

MICR 5025 EUKARYOTIC PATHOGENS

Spring 2018

CLASS DAYS and TIME: 10:00 – 11:00 am, Monday – Thursday, May 7 – June 1

CLASSROOM: ALTC 1.105 (unless otherwise indicated)

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RESPONSIBLE FOR ITS CONTENTS.**

COURSE DESCRIPTION

MICR5025 is designed to build on the microbiological concepts covered in IBMS5000 taken by the first-year PhD students in the Fall semester. For the MS students this course will build on the microbiological concepts covered in MICR5031 during the Fall semester. The MICR5025 Eukaryotic Pathogens course will provide students with a basic comprehensive understanding of parasitology and mycology. Topics include virulence mechanisms and the host immune response with respect to a variety of parasites that cause major human diseases as well as several important areas of medical mycology such as taxonomy/phylogeny, diagnostics/epidemiology, mating/phenotypic switching, morphology, pathogenesis and antifungal therapies. Students will gain a more detailed understanding of the current concepts, approaches, and applications of research in the field of eukaryotic pathogens.

COURSE ORGANIZATION

The MICR5025 course is divided into two 2-week sections. The first section covers parasitology and the second section is focused on medical mycology.

Reading Assignments – Certain instructors may assign paper(s) as required reading prior to lecture, which will be distributed by email. These reading assignments are required and not optional. Unless specifically noted by the instructor, anything in the required readings, whether emphasized in class or not, is considered testable on exams.

Lectures – All of the presentations are given in lecture format and are accompanied by the PowerPoint slide files or PDF-converted PowerPoint slide files. You are responsible for all information included in the lecture materials. However, you should not assume that all testable lecture material is found only in the posted materials. That is, lectures may be expanded and enhanced during in-class presentations. So, **take good notes because any information discussed in class is considered testable.**

Discussions – Occasionally instructors may assign specific papers for class discussion. Please be sure to read the paper well in advance and come to class prepared to fully participate in the discussion.

Mycology Essay/Presentation –

- Groups - Each student will be assigned to a group and each group will have a designated group leader. The group leader will be responsible for the entire oral presentation as well as the entire powerpoint presentation. All other members of the group will be responsible for writing a section of the essay of no longer than 1 page of text as well as answering questions during the Q & A period.
- Topic Selection - You should meet as a group to select a topic for the essay/presentation. Try to pick a topic related to fungal infections in the current news and media. Your goal is to explain the scientific basis for the news story using the available literature. However, your perspective should be that you are the expert and you should be prepared to go deeper than just a layman's explanation of the relevant scientific facts. The group leader should send your group's proposed essay topic to Dr. Kadosh by email for approval by the designated deadline. It's fine to include links to relevant websites describing the news story.
- Written Essay - All essays must have a title page, which does not count towards the page limit. Each group member, except the leader, is responsible for writing a section of the essay that is a single complete page of text (single-spaced, 0.5 inch margins,

Arial 12 point font). It's fine to insert figures/tables after the text is written but figures/tables will not count towards the 1 page requirement. You should decide as a group on the sections of the essay and which group member will write each section. Be sure to include an Introduction section which provides background information on the specific fungal pathogen (you will need to also explain why infections by this pathogen are significant). It is also important to describe the news event and explain the scientific basis for the observations. All scientific descriptions, claims and observations that you make must be supported by published references. Individual figures/tables plus legends (9 point Arial) should be no longer than 20 single-spaced lines long and one-half page wide per legend or table. There is no page limit for references. On the due date please bring two hard copies of the essay to class and also send it by email to Dr. Kadosh. All essays will be immediately distributed by email to the entire class.

- Oral Presentation and Discussion of Essay - The group leader should prepare a very brief powerpoint presentation (no more than 7 slides, most of which should come from the essay figures) to present in class on the designated date. The group leader's initial presentation, including background, significance, a description of the news story and scientific basis, should be no more than 10 minutes. Each presentation will be followed by an additional 10 min. of Q & A. All members of the group, except the group leader, will be responsible for answering questions. All other members of the class are expected to read each essay ahead of time and come prepared to ask questions.

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

There is no required textbook. However, for general background reading, students may find the following textbooks of interest: *Foundations of Parasitology* by Roberts & Janovy (Dr. Kadosh has a copy), *Medical Mycology* by Topley & Wilson (Dr. Wickes has a copy) and *Medical Mycology* by Kwon-Chung & Bennett (Dr. Wickes has a copy).

Grading Policies and Examination Procedures

Grading System – Final letter grades will be based on performance on 2 exams (40% each) and a written mycology essay/oral presentation (20%).

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. The proportion represented by each question type will vary between the 2 exams.

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

Grading Procedures – Exam results will be provided to students as quickly as possible. If you have questions about the grading of specific exam questions, please contact the relevant instructor.

Make-up Examinations – A student who must miss a scheduled exam for a serious reason must request an excused absence from the Course Director as soon as possible. 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 manner. 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 course director 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.

**MICR5025
EUKARYOTIC PATHOGENS
2018 CLASS SCHEDULE
Mon, Tues, Wed, Thurs 10:00-11:00 AM**

Date	Time	Lecture topic	Faculty	Room	Reading Assignment
7-May	10-11 am	Toxoplasma gondii	LoVerde	ALTC 1.105	TBA
8-May	10-11 am	Leishmania	LoVerde	ALTC 1.105	TBA
9-May	10-11 am	Trypanosomes	LoVerde	ALTC 1.105	TBA
10-May	10-11 am	Entamoeba & Cryptosporidium/Giardia	LoVerde	ALTC 1.105	TBA
14-May	10-11 am	Malaria	Bunnik	ALTC 1.105	TBA
15-May	10-11 am	Nematodes	LoVerde	ALTC 1.105	TBA
16-May	10-11 am	Schistosomiasis	LoVerde	ALTC 1.105	TBA
17-May	10-11 am	Tapeworms & Filaria	LoVerde	ALTC 1.105	TBA
21-May	10-11 am	Mycology: taxonomy/phylogeny/nomenclature	Gibas	ALTC 1.105	TBA
22-May	10-11 am	Mycology: diagnostics/epidemiology	Wickes	ALTC 1.105	TBA
23-May	10-11 am	Mycology: mating mechanisms	Wickes	ALTC 1.105	TBA
23-May	1-4 pm	EXAM 1 - Parasitology	Kadosh	ALTC 3.303	

24-May	10-11 am	Mycology: pathogenesis	Wickes	ALTC 1.105	TBA
29-May	10-11 am	Mycology: morphology	Kadosh	ALTC 1.105	TBA
30-May	10-11 am	Mycology: antifungal therapies	Wiederhold	ALTC 1.105	TBA
31-May	10-11 am	Mycology: host response to fungal infections	Wormley	ALTC 1.105	TBA
1-June	9-11 am	Mycology essay presentations	Kadosh/Wickes	ALTC 2.215	TBA
7-June	1-4 pm	EXAM 2 - Mycology	Kadosh	ALTC3.303	