

**SOUTHEAST COMMUNITY COLLEGE
HEALTH SCIENCES DIVISION
MEDICAL LABORATORY TECHNOLOGY
Revision Date: 04/2026**

I. CATALOG DESCRIPTION

Course Number: MEDT 2100
Course Title: Medical Microbiology 2
Prerequisites: MEDT 1190

Catalog Description: Continuation of Medical Microbiology 1. Study of theory and procedures; culturing, isolating and identifying microorganisms, parasites and fungi from human specimens. Skills and laboratory techniques corresponding to theoretical information presented in the lecture. Laboratory is concurrent with lecture.

Credit Hours: 4
Class Hours: 30
Lab Hours: 90
Total Contact Hours: 120

II. COURSE OBJECTIVES: *Course will:*

1. Apply the MLT program safety policies and aseptic technique during all laboratory procedures.
2. Apply isolation and identification techniques learned in Medical Microbiology 1.
3. Utilize appropriate culture media, incubation conditions and biochemical and automated testing to isolate, differentiate and identify clinically significant microorganisms.
4. Summarize procedures for processing body specimens for bacterial growth.
5. Differentiate common pathogens from normal flora from specific body specimens.
6. Recognize and correlate infectious disease with clinical specimens collected from different body sites.
7. Identify important antimicrobial agents and their mode of action.
8. Perform manual and automated methods of antimicrobial susceptibility testing.
9. Identify current laboratory techniques for collection, preservation, processing and identification of specimens for parasitic, mycobacterial, and fungal examination.
10. Identify infectious disease caused by parasitic, mycobacterial and fungal pathogens.
11. Perform and interpret microscopy techniques used in parasitic, mycobacterial and fungal examination.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

1. Apply laboratory safety principles.
2. Differentiate normal flora and pathogens in different body specimens.
3. Identify organisms using current laboratory techniques.
4. Discuss the disease processes and laboratory diagnostic tests used for the diagnosis of infectious diseases.
5. Perform manual and automated antimicrobial susceptibility testing.

6. Describe and perform laboratory techniques used in parasitic, mycobacterial and fungal examination and identification.

B GENERAL EDUCATION LEARNING OUTCOMES

1. GELO #3: Critical Thinking & Problem Solving

Collect, identify, interpret and analyze data.

Evaluate the validity of arguments, alternatives, data, outcomes, and/or impacts of actions.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

A. ANTIMICROBIAL AGENTS & SUSCEPTIBILITY TESTING

B. ENTEROBACTERIACEAE

C. NONFERMENTING GRAM NEGATIVE BACILLI & SIMILAR ORGANISMS

E. HACEK AND OTHER FASTIDIOUS GRAM-NEGATIVE BACILLI

F. ANAEROBES

G. CLINICAL SPECIMENS & INFECTIONS OF BODY SYSTEMS

a. URINE CULTURES

b. STOOL CULTURES

c. RESPIRATORY CULTURES

d. GENITAL CULTURES

e. BLOOD & BODY FLUID CULTURES

H. MYCOBACTERIUM

I. MYCOLOGY

J. CLINICAL PARASITOLOGY

V. INSTRUCTIONAL MATERIALS

A. Required text(s):

Delost, Maria Dannessa, *Introduction to Diagnostic Microbiology for the Laboratory Sciences* (current edition)

B. Other Required Resources:

Packet of Handouts

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. In-person and recorded lectures and videos
2. In-person and recorded laboratory demonstrations and videos
3. Hands-on activities
4. Role play
5. Online resources
6. Guest presentations
7. Case studies

VII. METHODS OF EVALUATION

- A.** Methods of evaluation typically include a combination of assignments, quizzes, exams, projects, laboratory competencies, etc. For grading expectations please see the course information document.

SCC STANDARD GRADING SCALE POLICY:

A+	95-100	C+	75-79
A	90-94	C	70-74
B+	85-89	D+	65-69
B	80-84	D	60-64
		F	Below 60

VIII. SPECIFIC COURSE REQUIREMENTS

A. ATTENDANCE

Attendance is crucial to the success of this course. The attendance policy can be found in the MLT Student Handbook.

B. OTHER

Please see the Course Information Document for course policies related to grading, expectations, assignments, assessment, and participation.