

CLS 428: CLINICAL MYCOLOGY
Fall 2018

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COURSE DESCRIPTION

Clinical Mycology. 1 cr. This course will be taught as a hybrid/blended course concerning the study of and identification of the fungi of medical significance. Identify clinical signs, symptoms, treatment and epidemiology associated with human mycotic disease. Examine specimen collection and transportation. Explore laboratory methods used to detect and identify the fungi.

PREREQUISITE Biology 333

TEXTBOOK AND REFERENCES

Required Text: Kern & Blevins, Medical Mycology, A self-Instructional Text, 2nd ed.

Reference Texts

- 1) Larone, Davise H., *Medically Important Fungi, A Guide to Identification*, 4th ed.
- 2) Fisher & Cook, *Fundamentals of Diagnostic Mycology*
- 3) Forbes, Sahm, Weissfeld, Bailey & Scott's *Diagnostic Microbiology* 11th ed.

Web Resources

<https://mycology.adelaide.edu.au/>
<http://www.cdc.gov>

CORE ABILITIES:

- Communicate Effectively ~verbally & in writing
- Think Critically
- Exercise Problem-Solving Skills
- Work Collaboratively in Diverse Teams
- Respect Cultural Diversity & Pluralism

LEARNING OUTCOMES

1. Gain an appreciation of the importance of fungal infection in human health and disease.
2. Define general terms used in mycology.
3. Develop a working knowledge of laboratory techniques and procedures pertaining to specimen collection, staining and media used in the identification of fungi.
4. Use appropriate safety protocol when in the laboratory .
5. Isolate and identify fungi of medical importance.
6. Distinguish common contaminate fungi from those of medical importance.
7. Utilize given case history and pertinent information to identify the causative fungus.

EXAMS

1. Lecture Quizzes (D2L)
2. Practical Final Exam
3. Comprehensive written final exam

JOURNAL REVIEW

Evidence Based Practice/Medicine is an important component to being a competent clinical professional. Evidence based practice is useful for clinical laboratory scientists to use as a means to finding answers to clinical problems. It involves generating questions (often because of a clinical problem) and then finding answers to those problems in the literature using online databases such as pubmed, google scholar, etc and then taking those findings and implementing them into your practice.

Part of the laboratory requirement thus includes weekly journal reviews. Each week 2-3 students will come ready to discuss a recent (within the last 3 years) literature article that pertains to an organism covered in the current week's lab. A sign-up sheet will be provided during the first laboratory period. Students simply need to provide an overview of the article to the class. Students are to post citation information or the URL of the article to the appropriate D2L Discussion board so all students can have access to the information.

In addition, each student will be required to find a recent literature article for the Yeast week of class (See the yeast Lab Handout posted to D2L for more details).

UNKWNOwnS

Photomicrographs will be provided by the instructor for unknowns covering pertinent topics covered in class e.g. opportunists, yeasts, superficial/dermatophytes, etc. Students will be required to provide a diagnosis based on microscopic morphologies to the appropriate D2L dropbox. Each unknown is worth 5 points.

DERIVATION OF COURSE GRADE

Laboratory (assignments, professionalism, etc.)	20%
Unknowns	10%
D2L Quizzes	25%
Final exam (written comprehensive)	25%
Practical Laboratory Final Exam	20%

COURSE GRADING

93 – 100	A	77 – 79	C+
90 – 92	A-	73 – 76	C
87 – 89	B+	70 – 72	C-
83 – 86	B	67 – 69	D+
80 – 82	B-	60 – 66	D
		Below 60	F

Plus or minus grades may be used at the discretion of the instructor.

Missed/Late Work Policy

Missed/late work (assignments, projects, exams, etc.) will receive a zero if not completed by the scheduled due dates or scheduled exam periods unless the student provides the instructor with a doctor's note, coaches note, obituary, etc., as deemed appropriate by the instructor. Students with proper documentation will be given no more than 72 hours, from the date of the document, to complete all missed work. It is the student's responsibility to provide the instructor with the documentation and schedule make-up exams and /or submit late assignments, etc. within the 72 hour time-frame; failure to do so will result in a zero.

Note: Having to work is not an acceptable reason for missing class and the absence will be deemed unexcused, and result in a zero for any missed school work.

ATTENDANCE:

1. **Attendance is mandatory in both lecture & lab**. However, if your schedule takes you away, please ask a peer for notes or to record the lecture for you. It is your responsibility to obtain missed lecture material. **There will be no make-up labs**, therefore it is expected that you will attend one of the two lab sessions for the week. Please notify the instructor prior to the planned absence so arrangements can be made for unknowns on the appropriate day.
2. **Absences will be excused only with appropriate proof** (i.e., note from a physician, funeral notice/card, etc.).

UNIVERSITY POLICIES

Academic Integrity

The board of regents, administrators, faculty, academic staff and students of the University of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the University of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions. (Excerpt from UWSP 14.01 STATEMENT OF PRINCIPLES)

As a student in this class you are expected to maintain academic standards, ethics, and honesty, including UWSP, SHCP, and individual course standards.

Academic Accommodations

Support services are available for students with disabilities. Any student who has a disability and is in need of classroom and/or exam accommodations, please contact the instructor and the Office of Disability Services as soon as possible.

A course outline/calendar will be distributed to all students in class and via the Content of D2L indicating dates, along with the activities, assignments, and exams scheduled for the course.

The instructor reserves the right to make changes to the syllabus and course content. Any in-class announcements (verbal or written) are considered official addendum to this syllabus. It is the student's responsibility to know what changes have been made. It is the student's responsibility to check D2L and emails for course announcements.