

Medical Assisting Lab Procedures

MDCA 1352.001 TR

Fall 2025

COURSE SYLLABUS

Instructor: ***Karen Duck, MS, BAAS, AAS, CMA (AAMA)***

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Office: UHS 102

Classroom: UHS 245 & UHS 241

Office hours: M-Th 9am-12pm & 1:30pm – 3:30pm

Course Description:

Students will be instructed in procedures depicted in the waived category of the Clinical Laboratory Improvement Act (CLIA). This course includes blood collection, specimen handling, basic urinalysis, identification of normal ranges, quality assurance, and quality control.

Prerequisite:

MDCA 1417, MDCA 1302

Required Texts:

Cengage: Medical Assisting; Administrative & clinical Competencies 9th ed., Michelle Blesi

Cengage: MindTap Learning Platform

Publisher: Cengage

ISBN Number: 978-0-357-50281-5

Student Learning Outcomes:

1. Asepsis and infection control
2. Specimen collection and processing
3. Diagnostic testing
4. Patient care and instruction
5. Quality assurance and quality control procedures
6. Appropriate equipment maintenance and troubleshooting

Course competencies:

ANATOMY & PHYSIOLOGY

I.C.8.a/b/c/d/e – Identify common pathology related to each body system including signs, symptoms, etiology, diagnostic measures, and treatment modalities

I.C.9 – Identify Clinical Laboratory Improvement Amendments (CLIA) waived tests associated with common diseases

I.C.11 – Identify quality assurance practices in healthcare

I.P.2.b/c – Perform venipuncture and capillary puncture

I.P.3 – Perform patient screening following established protocols

I.P.11.a/b/c/d/e- Collect specimens and perform CLIA-waived hematology test, chemistry test, urinalysis, immunology test, and microbiology test.

- A.1 – Demonstrate critical thinking skills
- A.3 – Demonstrate empathy for patients' concerns

APPLIED MATHEMATICS

- II.C.3.a/b – Identify normal and abnormal results as reported in graphs and tables
- II.P.2 – Record laboratory test results into the patients' record
- A.2 - Reassure patient

Competencies covered for MDCA 1348 in MDCA 1352 class-

- I.P.5 – Select proper sites for administering parenteral medication
- I.P.6 – Administer oral medications
- I.P.7 – Administer parenteral (excluding IV) medications

LECTURES & DISCUSSIONS:

The Clinical Laboratory, Terminology, Safety, Equipment, Laboratory Math, Quality Assessment, The Microscope, Phlebotomy, Hematology, Hemostasis (Coagulation), Immunology and Immunohematology, Urinalysis, Clinical Chemistry, and Microbiology

COMPETENCY PROCEDURES:

- Procedure 45-1 Perform a quality control measure on a glucometer (I.P.10) and record the results in a flow sheet (II.P.3)
- Procedure 46-4 Differentiate between normal and abnormal test results while determining the reliability of chemical reagent strips (II.P.2)
- Procedure 46-5 Obtain a specimen and perform CLIA waived Urinalysis; test the urine with a chemical reagent strip (I.P.11.c) and perform a urine culture test (I.P.11.e)
- Procedure 48-3 Obtain a specimen and perform CLIA waived Hematology; Perform a hemoglobin test (I.P.11.a)
- Procedure 48-7 Obtain a specimen and perform CLIA waived Chemistry test; Determine cholesterol level or lipid profile using a cholesterol analyzer (I.P.11.b)
- Procedure 49-4 Obtain a specimen and perform CLIA waived Immunology test; Perform a quickvue infectious mononucleosis test (I.P.11.d)
- Procedure 47-1 Instruct and prepare a patient for a procedure and perform venipuncture: Collect a venous blood sample using the vacuum tube method
- Procedure 47-2 Perform venipuncture: Collect a venous blood sample using the syringe method (I.P.2.b)
- Procedure 47-3 Perform venipuncture: Obtain a venous sample with safety winged butterfly needle
- Procedure 47-4: Instruct and prepare a patient for a procedure and perform capillary puncture: Obtain a capillary blood sample by fingertip puncture (I.P.2.c)

Procedures that will be assessed from Pharmacology MDCA: 1348

- Procedure 30-1. Administer Oral Medications (I.P.6)
- Procedure 30-7. Administer Parenteral (Excluding IV) Medications: Give an Intradermal Injection (I.P.5)
- Procedure 30-8. Select the Proper Sites for Administering a Parenteral Medication: Administer a Subcutaneous Injection (I.P.5)
- Procedure 30-9. Administer Parenteral (Excluding IV) Medications: Administer an Intramuscular Injection into the Deltoid Muscle (I.P.4.a) (I.P.4.b) (I.P.4.c) (I.P.4.d) (I.P.4.e) (I.P.4.f)
- Procedure 30-10. Administer Parenteral (Excluding IV) Medications: Give a Z-Track Intramuscular Injection into the Dorsogluteal Site (I.P.7)
- Procedure 4-5. Complete an Incident Report Related to an Error in Patient Care (X.P.7)

Course Policies/Attendance:

Students are expected to attend and participate in all classes. If you are absent, regardless of the cause, you are still responsible for contacting the instructor prior to the absence and for any course work missed. You are allowed three absences from class. On the fourth absence, your course grade will be reduced one letter grade. Class begins promptly at 9am. For every 3 times you are tardy to class, it will be recorded as one absence. Please make sure you arrive on time.

