

# MA-132L: MEDICAL OFFICE LABORATORY PROCEDURES

---

## Cuyahoga Community College

### Viewing: MA-132L : Medical Office Laboratory Procedures

#### Board of Trustees:

2017-03-30

#### Academic Term:

Fall 2020

#### Subject Code

MA - Medical Assisting

#### Course Number:

132L

#### Title:

Medical Office Laboratory Procedures

#### Catalog Description:

Laboratory component to the Medical Office Laboratory Procedures course. Includes the importance of quality control and quality assurance in the physician's office laboratory. Technical procedures for venipuncture and capillary sticks, and collection and processing of specimens covered. Laboratory testing including basic urinalysis, microbiology testing, serological testing, hematology testing and point of care testing. Occupational Safety & Health Administration (OSHA) and Clinical Laboratory Improvement Amendment (CLIA) regulations will be taught as they apply to the Physician Office Laboratory (POL).

#### Credit Hour(s):

1

#### Lab Hour(s):

3

## Requisites

#### Prerequisite and Corequisite

ENG-1010 College Composition I, or ENG-101H Honors College Composition I; and MATH-0955 Beginning Algebra or appropriate math placement score; and MA-1010 Introduction to Medical Terminology; and concurrent enrollment in MA-1321 Office Laboratory Procedures, and departmental approval: admission to Medical Assisting program.

## Outcomes

#### Course Outcome(s):

A. Utilize proper methods of maintaining a safe working environment in the office laboratory.

#### Objective(s):

1. 1. Develop an awareness of hazardous substances and conditions that are present in a small office clinical laboratory.
2. 2. Demonstrate appropriate precautions when handling biological specimens to ensure a safe laboratory and working environment.

#### Course Outcome(s):

B. Utilize proper procedures to prepare patients for lab testing, collecting, and processing laboratory specimens, and charting laboratory results.

#### Objective(s):

1. 8. Demonstrate the correct procedure in the collection of a clean-catch, mid-stream urine specimen.
2. 1. Demonstrate, analyze and adapt good techniques which fosters speed and accuracy.
3. 2. Demonstrate the proper procedure to collect and process laboratory specimens.
4. 3. Research and model control principles as applied to the medical office laboratory.
5. 4. Demonstrate correct usage of the metric system.
6. 5. Demonstrate how to prepare patients for lab testing and completion and charting of lab results.
7. 6. Demonstrate the proper procedure in collection and transporting of clinical specimens.
8. 7. Utilize theoretical background in areas related to the practical performance of laboratory tests.

**Course Outcome(s):**

C. Perform the proper procedure for the collection of blood using capillary and venipuncture without undue harm to the patient and without compromising the integrity of the sample.

**Objective(s):**

1. 1. Perform correctly at least ten (10) venipunctures and ten (10) capillary sticks/finger sticks.
  2. 2. Research the differences between serum and plasma and apply that knowledge to the understanding of testing requirements for routine lab chemistries.
  3. 3. Correlate the handling of all test results and evaluate the information to create a plan for the dissemination of the results, whether normal or abnormal.
  4. 4. Interpret the correct tubes for the tests indicated and plan the correct order of draw when performing venipuncture.
  5. 5. Analyze and apply the theory and procedure for basic hematology test.
  6. 6. Analyze and adapt that knowledge as to the purpose of the basic chemistry test, microbiological principles, microbiological tests, and the basic serological tests.
- 

**Methods of Evaluation:**

- A. Quizzes
- B. Tests/exams
- C. Modeling of laboratory procedures
- D. Testing of specimens
- E. Written Assignments
- F. Completion of all Commission on Accreditation of Allied Health Education (CAAHEP) competencies at 100%
- G. Professionalism to include appropriate dress, behavior, and attitude

**Course Content Outline:**

1. Safety in the laboratory
  - a. Safety procedures used in the office laboratory
  - b. Safety procedure manual and know how and when to access it.
2. Governmental regulations
  - a. OSHA
  - b. CLIA
3. Quality control
  - a. Definition of quality control
  - b. Steps in completing quality control
  - c. Quality assurance and quality control
4. Metric system applications
  - a. Proper use of calibrated pipets
  - b. How solutions are measured and prepared
5. Microscopy
  - a. Proper use of the microscope
  - b. The parts of a microscope
  - c. The functions of the microscope
6. Patient preparation for tests and collection of specimens
  - a. The use of patient handouts in preparation for tests and the collecting of specimens
  - b. An educational exercise between MA and patient
7. Urinary laboratory procedures
  - a. Urine Specimen collection and preservation
  - b. Common urinalysis tests
8. Blood Laboratory Procedures
  - a. Capillary blood collection
  - b. Venous blood collection
  - c. Description, function and composition of blood
  - d. Identification of patients and specimens
  - e. Vacuum tubes and additives
  - f. Needles and lancets
  - g. Phlebotomy complications
  - h. Common hematology tests
  - i. Common chemistry tests

- j. Common microbiology procedures and tests
  - k. Common serological tests
9. Point of Care Testing
    - a. The necessary components to a Point of Care test
    - b. The advantages and disadvantages of POCT
  10. Reporting and charting of lab results.
    - a. The steps in reporting lab results both in emergency and non-emergency situations.
    - b. Charting and correct documentation
    - c. The alpha and numeric filing systems

## Resources

Alexandra P. Adams, Deborah B. Proctor. *Kinn's The Medical Assistant, An Applied Learning Approach*. 12. St. Louis: Elsevier, 2014.

---

Alexandra P. Adams, Deborah B. Proctor. *Kinn's The Medical Assistant, An Applied Learning Approach, Study Guide*. {ts '2013-12-31 00:00:00'}.

---

## Instructional Services

### OAN Number:

CTAN Approved: Career Technical Assurance Guide CTMAT009 (2 of 2 courses, both must be taken)

Top of page

Key: 2722