MLT 2080: Clinical Microbiology

A. COURSE DESCRIPTION

Credits: 4
Lecture Hours/Week: *.*
Lab Hours/Week: *.*
OJT Hours/Week: *.*

Prerequisites:
This course requires either of these prerequisites
BIOL 1001 - Biology I (Minimum grade: 1.67 GPA Equivalent)
BIOL 1101 - Principles of Biology I (Minimum grade: 1.67 GPA Equivalent)

Corequisites: None
MnTC Goals: None

This course covers the isolation, identification, and significance of clinically associate bacteria,
mycobacteria, fungi, and parasites.
Prerequisite: Admission to the MLT Program and Biol 1001 or Biol 1101

B. COURSE EFFECTIVE DATES: 08/27/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. See Course Description and Course Outcomes

D. LEARNING OUTCOMES (General)

1. Discuss the clinical relevance of 80% of the usually isolated microorganisms.
   (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2)
2. Perform a variety of bacteriological procedures allowing for the identification of 90% of the usually occurring bacteria.
   (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2, 3, 4)
3. Outline and perform concentration and staining techniques used for the identification of parasites.
   (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2, 3, 4)
4. Microscopically identify commonly occurring parasites. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2)
5. Perform basic mycological procedures allowing for the identification of 80% of the usually occurring yeasts and molds. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2, 3, 4)
6. Discuss initial virology procedures for the preservation and transport of clinical specimens. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2)
7. Prepare, stain and microscopically examine clinical materials and culture isolates. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2, 3, 4)

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus
G. SPECIAL INFORMATION

1. Knowledge of Human Cultures and the Physical and Natural World--Through study in the sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.

2. Intellectual and Practical Skills--Including: Inquiry and analysis; Critical and creative thinking; Written and oral communication; Quantitative literacy; Information literacy; Teamwork and problem solving.

3. Personal and Social Responsibility and Engagement--Including: Civic knowledge and involvement--campus, local and global; Intercultural knowledge and competence; Ethical reasoning and action; Foundations and skills for lifelong learning.

4. Integrative and Applied Learning--Including: Synthesis and advanced accomplishment across general education, liberal studies, specialized studies and activities in the broader campus community.