

**LANCASTER GENERAL COLLEGE OF NURSING AND HEALTH SCIENCES
CLINICAL LABORATORY SCIENCE PROGRAM**

**SYLLABUS
2005-2006**

- I. Title: **CLS 112 Microbiology**
- II. Course Description: This course is a continuation of CLS 111. The course covers laboratory techniques in areas of Bacteriology and Mycobacteriology. Parasitology, Mycology, and Virology are presented as self-contained units. In this section, the clinically important micro-organisms are divided into general groups and are discussed as to morphology, biochemical characteristics, methods and media for growth, pathogenicity, and laboratory diagnosis. Antibiotic susceptibility testing and use of various chemotherapeutic agents are also covered. Culturing techniques and media selection are reviewed and students are trained in the identification of organisms using morphologic, biochemical, and microscopic methods.
- III. Prerequisites: Admission to the Clinical Laboratory Science program
- IV. Placement: Spring Semester
- V. Time Allotment: 56 hours
- VI. Faculty: Patricia A. Walls, M.S., MT(ASCP), SM; Teaching Supervisor
Carol Wagner, MT(ASCP), SM
Judy Buch, M.S., MT(ASCP), SM
- VII. Credits: 4.0
- VIII. Evaluation: Minimum passing grade for this course is 74%.

| <u>Instrument</u> | <u>Weight</u> |
|-------------------|---------------|
| Exams | 75% |
| Quizzes | 25% |

- IX. Textbook: C.R. Mahon & G. Manuselis. Textbook of Diagnostic Microbiology, 2nd edition, W.B. Saunders Co, 2000
- X. References: **Textbooks:**
Finegold & Barron. *Bailey & Scott's Diagnostic Microbiology*. C.V. Mosby & Co. 10th ed, 1998
- Additional Material:**
Assorted stained microscopic slide sets for review
Cassette tapes and videotapes on Microbiology
Journal readings & articles for review & presentation
- XI. Course Objectives: By the conclusion of this course, the student must be able to:
1. select appropriate media and handling for all specimens.
 2. demonstrate the ability to read culture plates by:

- a. describe purpose of all commonly used media and list the organisms expected to grow on it
 - b. list normal flora and/or frequently isolated pathogens from commonly submitted clinical specimens
 - c. recognize and describe cellular and colony morphology of commonly isolated organisms
 - d. list procedures for identifying commonly isolated organisms
 - e. list general procedures for identifying unfamiliar/infrequently encountered organisms
3. describe quality control procedures for media, susceptibility tests, equipment and common biochemical tests
 4. explain mechanism of action for common antibiotics, and list organisms affected by each antibiotic.
 5. describe the pathogenicity, common biochemical reactions, identifying characteristics, and morphology of each of the following groups of organisms: Pyogenic cocci, Enterobacteriaceae, Non-fermenters, Anaerobes, Coryneforms & Miscellaneous rods, Spiral organisms, & Mycobacteria

XII. School Policies: Students are held accountable for all policies in the Student Handbook and any revisions made to those policies during the academic year.

XIII. Class:

A. Importance of Attending Class

Healthcare education comprises more than just private reading and passing of exams. Students shall recognize that active and informed participation in class is essential to the development of intellectual abilities and scholarly growth. Students must also recognize the importance, for both the present and future, of achieving an academic record that reflects their intellectual ability. Such records are seldom achieved without regular attendance and participation in class activities. Attendance will be taken.

B. Student Responsibility for Missed Material

Students are responsible for all material presented and announcements made in class, regardless of attendance. It is the student's responsibility to obtain materials and assignments if absent

C. Unit Examinations

Examinations should only be missed in extenuating circumstances with approval of the instructor. A student who misses an exam will be required to make up the exam on the next day of lecture. Contact the appropriate instructor prior to the next lecture day to make arrangements to take the exam. A student who misses an exam, without instructor approval, will have ten percent (10%) deducted from the grade achieved on the exam. Example: The exam is worth sixty (60) points, the student takes the exam and achieves a grade of 52/60. The score of 52 is then decreased by 10%

or five points; thus, the grade on the exam will be 47/60. An alternate exam may be given for the makeup exam.

D. Class Behavior

Once class has started, the instructor has the prerogative not to admit students into lecture. Students will be dismissed from class for any inappropriate behavior.

XIV. Other:

Academic Dishonesty and Plagiarism

Academic dishonesty violates the spirit and purpose of an academic community and is therefore subject to disciplinary action. Academic dishonesty includes cheating on exams and unauthorized duplicate submission of work.

Plagiarism is an act of academic dishonesty. Any work submitted that is not your own is plagiarism. In preparing assignments, you must acknowledge in writing any use of outside sources or any assistance you received in preparing an assignment.

If an instructor believes a student has committed an act of academic dishonesty or has plagiarized material, the instructor will award a failing grade for that assignment. If the occurrence is during an exam, the student will receive a zero for that portion of their grade and must leave the room.

If the student disagrees with this decision, the student may follow the grievance procedure.

PLEASE NOTE: Changes to the syllabus may be needed as the course progresses. Students and any other individuals who may be affected by any changes will be notified promptly after any change is made.