MICR 6052 ADVANCED IMMUNOLOGY

Fall 2016

| CLASS DAYS and TIME: | Mondays 2:00-4:00 PM |
|----------------------|--------------------------------------------------|
| CLASSROOM: | room 5.063V, Basic Sciences Building |
| COURSE FACULTY: | Nu Zhang, Ph.D. Course Director |
| | Michael Berton, Ph.D. Course Co-director |
| OFFICE HOURS: | By appointment |
| EMAIL: | <u>zhangn3@uthscsa.edu</u> berton@uthscsa.edu |
| TELEPHONE: | Zhang - 567-3973 Berton - 567-3931 |

READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

MICR6052 is designed for second year MS and PhD students who wish to gain a more in-depth understanding of cutting edge concepts in immunology. Through detailed examination of the primary literature, class presentations and in-class discussions, students will develop critical thinking skills in immunological research that will prepare them for professional scientific careers. The course consists of assigned readings from the primary literature, student presentations, and discussions of the primary literature in focused concept areas. Students will also gain a more detailed understanding of cutting-edge methods and translational applications of immunological research.

Prerequisites: IBMS 5000 or MICR 5051 and permission of course director

Semester credit hours: 2

Course objectives:

By the end of this course, each student should be able to:

- Critically read and analyze the primary literature in the field of immunology
- Design and deliver compelling oral presentations of research data
- Recognize pitfalls and deficiencies in various immunological research approaches and propose alternative approaches

• Put gaps in our current knowledge of immunology into the context of human health and disease and begin to develop approaches to address those knowledge gaps

COURSE ORGANIZATION

Schedule

See class schedule on last page of syllabus

Attendance

In order to achieve the expected level of competency, students must be fully engaged. **Students are therefore expected to attend every class period and to be on time.** It is recognized that a student may occasionally arrive late to class due to unexpected traffic problems or inclement weather. However, chronic lateness is considered an unprofessional behavior that disrupts the learning environment for everyone else in the classroom.

Textbooks - None

Grading Policies And Examination Procedures

Grading System – Final letter grades will be based solely on the quality of student presentations and discussions.

Grading may be curved at the discretion of the course director and is based on the following scale:

A = 90-100% B = 80-89% C = 70-79% F = < 70%

Note: Fractions of grades are rounded to the nearest whole number for your final course grade. For example, 89.45 is an A, but 89.44 is a B.

Grading Procedures –

Make-Up Presentations – A student who must miss a scheduled paper presentation for a serious reason must request an excused absence from the Course Director. <u>Acceptable</u> "serious reasons" usually involve serious illness or injury to the student (doctor's excuse may be required) or the student's family member. Examples of <u>unacceptable</u> reasons include: Not prepared or incomplete studying, over-sleeping, hangover, heavy traffic or any travel delays, other appointments or scheduled professional or personal commitments.

If it is determined that missing paper presentation is justified, a make-up presentation will be scheduled. Any student who misses a paper presentation and does not receive an excused absence <u>will receive a grade</u> of zero for that presentation.

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

Information regarding accommodations for disabilities is available in the UTHSCSA Catalog. A student who wishes to request accommodation for a disability should contact the Associate Dean for Students, Graduate School of Biomedical Sciences. The Student Request for Accommodations under Americans with Disabilities Act form and additional information may be obtained at http://www.uthscsa.edu/eeo/request.html.

SCIENTIFIC INTEGRITY / PROFESSIONAL CONDUCT:

The expectation is that all students will exhibit the highest standards of scholastic and scientific integrity as elaborated on page 99 of the current UTHSCSA Student Catalog. Any student who commits an act of

academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating on exams, plagiarism, tampering with reference materials or files, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person (e.g. copying material from the web without proper attribution), and any act designed to give unfair advantage to a student or the attempt to commit such an act. Failure to abide by these rules of professional conduct will result in a grade of zero for the exam in question and, depending on the nature of the infraction, the consequences may include dismissal from the program.

If you suspect another student of professional misconduct, please bring your suspicions directly to the Course Director. Confidentiality will be maintained at every level during any ongoing investigation of suspected academic or scientific misconduct.

EMAIL POLICY

Every student is issued a University e-mail address and account at the time of enrollment. As a matter of University Policy, communications between students and faculty that occur using the student's University e-mail address are considered official business. Therefore, **students are expected to check their university email inboxes on a regular basis** so that any announcements, instructions, or information regarding this course will be received in a timely way. Missed communications due to inadequate monitoring of incoming emails on the University's email server will never be a valid excuse for unsatisfactory academic progress.

USE OF RECORDING DEVICES

Recording of lectures and other learning activities in this course by any means (*e.g.*, video, audio, etc.) is only permitted if approved by the instructor or required for compliance with Americans with Disabilities Act (ADA).

ELECTRONIC DEVICES

Cell phones must be turned off during all class meetings and exams. Computers and electronic tablets are allowed only for participating in classroom activities (*e.g.*, viewing slides presented in lecture or conference materials). Texting, tweeting, emailing, web-surfing, gaming, or any use of electronic devices that is not directly connected with classroom activities is NOT permitted.

MICR6052 ADVANCED IMMUNOLOGY 2016 FALL CLASS SCHEDULE Mon 2:00-4:00 PM

| | | | Student | | |
|---------------|----------------------------------------|-------|-----------|--------|--------------------|
| Date | Time | Торіс | Presenter | Room | Reading Assignment |
| Aug 29 2-4 pm | Introduction to course and first paper | | | | |
| | presentation by Dr. Nu Zhang | | 5.063V | ТВА | |
| Sept 6* | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Sept 12 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Sept 19 | 2-4 pm | ТВА | ТВА | 5.063V | ТВА |
| Sept 26 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Oct 3 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Oct 10 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Oct 17 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |

| Oct 24 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
|--------|--------|-----|-----|--------|-----|
| Oct 31 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Nov 7 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Nov 14 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Nov 21 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Nov 28 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Dec 5 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |
| Dec 12 | 2-4 pm | ТВА | TBA | 5.063V | ТВА |

*Note class date change due to Labor Day Holiday on Monday

Class requirements:

Paper presentations – Students will prepare a 50 min power-point presentation on the assigned paper or papers. The papers will be assigned before or on the first day of class. Student presentations should include:

- 1. a thorough and relevant introduction of the background for the topic, including but not limited to the literature citations in the assigned papers being presented.
- 2. presentation and explanation of the rationale for the overall hypothesis being tested
- 3. a clear description of the hypothesis itself
- 4. clear descriptions and explanations of the experimental approaches used for testing the hypothesis
- 5. and finally the presenter should be prepare to answer the question: "what should be the next step?".

Discussion - Each student is expected to read all the papers and prepare for an in-depth discussion of each paper(s), regardless of who is presenting the paper(s). Following the 50 min presentation, students will be randomly selected to further discuss individual figures and experimental results in detail, to critically analyze the results and propose alternative experiments if the original experiments failed to adequately support the authors' conclusions. These activities will help the students to develop the skills for identifying potential pitfalls of a given experimental approach and for proposing alternative strategies later in their scientific career.

List of students registered for the course:

To be announced

List of articles for 2016 class:

To be announced