CLS 425: DIAGNOSTIC MEDICAL MICROBIOLOGY
COURSE SYLLABUS

Instructor: Reed Brooks, EdD, MS, PA (ASCP)
Office: D145 Science Bldg. UWSP
Phone: 715 – 346 – 3765 (Office)
E-mail: rbrooks@uwsp.edu

Office Hours: Tuesday 11-12, Wednesday 10-11

COURSE DESCRIPTION:

Diagnostic Medical Microbiology (CLS425 – 5 credits)
This course (lecture/lab) will be taught as a hybrid/blended course. 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.

LEARNING OUTCOMES:

The student will:
1. Develop a working knowledge of techniques and procedures commonly used in the clinical microbiology laboratory.
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.

LIFELONG LEARNING

It is imperative students understand the importance of becoming lifelong learners. Changes are taking place quite regularly within the world of microbiology including bacteriology, mycology, parasitology and virology. For example, microbes have undergone and will likely continue to undergo name changes. In addition, we are seeing increased resistance to antibiotics and other chemotherapeutic agents occurring. Antibiotics and other treatments that are effective today may not be effective in the near future, thus the need for referring to Clinical and Laboratory Standards Institute (CLSI) guidelines. Lectures may mention antibiotics that have been used to treat various infections that were at one time effective, but things change thus the need to consult CLSI guidelines. The way organisms are identified within many clinical laboratories has also undergone transformation with the advent of increasing technologies e.g. MALDI-TOF. Thus, information that is true today may not be tomorrow. Change is constant. It is therefore the student's responsibility to become a lifelong learner and stay well informed of such changes. During your clinical practicums and throughout your career identification, susceptibility testing, etc., in the clinical lab will require you to follow institutional protocols, to refer to guidelines

established by the Clinical and Laboratory Standards Institute (CLSI), and to become a lifelong learner. Materials presented in lecture and laboratory are not a substitute for hospital/clinical protocols, CLSI guidelines, professional expertise, etc.

TEXTBOOK AND HELPFUL WEBSITES:

Students are required to complete all assigned text readings. Lectures provide an overview of materials which are to be supplemented with the text.
1. Bailey & Scott's Diagnostic Microbiology 14th ed. by Tille, Patricia M.
2. http://iws2.collin.edu/dcain/CCCCD%20Micro/tutorial.htm

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.

COURSE ACTIVITIES/ASSIGNMENTS/GRADING
Safety/Professionalism:
Safety is imperative in the teaching and clinical laboratory. In our lab we will utilize universal precautions and wear the proper personal protective equipment (PPE). This information will be highlighted by the instructor in the beginning labs, and throughout the year.
Students will be required to complete associated MTS safety training assignments as assigned at the beginning of the course and sign safety forms. A students performance and adherence to safety will impact this portion of your grade.

Assignments/Exams/Quizzes may include:
1. Laboratory experiments/assignments/case studies
2. Lecture/Post lab quizzes
3. Lecture exams
4. Rolling Laboratory Practicals
5. Comprehensive final (written) exam

DERIVATION OF COURSE GRADE:

Safety/Professionalism	5%
Assignments/Quizzes	30%
Laboratory Practicals	15%
Lecture exams	35%
Comprehensive Final written exam	15%

GRADING SCALE:

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

ATTENDANCE:

It is the students' responsibility to regularly log on to the learning management system to participate and learn. Attendance to laboratories is mandatory. Given the nature of the laboratory, missed labs are not allowed to be made up.

Missed assignments are only excused with written documentation (doctor's excuse, printed obituaries, coaches' note for games, etc.). I expect to hear from you before the possibility of you missing an exam, quiz, or an assignment due date.

UNIVERSITY POLICIES:

Academic Honesty & Misconduct

Academic honesty is a core principle of learning and scholarship. When you violate this principle, you cheat yourself of the confidence that comes from knowing you have mastered the targeted skills and knowledge. You also hurt all members of the learning community by falsely presenting yourself as having command of competencies with which you are credited, thus degrading the credibility of the college, the program, and your fellow learners who hold the same credential.

All members of the learning community share an interest in protecting the value, integrity, and credibility of the outcomes of this learning experience. We also have the responsibility to censor behaviors that interfere with this effort. The following behaviors will be subject to disciplinary action:

Plagiarism - presenting someone else's words, ideas, or data as your own work.

Fabrication - using invented information, falsifying research or other findings.

Cheating - misleading others to believe you have mastered competencies or other learning outcomes that you have not mastered. Examples include, but are not limited to:

1. Copying from another learner's work
2. Allowing another learner to copy from your work
3. Collaborating on an assessment (graded assignment or test) without permission from the instructor
4. Taking a test for someone else or permitting someone else to take a test for you

Academic Misconduct - other academically dishonest acts such as tampering with grades, taking part in obtaining or distributing any part of an assessment, or selling or buying products such as papers, research, projects or other artifacts that document achievement of learning outcomes. Academic dishonesty is NOT ACCEPTABLE. UWSP subscribes to the definitions of academic dishonesty provided by the National Association of Student Personnel Administrators. Academic misconduct in the University of Wisconsin System is defined by UWS Chapter 14. The complete text of the chapter is available to you from the Dean of Students or you can visit https://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11 for more information.

ADA STATEMENT:
In compliance with the Americans with Disabilities Act, students are encouraged to register with UWSP Disability and Assistive Technology Center (DACT) for assistance with accommodations. It is the student's responsibility to work with DATC to document permanent or temporary disability in order to determine eligibility and receive reasonable accommodations. The college cannot assume responsibility for providing accommodations or services to students who have not identified themselves as having a qualifying disability. Contact DACT at datctr@uwsp.edu, 715-346-3365, Room 609 Albertson Hall, 900 Reserve Street, Stevens Point, WI 54481.

The instructor reserves the right to make changes to the syllabus, schedule, course content, assignments, etc. Any in-class announcements (verbal or written), announcement postings to the learning management system, or announcements via email are considered official addendums to this syllabus. It is the student's responsibility to know what changes have been made. It is the student's responsibility to check the learning management system and/or emails for course announcements.