Students are responsible for checking their Blackboard Course Messages, Blackboard Announcement Board, NTCC email, and Microsoft Teams for instructor communications.

Drop Policy: The last day to drop with a grade of "W" is **Tuesday, November 18, 2025.**

Instructional Methods and Tools:

The instructional methods and tools are tied to the course and chapter learning objectives by allowing the student to research, discover, and perform the differing educational exercises in class and within the Sim Chart Learning Platform. This course uses the following tools to aid students in successfully achieving the learning objectives in this course:

1. The Sim Chart Learning Platform will be used for the majority of assignments and procedures related to electronic health records and business practices.
2. Completion of hands-on competencies.
3. Articles, lectures, and powerpoint presentations supplied by the instructor.

Evaluation and Grading Criteria:

Exams will be given throughout the semester and will cover chapter reviews, terminology, and any additional materials given by the instructor during lecture. If there is any alteration in the class calendar, the change will be announced in class. If a student exits the room during an exam, the time will be noted and for every minute the student is out of the room, that number of points will be subtracted from the test score.

In addition, medical assisting students must obtain a passing score on all psychomotor and affective domain objectives (competencies) in the course. CAAHEP accreditation requires 100% of all medical assisting graduates pass 100% of all competencies.

Examinations and Competency Procedures:

There will be chapter and multi-chapter examinations and one (1) comprehensive final examination. There will be multiple competency procedure assessments that will count as a test grade. If you are absent the day of a competency procedure check-off, it will be up to you to contact your instructor to schedule a competency procedure make-up appointment. Failure to schedule a make-up appointment with your instructor will result in a final grade of zero (0) being entered for your competency. In addition, medical assisting students must obtain a passing score on all psychomotor and affective domain objectives (competencies) in the course. CAAHEP accreditation requires 100% of all medical assisting graduates pass 100% of all competencies. All class examinations are considered to be a major part of the course work upon which a portion of your final grade will be based. If the total average of the chapter exams is below 75%, the student will not qualify to sit for the final examinations. There are NO make-up exams! Class exams are listed on the class calendar. If this calendar must be altered, the change in the schedule will be announced in class. If you have a conflict with the date, you must contact me well in advance of the examination. Failure to do so will result in an examination grade of zero. There is absolutely no make-up exam for the final exam. You must be in attendance to take the final. If you are not able to take the final exam, a grade of 0 will be given for the exam. A grade of zero will be assigned for any missed unannounced quizzes.

*****There are no make-ups for any activities or assignments and I do not accept late work unless prior arrangements have been made.**

Competency/Performance Test Policy:

Procedure passed on first attempt, maximum score possible = 100 %

Procedure passed on second attempt, maximum score possible = 88 %

Procedure passed on third attempt, maximum score possible = 75 %

Assignments:

All assignments are due on the specified due date. **No late assignments will be accepted.** If you are unable to turn in your assignment on the specified date, you must contact me in advance to make arrangements for submission.

Academic Dishonesty:

Academic dishonesty is considered an act of cheating. Each student has a responsibility to follow the college policies regarding academic dishonesty which are found on page 86 in the Northeast Texas Community College General Catalog. Please see my letter regarding Academic Integrity found on BlackBoard under "START HERE"

Any student in violation of this policy will automatically receive a grade of "0" for that assignment. A second violation will result in suspension from the program.

APA (American Psychological Association) Format: APA is a specific format that is a guideline for every aspect of writing, from determining authorship to constructing a [table](#) to avoiding [plagiarism](#) and constructing accurate reference citations. This format must be adhered to for all writing assignments to avoid plagiarizing your written material. If you are unfamiliar with APA formatting, I have provided an Internet link on the "**START HERE**" page for reference.

Grading Scale:

Apply It Chapter Assignments, Homework, Student Contract	20%
Lab Procedures	15%
Apply It Chapter Test, In Class Test	35%
Final Comprehensive Exam	30%

The grading scale of all evaluation combined will be as the following:

90% - 100%	=	A
89% - 80%	=	B
79% - 75%	=	C
Below 74.9%	=	F

75% is the minimum passing level of achievement. Any student who receives a final score below 75% will not pass the course. In addition, medical assistant students must obtain a passing score on all psychomotor and affective domain objectives (competencies) in the course. CAAHEP accreditation requires 100% of all medical assisting graduates pass 100% of all competencies.

