

# MA-240L: ADVANCED PROCEDURES FOR THE MEDICAL ASSISTANT LABORATORY

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## Cuyahoga Community College

**Viewing: MA-240L : Advanced Procedures for the Medical Assistant Laboratory**

**Board of Trustees:**

March 2026

**Academic Term:**

Fall 2026

**Subject Code**

MA - Medical Assisting

**Course Number:**

240L

**Title:**

Advanced Procedures for the Medical Assistant Laboratory

**Catalog Description:**

Practice of the more advanced procedures performed in the medical office by medical assistants including specimen collection, physician's office laboratory testing, assisting with minor surgical procedures, caring for patients over the lifespan, and patient education.

**Credit Hour(s):**

1

**Lab Hour(s):**

3

## Requisites

**Prerequisite and Corequisite**

Concurrent enrollment with MA-2400 Advanced Procedures for the Medical Assistant, and departmental approval

## Outcomes

**Course Outcome(s):**

Demonstrate the proper performance of CLIA Waived testing to include hematology, chemistry, urinalysis, immunology and microbiology tests.

**Objective(s):**

1. Demonstrate the proper collection method and specimen for CLIA-waived hematology tests to include Hematocrit, Hemoglobin, Erythrocyte Sedimentation Rate (ESR), and Prothrombin Time INR.
  2. Demonstrate the proper collection method and specimen for CLIA-waived chemistry tests to include Total Cholesterol, Glucose (non-fasting and fasting), and Hemoglobin A1C (HbA1C).
  3. Demonstrate the proper collection method and specimen for CLIA-waived immunology (serology) tests to include Urine Pregnancy and Mononucleosis.
  4. Demonstrate the proper collection method and specimen for CLIA-waived urinalysis tests to include Urine Dipstick and Urine Macroscopic.
  5. Demonstrate the proper collection method and specimen for CLIA-waived microbiology tests to include Rapid Strep, COVID-19, and Rapid Flu.
  6. Demonstrate the proper procedure for performing the following CLIA-waived tests: Hemoglobin, Glucose (fasting and non-fasting), Urine Pregnancy, Mononucleosis, Macroscopic and Chemical Urinalysis, and Rapid Strep.
  7. Identify normal and abnormal results as reported in charts and graphs.
  8. Plot results on charts and graphs.
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**Course Outcome(s):**

Demonstrate proper use of commonly used laboratory equipment that a medical assistant uses in the Physician's Office Laboratory (POL).

**Objective(s):**

1. Perform and accurately document a quality control procedure.
2. Describe the proper usage of important pieces of laboratory equipment to include centrifuge, microscope, autoclave, and incubator.
3. Perform accurate documentation for specimen collection and laboratory requests.

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**Course Outcome(s):**

Demonstrate proper patient education on nutritional choices to meet a healthy lifestyle and/or current medical condition.

**Objective(s):**

1. Compare and contrast the special dietary needs for weight control, diabetes, cardiovascular disease, hypertension, lactose sensitivity, gluten-free diets, food allergies, and eating disorders
2. Perform proper patient education on nutritional food choices for healthy adults.

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**Course Outcome(s):**

Properly assist a healthcare provider with minor surgical procedures in the medical office.

**Essential Learning Outcome Mapping:**

Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.

**Objective(s):**

1. Correctly set up a minor surgery tray and sterile field.
2. Properly perform a sterile hand wash and don sterile gloves.
3. Properly provide patient education on pre- and post-surgical procedures.
4. Prepare items for autoclaving.
5. Perform within a sterile field
6. Perform sterilization procedures.

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**Course Outcome(s):**

Demonstrate performance of common procedures performed by medical assistants in the medical office within their scope of practice.

**Objective(s):**

1. Describe the common tests performed in the medical office including the following from each body system:
  1. Integumentary System (Skin)
    1. Wound cleansing and dressing changes
    2. Suture and/or staple removal
    3. Application of topical medications
  2. Musculoskeletal System
    1. Bandaging and supportive wraps
    2. Proper assistive ambulatory device training (crutches, walker, etc.)
  3. Cardiovascular System
    1. Electrocardiogram (ECG/EKG)
    2. Holter monitor application
    3. Blood pressure measurement
  4. Respiratory System
    1. Pulse oximetry
    2. Spirometry / pulmonary function testing
    3. Throat or nasal swab collection

#### 5. Digestive System

1. Occult blood stool testing (FOBT/FIT)
2. Patient education on proper collection of stool specimens

#### 6. Urinary System

1. Patient education on proper urine specimen collection (routine, clean catch, 24-hour)
2. Urinalysis (dipstick, microscopic prep)

#### 7. Reproductive System

1. Pregnancy testing (urine/hCG)
2. Testicular exam patient education
3. Breast exam patient education

#### 8. Endocrine System

1. Fingerstick glucose testing
2. Cholesterol screening

#### 9. Nervous System / Special Senses

1. Vision screening (Snellen chart, Ishihara test)
2. Ear irrigation (cerumen removal)

#### 10. General / Multi-System Procedures

1. Immunizations and injections (IM, SC, ID)
  2. Venipuncture and capillary puncture
  3. Administration of medications under provider order
  4. Minor surgical procedures within scope of practice
  5. Vital signs
2. Accurately document procedures in a patient's medical record.

#### **Course Outcome(s):**

Demonstrate accurate performance of tasks done by medical assistants when assisting in the care of the geriatric population.

