrollment Capacity	2 students		

### Course Description

\*Course Descriptions: An appreciation for Research has high educational value in the development of physicians. The purpose of this elective will be to provide students an opportunity to explore research processes, planning and execution particularly within medicine. Students may or may not be involved in a research project at the commencement of the elective. Thus, the elective can provide assistance to students with an on-going research project reach their project goals and can provide those interested in starting a research project the fundamentals to begin, carry-out, and potentially complete a research project.

The educational objectives reflect the process of research project development. Students will have flexibility with learning modules, and will be asked for their input on modules to tailor to their needs/interests during the elective. The timeframe for completing the modules will be flexible based on their progress in the elective and involvement (or non-involvement) in a research project. Additionally students will be working towards having a sample protocol ready by the end of the rotation.

This experience will teach students an appreciation for critical analysis of the research design and its effects on outcomes in published articles and evidence-based medicine. Additionally, the experience will prepare students with the research skills and techniques to develop an independently designed research project; a requirement or desirable quality many competitive residence programs seek and

thus, the elective will provide an advantage for students when competing for these residency programs.

\*Typical weekly course schedule:

The schedule is fluid and flexible and dependent on the research. Discussion of what the schedule will look like will be completed by the Course Director and/or Mentor.

### Instructor Information

	<b>*Elective Director</b>	<b>Dallas Campus Coordinator</b>	<b>Name</b>	<b>COM-Elective Coordinator</b>
<b>Name</b>	Dr. Tom Cox	Dr. K. Waqiee Ahmed	Jennifer Trimble	
<b>Telephone number</b>	214-820-3349	214-820-7792	214-818-1699	
<b>Email address</b>	<a href="mailto:Thomas.cox@bswhealth.org">Thomas.cox@bswhealth.org</a>	<a href="mailto:Kashif.ahmed@bswhealth.org">Kashif.ahmed@bswhealth.org</a>	<a href="mailto:Jennifer.trimble@bswhealth.org">Jennifer.trimble@bswhealth.org</a>	
<b>Office hours</b>	By Appointment	By Appointment	By Appointment	
<b>Office location</b>	1 <sup>st</sup> Roberts, GME.	1 <sup>st</sup> Roberts, GME.	2 <sup>nd</sup> Wadley Tower, Ste 285	

Additional Teaching Faculty [Click or tap here to enter text.](#)

### \*Learning Outcomes & Objectives

- **Principles and Guidelines for Curriculum Development:** <http://medicine.tamhsc.edu/policies/pdf/curriculum-principles-guidelines.pdf>
- **^Assessment Methods** MUST be used from the following list: <http://medbig.org/curriculum/vocabularies.pdf>
- **COM Medical Education Program Objectives (MEPO's):** <http://medicine.tamhsc.edu/academic-affairs/curriculum/objectives/>

<b>*Objective – The student will be able to:</b>	<b>*Taught (T) and/or Evaluated (E):</b>	<b>*Assessment Method:</b> (^see link above)	<b>Notes/ Comments/ Explanation</b> : (This column is optional. Use as needed.)	<b>*MEPO's</b>
Discuss the role of research in medicine and being a physician	T/E	Non-Clinical Evaluation		S12, S9
Strive for personal excellence in all areas of the learning and medical environment and commit to engage in life-long learning to improve patient care	T/E	Non-Clinical Evaluation		S12, AB5
Adhere to institutional and professional standards	T/E	Non-Clinical Evaluation		AB6

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Reflect on and identify their interest in biomedical clinical, translational, medical education, health care policy, and/or health services research.	T/E	Non-Clinical Evaluation		S8
Efficiently search the literature on a topic of interest and summarize the known knowledge of a topic	T/E	Non-Clinical Evaluation		S9
Develop a research project/proposal framed around a literature review and innovative hypotheses	T/E	Non-Clinical Evaluation		S9
Determine how to select the appropriate statistics for an experimental design	T/E	Non-Clinical Evaluation		S12
Define and describe ethical issues related to the responsible conduct of research	T/E	Non-Clinical Evaluation		S14
Describe the role of extramural grants as a resource for grant development	T/E	Non-Clinical Evaluation		S12

### \*Textbook and/or Resource Material

1. COM Library Services Website related to literature searches and references sources. What components? i.e. PubMed database, RefWorks, etc
2. "Scientific Integrity," 3<sup>rd</sup> edition by Francis L Macrina (Excerpts will be supplied as necessary)
3. Literature articles such as (1) Elliott RL, "Evidence-debased medicine" and the integrity of the medical profession, J Clin Ethics 2011 Spring: 22(1)71-3 (2) Tonelli MR, Conflict of interest in clinical practice Chest 2007 August; 132(2):664-70
4. BMC Medical Research Methodology <http://www.biomedcentral.com/bmcmedresmethodol>
5. "Fundamentals of Research modules on Vimeo
6. GME Step by Step Research Guide.

### \*Grading Policies

The final course grade will be based on the following:

1. *Standard non-clinical evaluation form*
2. *Required written reflections submissions as related to course objectives 1, 2, 6. Required written exercise submissions as related to course objectives 3 and 4.*
3. *Guided exercises (discussions with faculty mentors ad written submissions) including research ethics review, literature searches, hypothesis development and selection of research methodology.*
4. *Small group presentations related to reflection submission as related to course objectives 1, 2, and 6.*
5. *Create a draft of a research project proposal related to objectives 4 and 5.*

X Non-Clinical Evaluation

The final course grade will be based in part on the following: attendance, professionalism and ethics, and learning objectives. These will be evaluated using the COM Non-Clinical evaluation form. Required to submit an executive summary to include how things learned during the elective helped them write the protocol. How it all translates into Research methodology.

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Non-Clinical  
Evaluation

Pass/Fail

Please see [medicine.tamhsc.edu](http://medicine.tamhsc.edu) website for approved non-clinical evaluation form. (see figure below)

### **Elective Grade**

- Fail - Student fails the elective
- Pass - Student passes with some weaknesses noted
- Pass

\*Comments

Grading Scale	
Satisfactory	Passing non-clinical evaluation form, Passing reflection paper, Small group presentations, and draft research project proposal
Unsatisfactory	Failure of non-clinical evaluation form or reflection paper, or small group presentations, or draft research project proposal

### **\*Attendance, Make-up Policies, & Remediation**

Remediation will be required if student fails the course due to lack of Medical Knowledge, Professionalism or Ethical issues. Failure will result in student retaking the course.

<http://student-rules.tamu.edu/rule07>. TAMHSC – COM student handbook states: Students who miss more than 20% of an elective for any reason (2 weekdays during a 2-week rotation or 4 weekdays for 4-week rotation) will require a remediation plan. Time for unexcused absences may have to be made-up/remediated at the discretion of the Elective Director.

### **Course Topics, Calendar of Activities, Major Assignment Dates**

To be discussed with faculty

### **Other Pertinent Course Information**

To be discussed with faculty

### **Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>. **Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.**

### **COM Professionalism and integrity Statement (Academic Honesty and Plagiarism)**

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All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component's Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an "F"/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at <http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf>.

## Academic Integrity

For additional information please visit: <http://aggiehonor.tamu.edu>

***"An Aggie does not lie, cheat, or steal, or tolerate those who do."***

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; <http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions>.

## E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students' TAMHSC e-mail accounts. Please check the account frequently during the semester for updates.

This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU's Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

## Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at <http://medicine.tamhsc.edu/current/student-mistreatment-form.html>. For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

## Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: <http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf>

**Note:** More information is available on the aforementioned topics to all students on the College of Medicine website.

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