Grades will be posted online under "**My Grades**" in Blackboard. Grades will be posted no later than day 7 of the following week in which the assignment was due. For example, if your assignment was due in Week 3, you would not receive grades on that assignment until Day 7 of Week 4. MindTap

grades will automatically post to your grade book after you have submitted the assignment. I do review tests and worksheet assignments for computer errors and may award credit for answers that I feel are correct.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to: online through the BlackBoard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, BlackBoard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the BlackBoard course site.

ADA Statement

It is the policy of Northeast Texas Community College to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the Northeast Texas Community College Catalog or Student Handbook or you can contact the Coordinator of Special Populations at 903-434-8202, or visit the website: <http://www.ntcc.edu/index.php?module=Pagesetter&func=viewpub&tid=111&pid=1>

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing.

Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tobacco Use:

The use of tobacco products including smokeless tobacco, smoking tobacco, and any legal smoking preparation is prohibited in all College buildings, enclosed facilities, inner campus, and College owned vehicles.

Tobacco use is prohibited in:

1. All enclosed buildings and facilities, including but not limited to classrooms, offices, food service areas, lavatories and residence halls
2. All exterior areas in the inner campus and parking lots.
3. All college owned vehicles.

Tobacco use is permitted in:

1. Personal vehicles
2. Designated smoking huts on the west side of campus.

CELL PHONES, PAGERS & OTHER ELECTRONIC DEVICES

Classrooms should be free of all unnecessary distractions from the tasks of learning. Therefore, as a general rule, students should silence all personal electronic devices not being used for coursework prior to entering the classroom. Instructional management is a right and a responsibility of the instructor; therefore, policy regarding the use of electronic devices in the classroom may vary depending upon the nature of the course or the guidelines of the instructor. Upon entering the classroom, all cell phones will be placed in vibrate/silent mode.

CLASSROOM COMPUTERS

The computers in the classroom are for course work only. Checking social media sites and other Internet activity not related to educational work is prohibited. Computers are monitored at the discretion of the instructor. Please make sure that you read the Social Media and Electronic Devices policy found in your MA Program Handbook. **If you are found in violation of this policy, your course grade will be decreased one letter grade for each occurrence.**

LEARNING OBJECTIVES:

Chapter 41 – The Physician’s Office Laboratory

- Explain the purpose of the Physician’s Office Laboratory (POL) and its regulatory requirements (e.g., CLIA).
- Describe the workflow within a POL, including specimen handling and quality control.
- Demonstrate knowledge of maintaining accuracy and safety in point-of-care testing.

Chapter 42 – Specimen Collection and Processing

- Identify appropriate techniques for collecting various specimen types (blood, urine, swabs).
- Apply proper labeling, transport, and handling protocols to preserve specimen integrity.
- Recognize safety procedures and infection control measures during specimen collection.

Chapter 43 – Blood Specimen Collection

- Differentiate between venous and capillary sampling methods.
- Demonstrate knowledge of venipuncture procedures and capillary puncture techniques.
- Explain factors that could influence sample quality (e.g., contamination, timing, patient preparation).

Chapter 44 – Diagnostic Testing

- Define the purpose and limitations of common in-office diagnostic tests.
- Review how results are interpreted and communicated, including when to refer out.
- Understand documentation and reporting requirements for in-office testing.

Chapter 45 – Cardiology Procedures

- Identify common cardiology diagnostics such as EKGs and stress tests.
- Describe the roles and responsibilities of medical assistants in preparing patients, performing procedures, and maintaining equipment.
- Interpret basic EKG tracings and explain findings to the supervising provider.

Chapter 49 – Pharmacology Fundamentals

- Explain foundational pharmacological concepts, including drug classification, dosage, and administration routes.
- Interpret medication orders and understand dosage calculations.
- Identify common drug interactions, contraindications, and safety considerations.

Chapter 50 – Measurement Systems, Basic Mathematics, and Dosage Calculations

- Apply metric, household, and apothecary measurements accurately.
- Perform calculations necessary for dosage administration, conversions, and dilutions.
- Check dosages for safety and correctness before administration.

Chapter 51 – Administering Oral and Noninjectable Medications

- Demonstrate correct procedures for administering oral, topical, ophthalmic, otic, and inhaled medications.
- Understand patient education, documentation, and safety protocols for noninjectable medication administration.
- Recognize and respond to adverse reactions or errors appropriately.

Chapter 52 – Administering Injections and Immunizations

- Describe types of injections (subcutaneous, intramuscular, intradermal) and corresponding techniques.
- Select proper needle size, site, and volume for safe administration.
- Maintain accurate immunization records and handle vaccines properly to ensure efficacy.