#### **Objective(s):**

1. Accurately perform basic cognitive screening assessments within the MA scope of practice.
2. Describe and demonstrate proper communication techniques used in patients with disorders associated with aging (vision and hearing changes).
3. Demonstrate proper care of patients with low ambulatory mobility.

#### **Course Outcome(s):**

Demonstrate accurate performance of tasks done by medical assistants when assisting in the care of the pediatric population.

#### **Objective(s):**

1. Correctly perform vital signs assessment on infants.
2. Correctly perform proper infant measurements to include:
  1. Height
  2. Weight
  3. Head Circumference
  4. Chest Circumference
3. Accurately chart infant measurements on a growth chart.
4. Compare and contrast injection sites between an adult and infant.
5. Accurately locate and describe the current Centers for Disease Control's childhood vaccination recommendations.
6. Describe safety concerns when working with children in the medical office.

#### **Methods of Evaluation:**

1. Tests
2. Quizzes

3. Written assignments
4. Lab skills practical assessments

**Course Content Outline:**

1. Components of Quality Assurance
  - a. Quality Control
  - b. Laboratory Requisitions
2. Specimen Collection
  - a. Blood
    - i. Capillary Puncture
    - ii. Venipuncture
      1. Vacutainer Assembly
      2. Butterfly Assembly
      3. Adverse Conditions
        - a. Fainting
        - b. Bruising
        - c. Swelling
    - iii. Collection Tubes and Additives
  - b. Urine
    - i. Sample Types
      1. Random Sample
      2. Clean Catch Mid-Stream (CCMS)
      3. 24-hour Collection
      4. First Morning Void
    - ii. Specimen Preservation and Storage
  - c. Other Samples
    - i. Stool
    - ii. Microbiological Samples
3. Laboratory Testing
  - a. Blood
    - i. Common Blood Test Abbreviations
    - ii. Normal Ranges
    - iii. CLIA Waived Testing
  - b. Urinalysis
    - i. Physical Exam for Color and Clarity
    - ii. Chemical Dipstick
    - iii. Urine Pregnancy Testing
  - c. Other samples
    - i. Stool
      1. Fecal Occult Blood (FOB)
      2. Ova and Parasites
    - ii. Microbiological Samples
4. Role of the Medical Assistant in the POL
  - a. Patient Communication and Preparation
  - b. Accurate Documentation
  - c. Safety Requirements
  - d. Sample Collection and Processing
  - e. CLIA Waived Testing
  - f. Reporting and Documenting Results
5. Pediatrics
  - a. Childhood growth patterns
  - b. Immunizations
  - c. Safety guidelines
6. Geriatrics
  - a. Changes over the lifespan
  - b. Screening tools for dementia, depression, and malnutrition
7. Surgical Medical Assisting
  - a. Surgical instruments used in minor surgery
  - b. Sterile field

- c. Asepsis
- d. Patient education
- e. Autoclaving.
- f. Sterilization procedures.

### Religious Accommodation

Before reviewing the course schedule, students should carefully review the following religious accommodation policy and other required instructional policies:

#### Religious Accommodation:

Students seeking an accommodation for absences permitted under Ohio's Testing Your Faith Act must provide the instructor with written notice of the specific dates for which the student requires an accommodation and must do so not later than fourteen (14) days after the first day of instruction. Please submit requests for accommodations at this link: [https://portal2.tri-c.edu/ReligiousAccommodation/Religious Accommodation Form](https://portal2.tri-c.edu/ReligiousAccommodation/ReligiousAccommodationForm). Students with questions about their religious accommodations under Ohio's Testing Your Faith Act may contact the College's Office of General Counsel and Legal Services by phone at 216.987.4856 or via email at [legal@tri-c.edu](mailto:legal@tri-c.edu).

#### Other Required Instructional Policies:

<https://www.tri-c.edu/student-resources/curriculum/documents/syllabus-part-b.pdf>

### Weekly Schedule

	Topics
Week 1	Quality Control
Week 2	Specimen Collection
Week 3	CLIA Waived Testing of Blood
Week 4	CLIA Waived Testing of Blood
Week 5	CLIA Waived Testing of Urine
Week 6	CLIA Waived Testing of Urine
Week 7	Pediatric Measurements and Assisting in the Exam
Week 8	Pediatric Measurements and Assisting in the Exam
Week 9	Assisting with Geriatric Patients
Week 10	Assisting with Geriatric Patients
Week 11	Minor Surgery Instruments
Week 12	Autoclaving and Sterility
Week 13	Minor Surgery Trays/ Sterile Fields
Week 14	Lab Activities Incorporating All Topics from this Course
Week 15	Lab Activities Incorporating All Topics from this Course
Week 16	Final Exam

The Course Schedule is subject to change due to pedagogical needs, instructor discretion, parts of term, and unexpected events.

### Required/Recommended Readings

Booth, K. A., Whicker, L. G., Wyman, V. M., & Thompson, J.. *Medical assisting: Administrative and clinical procedures*.

### Resources for the Instructor

Niedzwiecki,B., Pepper, J. (2023). (2023) *Kinn's the medical assistant: An applied learning approach*, Elsevier.

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Blesi, C. (2021). *Principles of pharmacology for medical assisting*, Cengage.

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Booth, K.A., Whicker, L.G., Wyman, V.M., & Thompson, J. (2023). *Medical assisting: Administrative and clinical procedures*, McGraw Hill.

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