

MICR 5028 VIROLOGY

Spring

CLASS DAYS and TIME: Unless otherwise indicated in the schedule below, Monday, Tuesday and Thursday 10:00-11:30 am (with ~10 minutes break).

CLASSROOM: ALTC 1.105 or Online, TBA

COURSE FACULTY: Yan Xiang, Ph.D., Prof.
Course Director
Zhenming Xu, Ph.D., Assit. Prof.
Course co-Director

OFFICE HOURS: By appointment

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<p>READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.</p>
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COURSE DESCRIPTION

MICR5028 focuses on the molecular and cellular biology of animal viruses, and their interactions with host cells. Many of the viruses to be covered in this course are medically significant or have provided critical information that has expanded our understanding of cell biology, immunology, development, and differentiation.

COURSE ORGANIZATION

MICR5028 course is focused on applying fundamental virology concepts to the understanding of current virology research questions with a combination of lecturing, student-presentation and in-class discussion format.

Assignments – Required assignments for reading and video-watching are posted on the course page on Canvas and are never considered optional. Unless specifically noted by the instructor, anything in the required readings, whether emphasized in class or not, is considered testable on exams. Students will be responsible for a significant amount of reading and preparation outside of the classroom so that class time can be most productively used for

discussions and presentations of key concepts and of experimental results from the primary literature.

Student presentation/discussion format – 4 weeks

- Students will be randomly assigned to teams. These teams will stay together for the entire 4 weeks.
- The topics and the assignments of those topics to teams will be provided to the students the week before the beginning of course on the course page on Canvas.
- Members of the student group should take turn to be the leader for the presentation, so everyone will be the team leader once. The order can be determined through group discussion. If there are problems reaching consensus, students will take turn according the alphabetic order of their names. The team should come together to prepare for the presentation. The leader of each team will be responsible for organizing the team's presentation, but everyone in the team should participate in the preparation and presentation. The presentation will last 50 minutes, including discussions. The presentation must use the key figures (but not necessarily all the figures) in the assigned materials.

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 lecture 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

Recommended textbook (optional): Principles of Virology: Molecular Biology, Pathogenesis, and Control of Animal Viruses, 2nd edition, Authors: S. Jane Flint (Editor), L. W. Enquist, A. M. Skalka, Flint. S. J., V.R. Racaniello, S. Jane Flint, ASM (publisher)

Grading Policies And Examination Procedures

Grading System –Final letter grades for the Spring semester will be based on the quality of student discussion and student presentations (60%) and one close-book exam (40%).

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.

Examination Protocol – Exams may be composed of multiple choice, short answer, and essay questions.

No electronic devices, extra paper, books, backpacks, etc. are permitted in the testing area. Hats must be removed.

Students are allowed to bring to the exam a letter-size paper with hand-written notes. The paper will have to be turned in after the exam.

Here are three examples of possible exam questions.

1. Please describe icosahedral symmetry.
2. Why do the coats of virus particles have many copies of one or more simple building blocks (protein subunits)
3. Two influenza virus proteins are targets of neutralizing antibodies. What are they? What are their functions in viral life cycle?

Grading Procedures – Exam results will be provided to students as quickly as possible. No “challenges” are allowed. A time may be scheduled outside of class so that students may review concepts of concern to them.

Make-up Examinations – A student who must miss a scheduled exam for a serious reason must request an excused absence from the Course Director. Acceptable “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 unacceptable 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 an exam is justified, a make-up examination will be scheduled. The make-up exam will be given as soon as possible at a time designated by the Course Director. Any student who misses an exam and does not receive an excused absence **will receive a grade of zero for that exam.**

Requests For Accommodations 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/eoo/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.

Please send the powerpoint of your presentation to xiangy@uthscsa.edu by 9:30 am on the morning of your presentation, so that it can be uploaded to Canvas

MICR5028 2020 CLASS SCHEDULE

Date	Time	Weekly Topic, Theme or Concept	Groups Presenting	Room
TBA	10:00-11:30 AM	Virus structure	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Virus entry	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Virus discovery	TBA	ALTC 1.105
TBA	10:00-11:30 AM	HIV	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Influenza virus	TBA	ALTC 1.105
TBA	10:00-11:30 AM	HCV	TBA	ALTC 1.105

TBA	10:00-11:30 AM	KSHV	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Poxvirus	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Coronavirus	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Polyomavirus and tumor virology	TBA	ALTC 1.105
TBA	10:00-11:30 AM	HPV	TBA	ALTC 1.105
TBA	10:00-11:30 AM	Viral vectors and oncolytic viruses	TBA	ALTC 1.105
TBA	TBA	EXAM	All	

* Academic Learning & Teaching Center – the new building by the Holly Auditorium