

CLS 427: CLINICAL PARASITOLOGY
Fall 2019

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Office hours: Tuesday/Thursdays 10-11, or by appointment.

COURSE DESCRIPTION:

Clinical Parasitology. 1 cr. This course will be taught as a hybrid/blended course. Identify clinical signs, symptoms, treatment and epidemiology associated with human parasitic disease. Examine specimen collection and transportation. Explore laboratory methods used to detect and identify parasites.

TEXTBOOK AND HELPFUL WEBSITES:

Students are required to complete all assigned text readings and or supplement lecture materials by reading corresponding text chapters. Lectures provide an overview of materials which are to be supplemented with the text.

1. **Required Text:**
Leventhal & Cheadle, *Medical Parasitology, A Self-Instructional Text* 6th ed.
2. **Reference Texts**
 - 1) Zeibig *Clinical Paristology A Practical Approach* 2nd Edition.
 - 2) Forbes, Sahm, Weissfeld, Bailey & Scott's *Diagnostic Microbiology* 12th ed.
3. Bailey and Scotts *Diagnostic Microbiology* 14th edition.
4. **Web Resources**
 - 1) <http://www.dpd.cdc.gov/DPDx/>
 - 2) <http://www.rph.wa.gov.au//labs/haem/malaria/>
 - 3) <http://www.medtraining.org>

LEARNING OUTCOMES:

Following completion of CLS 427 Clinical Parasitology, students will:

1. Gain an appreciation of the importance of parasitic infection in human health and disease.
2. Define general terms used in parasitology.
3. Develop a working knowledge of laboratory techniques and procedures pertaining to specimen collection, concentration, staining and identification of parasites.
4. Use appropriate safety protocol when in the laboratory.
5. Detect and identify parasites of medical importance.

6. Utilize given case history and pertinent information to identify the causative parasite.
7. Complete projects successfully as a member of the class, as a member of a group, and as an individual.

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.

COURSE ACTIVITIES/ASSIGNMENTS/GRADING

Safety:

Safety is imperative in the 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 modules as assigned at the beginning of the course.

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 discussion board so all students can have access to the information.

Assignments:

Various assignments may be given during the course to help reinforce concepts concerning clinically relevant parasites.

Quizzes/exams:

Quizzes will be given during the course utilizing an online learning management system to help reinforce content.

A final exam and practical final will also be given at the end of the course.

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

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

DERIVATION OF COURSE GRADE:

Professionalism	5%
Laboratory (Post Lab quizzes, journal review, etc.)	20%
Lecture Quizzes	25%
Final exam (written comprehensive)	25%
Practical Laboratory Final Exam	25%

ATTENDANCE:

It is the students' responsibility to regularly log on to the learning management system to participate and learn.

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
6. 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, etc. Any in-class announcements (verbal or written), announcement postings to the learning management system, or announcements via email, etc. 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.