Course Prefix and Number: BIOL 312L
Course Title: Microbiology Laboratory
Number of: Credit Hours: 2 Lecture Hours: 0 Laboratory Hours: 2

Catalog Description: Laboratory experiences to complement BIOL 312. $20 lab fee. Prerequisites: BIOL 110 and 110L; BIOL 312 or concurrent enrollment.

Prerequisite(s)/Corequisite(s): BIOL 110 and 110L; BIOL 312 or concurrent enrollment.

Text(s): Textbook(s) listed is/are not necessarily the textbook(s) used in the course.


Basic Microbiology Techniques by Kelley and Post. Star Publishing.


Course Objectives:

• To demonstrate familiarity with basic laboratory techniques of microbiology, including culturing of microbes, sterile techniques, staining procedures, microscopy, and physiological tests used for identification of microbes and identification of unknown microbes by the techniques listed above.

Measurable Learning Outcomes:

• Culture microorganisms using sterile techniques.
• Demonstrate microbial staining procedures.
• Use appropriate microscopic technique.
• Conduct physiological tests to identify microorganisms.
• Employ appropriate methods to identify unknown microbes.

Topical Outline (major areas of coverage):

• Experiments and laboratory exercises which are complementary to topics covered in Biology 312 lecture.

Material from this course may be tested on the Major Field Test (MFT) administered during the Culminating Experience course for the degree.

Recommended maximum class size for this course: 15
Library Resources: Online databases are available at http://www.ccis.edu/offices/library/resources.asp. You may access them from off-campus using your eServices login and password when prompted.

Prepared by: Nathan Means, Ph.D.  
Name ___________________________ Signature ___________________________

Date: October 14, 2005

NOTE: The intention of the master syllabus is to provide an outline of the contents of this course, as specified by the faculty of Columbia College, regardless of who teaches the course, when it is taught or where it is taught. Faculty members teaching this course for Columbia College are expected to facilitate learning pursuant to the course objectives and cover the subjects listed in the topical outline. However, instructors are also encouraged to cover additional topics of interest so long as those topics are relevant to the course's subject. The master syllabus is, therefore, prescriptive in nature but also allows for a diversity of individual approaches to course material.

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