COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Laboratory Diagnostics
COURSE NUMBER	MEDA 0185
DIVISION	Health Professions
DEPARTMENT	Medical Assistant
CIP CODE	51.0801
CREDIT HOURS	5
CONTACT HOURS/WEEK	Class: 3 Lab: 4
PREREQUISITES	None
COURSE PLACEMENT	This course is part of a selective admission program. Students must be admitted to the Medical Assistant program to enroll in this course.

COURSE DESCRIPTION

The role and function of the professional in the clinical laboratory is introduced. Topics include safety in the laboratory, CLIA government regulations and quality assurance, and microscope procedures and concepts. Students perform procedures in the different departments of the laboratory including specimen collection and performance of CLIA 88 low and moderate complexity testing. Students demonstrate competency in the wide variety of specimen techniques used to collect, process, and test specimens.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit: https://kansasregents.org/workforce_development/program-alignment

PROGRAM LEARNING OUTCOMES

1. Define diseases and related treatments for the body systems.
2. Demonstrate clinical and laboratory skills necessary for entrylevel employment.
3. Practice basic principles and practices of safe pharmacological administration.
4. Modify communication to effectively interact with and provide education to patients of varying backgrounds.
5. Select appropriate reference materials to enhance performance of job functions and patient education.

6. Comply with principles of records management to complete incident reports, documentation, data entry and electronic health records.
7. Demonstrate legal, ethical, and safe behaviors when performing the duties of the medical assistant.

TEXTBOOKS
http://kckccbookstore.com/

METHODS OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE
I. Collection of urine and fecal specimens
   A. Language/verbal skills
   B. Sensitivity to patients' rights and feelings
   C. Reporting information
   D. Rationale
   E. Safety
   F. Application

II. Laboratory test results
   A. Maintain laboratory test results
   B. Interpretation of healthcare results.
   C. Screen test results
   D. Normal and abnormal test results
   E. Accurate Documentation

III. Organization of the clinical lab
   A. Levels of laboratory personnel
   B. Common laboratory panels

IV. Lab regulations, policies, and laws
   A. Center for Disease Control (CDC) guidelines
      1. Standard Precautions and Universal Precautions
      2. Training and Practice
   B. Personal safety precautions (Occupational Safety and Health Administration (OSHA))
   C. Disease processes in relation to CLIA waived tests

V. Clinical Laboratory Improvement Amendment (CLIA) testing
   A. Urinalysis, hematology, chemistry, immunology and microbiology
   B. Control procedures
   C. Patient screening
   D. Normal and abnormal test results.
   E. Practice Standard Precautions/PPE/Hand washing

VI. Venipuncture and capillary puncture
   A. Rationale for procedure
   B. Safety
   C. Preparation
   D. Procedure

COURSE LEARNING OUTCOMES AND COMPETENCIES

Upon successful completion of this course, the student will:

A. Instruct patients in the collection of a urine and fecal specimen.
   1. Use language/verbal skills that enable patient's understanding.
   2. Display sensitivity to patient's rights and feelings in collecting specimens.
   3. Report relevant information to others succinctly and accurately.
   4. Accurately collect urine specimens.
   5. Accurately collect fecal specimens.
   6. Accurately process urine and fecal specimens for transport.

B. Maintain laboratory test results.
   7. Maintain laboratory test results using flow sheets.
   8. Analyze charts, graphs and/or tables in the interpretation of healthcare results.
   9. Screen test results.
   10. Distinguish between normal and abnormal test results.
   11. Accurately document procedures.
   12. Accurately complete a laboratory requisition.
   13. Accurately complete laboratory tracking logs.

C. Describe the organization of the clinical lab.
   14. Explain the levels of the laboratory personnel.
   15. List common laboratory panels.

D. Comply with lab regulations, policies, and laws.
   16. Identify the CDC guidelines for Standard Precautions and Universal Precautions.
   17. Participate in training on Standard Precautions.
   18. Practice Standard Precautions.
   19. Perform hand washing.
   20. Identify personal safety precautions as established by the Occupational

Safety and Health Administration (OSHA).

21. Identify disease processes that are indications for CLIA waived tests.

E. Perform Clinical Laboratory Improvement Amendments (CLIA) testing in urinalysis, hematology, chemistry, immunology and microbiology.
    22. Perform CLIA waived urinalysis testing procedures.
    23. Perform CLIA waived hematology testing procedures.
    24. Perform CLIA waived blood chemistry testing procedures.
    25. Perform CLIA waived immunology testing procedures.
    26. Perform CLIA waived microbiology testing procedures.
    27. Perform medical laboratory quality control procedures.
    28. Perform patient screening using established protocols..
    29. Select appropriate barrier/personal protective equipment (PPE) for potentially infectious situations.

F. Perform venipuncture and capillary puncture.
    30. Explain the rationale for performance of a procedure to the patient.
    31. Show awareness of patients concerns regarding their perceptions related to the procedure being performed.
    32. Prepare a patient for procedures and/or treatments.
    33. Select the appropriate site for venipuncture and capillary puncture.
    34. Perform venipuncture using a vacuum tube safely.
    35. Perform venipuncture using a needle and syringe safely.
    36. Perform venipuncture using a butterfly needle safely.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.