

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

SUBJECT AREA	<u>Medical Assisting Technology</u>
COURSE RUBRIC AND NUMBER	<u>MDCA 1452</u>
COURSE TITLE	<u>Medical Assistant Laboratory Procedures</u>
COURSE CREDIT HOURS	<u>4            3    :    3</u> Credits        Lec        Lab

### I. Catalog Description

Discusses application of governmental health care guidelines. Includes specimen collection and handling, quality assurance, and quality control in performance of Clinical Laboratory Improvement Amendments (CLIA)-waived laboratory testing. A grade of "C" or better is required in this course to take the next course. **Prerequisites: MDCA 1305 and MDCA 1313 and MDCA 1409. (3:3). Lab fee. Professional Practice Insurance required.**

### II. Course Objectives

#### A. Unit I. Introduction to the Medical Laboratory

1. Discuss infection control procedures.
2. Identify personal safety precautions as established by OSHA.
3. Participate in training on Standard Precautions.
4. Explain quality control and quality assurance in the medical laboratory.
5. Discuss quality control issues related to handling microbiological specimens.
6. Recognize and comply with safety signs, symbols, and labels.
7. Discuss the organization and function of the medical laboratory.
8. Identify and define selected abbreviations commonly used in the medical laboratory.
9. Perform hand washing.
10. Match types and explain uses of PPE.
11. Select appropriate barrier/PPE for potentially infectious situations
12. Properly dispose of hazardous waste.
13. Demonstrate proper use of eye wash, fire extinguisher, and sharps disposal containers.
14. Maintain MSDS (Material Safety Data Sheets) and identify information about specific chemicals and whether they are a health hazard.
15. Practice risk management, ergonomics, and body mechanics.
16. Identify safety techniques that can be used to prevent accidents and maintain a safe work environment.
17. Identify the most common laboratory panels and explain the body systems or function being surveyed.
18. Explain where accurate and reliable information might be obtained about proper procurement.
19. Store and handle laboratory specimens.
20. Contact outside laboratories and verify specimen pickups.

B. Unit II. Patient Preparation and Collecting Specimens

1. Perform patient screening using established protocols.
2. Perform patient education.
3. Apply critical thinking skills in performing patient assessments and care.
4. Use language/verbal skills that enable patient's understanding.
5. Identify self and provide credentials.
6. Identify the patient and verify date of birth.
7. Identify any allergies and medications
8. Demonstrate respect for diversity in approaching patients and family.
9. Display sensitivity to patient rights and feelings in collecting specimens.
10. Explain the rationale for performing a procedure to patient.
11. Identify patient's concerns related to the procedure being performed.
12. Correctly complete a laboratory requisition.
13. Obtain specimens for microbiological testing.

C. Unit III. Basic Microbiology

1. Identify types of infectious agents.
2. Compare different methods of controlling the growth of microorganisms
3. Discuss the organisms included in the study of microbiology.
4. Discuss the types of diseases caused by different groups of microorganisms.
5. Perform a throat culture and a rapid test for a group of streptococci.
6. Discuss laboratory test methods used to detect sexually transmitted diseases.
7. Explain the importance and use of the fecal occult blood test.
8. Obtain specimens for microbiological testing.
9. Administer and perform lab tests (pregnancy, strep-test, influenza).

D. Unit IV. Urinalysis

1. Identify the organs of the urinary system.
2. Identify the parts of the kidney and state the function of each part.
3. Explain how urine is formed.
4. Describe proper urine collection and preservation methods.
5. Perform a physical examination of urine.
6. Perform a chemical examination of urine.
7. Identify components of urine sediment.
9. Explain how urinalysis results can give information about the status of a patient's health.
10. Screen test results.
11. Distinguish between normal and abnormal test results.

E. Unit V. CLIA Waived Testing

1. Identify disease processes that are indications for CLIA waved tests.
2. Perform CLIA waived hematology testing.
3. Perform CLIA waived chemistry testing.
4. Perform CLIA waived urinalysis testing.
5. Perform CLIA waived immunology testing.
6. Perform CLIA waived microbiology testing.
7. Perform CLIA waived specialty testing.
8. Screen test results.
9. Distinguish between normal and abnormal test results.

F. Unit VI. Phlebotomy: Venipuncture and Capillary Puncture

1. Identify and describe the anatomy of the circulatory system

2. Identify and describe the physiology of the circulatory system
3. List and describe the cellular components of blood
4. Explain supplies and equipment used in blood collection
5. Demonstrate the use of equipment safely and comfortably
6. Identify blood collection methods
7. Identify needle gauges used in phlebotomy
8. Identify and explain the use for the different collection tubes and their additives
9. Explain additive actions
10. List steps to the venipuncture technique
11. Explain how to handle the various reactions a patient may have to venipuncture
12. Identify factors affecting laboratory values
13. Discuss the composition of capillary blood
14. Demonstrate the use of a centrifuge
15. Report incidents, e.g., needle sticks
16. Perform within the scope of practice
17. Apply HIPAA rules in regard to privacy/release of information
18. Practice Standard Precautions
19. Perform a venipuncture.
20. Perform a capillary puncture.
21. Document actions accurately in the patient record

### III. THECB Learning Outcomes (WECM)

1. Demonstrate venipuncture and skin puncture technique.
2. Demonstrate compliance with Universal Standards and Precautions based on OSHA regulations.
3. Perform CLIA waived laboratory tests.
4. Label and handle all biological specimens.
5. Use equipment including calibration, maintenance, and troubleshooting.
6. Demonstrate quality assurance and quality control procedures.

### IV. Evaluation

#### The lecture grade will be determined as follows:

Quizzes/Daily Work	40%
Written Exams	35%
Homework/Presentations	25%

#### The lab grade will be determined as follows:

Lab Assignments/Daily Work	30%
Competencies	45%
Uniform/Professionalism	25%

#### Laboratory Competencies:

#### Minimum Score 75%

“Psychomotor and affective competencies taught and assessed in this course must be passed with 100% of the psychomotor and affective competencies from the MAERB Core Curriculum, in order to pass the course.” In other words, students shouldn’t be able to pass any particular course if they haven’t passed all of the MAERB psychomotor and affective competencies found within it.

**Both Lecture and Lab grades will be combined, and student must pass both Lecture and**

**Laboratory in order to successfully pass the course.**

**Final Grade:**

Lecture	35%
Laboratory	40%
Final Exam	25%

Key for grades as follows:

- A (90-100%)
- B (80-89%)
- C (70-79%)
- D (60-69%)
- F Less than 60\*

\*A grade of “D” or “F” will need to be repeated for all Health Occupations classes in order to graduate.

**V. Disability Statement (Americans with Disabilities Act [ADA])**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

**VI. 6 Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.