CLS 425: DIAGNOSTIC MEDICAL MICROBIOLOGY COURSE SYLLABUS

Instructor: Reed Brooks

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Office hours: Monday 10-11, Wednesday 10-11

COURSE DESCRIPTION

Diagnostic Medical Microbiology (CLS425 – 5 credits)

This course will be taught as a hybrid course with recorded lectures, online discussions/assignments, and a combination of independent and in-person laboratories depending on the organisms being studied. It is based in the principles and practices utilized in the isolation and identification of human pathogenic microorganisms and the relationship of these organisms to disease.

PREREQUISITE Biology 333 or concurrent enrollment.

CORE ABILITIES:

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

SHCP PROGRAM OUTCOMES:

This course addresses the following SHCP program outcomes. Student work clearly demonstrates development of the skills, knowledge, attitudes & behaviors identified in outcomes: 1 - 12

TEXTBOOK

Bailey & Scott's *Diagnostic Microbiology* 14th ed. by Tille, Patricia M.

LEARNING OUTCOMES

The student will:

- 1. Develop a working knowledge of techniques and procedures commonly used in the clinical microbiology laboratory (bacteriology, mycology, parasitology, virology)
- 2. Use appropriate safety protocol and laboratory techniques for processing specimens.
- 3. Acquire knowledge of culture techniques appropriate for the primary culture sites.

- 4. Recognize the expected "normal" flora for each culture site.
- 5. Understand the importance of Clinical Microbiology laboratory organism isolation and identification in diagnosing and monitoring diseases/conditions.
- 6. Associate selected infectious diseases with appropriate culture requirements and causative agents.
- 7. Understand the recommended process for identifying unknown pathogens.

GRADING SYSTEM

| 93 - 100 | A | 77 – 79 | C+ |
|----------|----|----------|----|
| 90 - 92 | A- | 73 - 76 | C |
| 87 - 89 | B+ | 70 - 72 | C- |
| 83 - 86 | В | 67 - 69 | D+ |
| 80 - 82 | В- | 60 - 65 | D |
| | | Below 60 | F |

LABORATORY ASSIGNMENTS

- 1. Laboratory experiments
- 2. Special assignments

EXAMS/QUIZZES

- 1. Post lab quizzes
- 2. Four one-hour exams.
- 3. Rolling Laboratory Practicals
- 4. Comprehensive final (written) exam

D2L DISCUSSION BOARDS

There will be various discussions and/or journal reviews embedded throughout the course and referenced in the course schedule. Grading will be based on an initial post and a response post. See D2L for the grading rubric.

DERIVATION OF COURSE GRADE

| Laboratory Assignments: Vitek, Myco, Anaerobes, etc. | 10% |
|--|-----|
| Post lab quizzes | 15% |
| Laboratory Practicals | 10% |
| D2L Discussions | 10% |
| Hour exams | 35% |
| Comprehensive written exam | 20% |

REFERENCES

Reference Texts

- 1) Larone, Davise H., *Medically Important Fungi, A Guide to Identification*, 4th ed.
- 2) Fisher & Cook, Fundamentals of Diagnostic Mycology
- 3) Leventhal & Cheadle, Medical Parasitology, A Self-Instructional Text

6th ed.

- 4) Koneman, Allen et al, *Color Atlas & Textbook* of *Diagnostic Microbiology*. 5th ed.
- 5) Kern & Blevins, Medical Mycology: A Self-Instructional Text. 2nd ed.

Web Resources

http://www.cdc.gov

ATTENDANCE:

- 1. Attendance is <u>mandatory in both lecture & lab</u>. However, if your schedule takes you away, please ask a peer for notes or to record the lecture for you. It is <u>your</u> responsibility to obtain missed lecture material. <u>There will be no make-up labs</u>, therefore it is expected that you will attend one of the two lab sessions for the week.
- 2. <u>Absences will be excused only with appropriate proof</u> (i.e., note from a physician, funeral notice/card, etc.).
- 3. 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. In addition, 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.

All Assignments with an associated D2l dropbox need to be submitted to the appropriate D2l dropbox. Failure to do so will result in a zero. Paper copies will not be accepted and will receive 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.

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 inclass 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.