South Central College

MA 2010 Laboratory Skills for Medical Assistants

Course Outcome Summary

Course Information

Description This course is designed to teach laboratory fundamentals of medical assisting in a clinical office setting. Students will learn aspects of standard precautions, laboratory safety, venipuncture, collection of patient specimens, perform CLIA waived laboratory testing along with identification of infectious agents.

Total Credits 3

Types of Instruction

Instruction Type	Credits/Hours
Lab	1/32
Lecture	2/32

Pre/Corequisites

HC 1001 & 1924

Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Demonstrate methods of Standard Precautions

Learning Objectives

Describe personal protective equipment
Identify safety techniques that can be used to prevent accidents and maintain a safe work environment
Identify safety signs, symbols and labels
Match types of uses of personal protective equipment (PPE)

2. Apply Laboratory Safety Practices

Learning Objectives

Complete an incident report
Discuss requirements for responding to hazardous material disposal
Develop a personal (patient and employee) safety plan
Develop an enviornmental safety plan (equipment)
Perform hand washing

Maintain a current list of community resources for emergency preparedness

3. Explain Quality Control Procedures

Learning Objectives

LIst major types of infectious agents
Compare different methods of controlling the growth of microorganisms
Discuss infection control procedures

4. Deomonstrate Blood Collection

Learning Objectives

Perform venipuncture
Demonstrate empathy in communicating with patients, family and staff
Document patient care/venipuncture
Perform venipuncture with syringe and butterfly method
Perform venipuncture on hand vein
Perform capillary puncture

5. Perform Microscope Examination

Learning Objectives

Identify parts of a laboratory microscope
Focus laboratory microcope
Discuss proper care of a laboratory microscope

6. Perform CLIA Waived Urinalysis Testing

Learning Objectives

Discuss proper clean catch mid stream urine sample patient instructions
Explain the importance of the proper collection of urine specimens
Distinguish between normal and abormal test results
Describe how to prepare urine sediment for microscopic examiniation
Identify normal and abnormal urine crystals

7. Perform CLIA Waived Microbiology Testing

Learning Objectives

Discuss quality control issues related to handling microbiological specimens
Obtain specimen for microbiological testing
Explain the rationale for performance of a procedure to the patient

8. Perform CLIA Waived Hematology Testing

Learning Objectives

Distinguish between different White Blood Cells (WBCs)
Screen test results
Discuss collection process which could affect hematology lab results

9. Perform CLIA Waived Chemistry Testing

Learning Objectives

Discuss most common chemistry tests performed in a clinical laboratory
Explain what is included in a chemistry panel
Explain how colorimeters and spectrophotometers produce specimen laboratory results

10. Explain the Principle of CLIA Waived Laboratory Testing

Learning Objectives

Discuss the importance of the Clinical Laboratory Improvement Amendments of 1988 (CLIA) in regards to CLIA waived laboratory testing
Idenify disease processes which have indictors for CLIA waived tests
Identify common CLIA waived tests which are used within a clinic laboratory

11. Demonstrate the methods for blood smears

Learning Objectives

Demonstrate the correct procedure in preparing a blood smear
Idenify common problems in preparing and staining a blood smear
Discuss the relationship between staining and identification of formed elements in the blood

12. Use Quality Assurance and Quality Control techniques within the laboratory setting

Learning Objectives
Explain the importance of daily records keeping in regards to accuracy of laboratory test results
Perform controls on CLIA waived laboratory equipment
Chart controls on a daily/monthly quality control log
Define standard deviation and how it relates to patient laboratory results

SCC Accessibility Statement

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: www.southcentral.edu/disability

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.

Student Contributions

Each student is expected to attend class and participate in classroom activities. Each student must be punctual for each class. All assignments must be completed and turned in on time. If the student will be absent, he/she must contact the instructor in person, by telephone, or e-mail. If the student is not able to turn in an assignment or take a test, the instructor must be notified prior to class time for make-up consideration. Contact information for the instructor is provided in the syllabus. Any inappropriate behavior such as cheating will not be tolerated and the student will not receive credit for the test/assignment. Please see SCC's e-catalog under Student Policies/Academic Dishonesty.

Classroom Policies

Electronic Devices within the Classroom:
Cellular phones, pagers and other electronic devices must be turned off or set on silent along with be out of sight within in the lab or classroom

Eating and Drinking in the Classroom/Lab:
Food is not recommended for the lab or classroom setting. Beverages may be brought into the lab and classroom setting only if there is a screw lid or resalable lid. NO open containers

Classroom Computers and Printers:
Classroom computers and printers are designated for classroom work only. You may not use either the computer or printer for work that is outside the scope of this course. All printing done within the lab must be approved by the instructor

Dress Code

Students are expected to attend class/lab well groomed, wearing clean-stain free, rip free medical scrubs. Medical scrubs are required to be worn during lab due to the clinical/laboratory activities involved in the class. The Medical Assisting Program Instructors have the right to address any dress code issues as he/she deems appropriate. Other dress code policies may be implemented, and will be communicated to the student as changes occur

Late Assignment Policy

Late assignments will not be accepted over 5 days late, there will be a 20% penalty for each day it is late.

**There will not be a make-up for the Final Exam

Student Responsibilities

Students are required to attend all lectures and labs
Students must be an active participate in lecture discussions and lab activities
Students are responsible for all course materials (syllabus, text, workbook)
Students are required to turn in all assignments and projects
Students are responsible to check South Central College's website or alert system for weather notices
Students are responsible to discuss any extenuating circumstances with the instructor. All extenuating circumstances will be evaluated on a case-by-case basis and it is up to the instructor's discretion to determine the action that will be taken.

Instructor Responsibilities

The instructor will respond to all correspondence within 2 business days (note: this does not include weekends and holidays)
The instructor will return graded assignments/competencies within a week to the student
The instructor will be an active participate within the classroom and lab
The instructor reserves the right to modify the course at any point in the semester
The instructor will communicate any and all modifications to the students in a timely manner

Tutoring Services

Tutoring services are available to students within the Academic Support Center at South Central College. Students also have access to on-line tutoring services through SmartThinking. All South Central College students receive 10 free hours of SmartThinking tutoring services per semester. Some textbooks are bundled with SmartThinking hours also. Students can access a link within their D2L homepage to access their personal SmartThinking account.

If you have already set up a SmartThinking account and have forgotten your username or password, please contact Susan Mucha at 507-389-7453 or susan.mucha@southcentral.edu. This email address is being protected from spambots. You need JavaScript enabled to view it.

Accessibility Statement

If you have a disability and need accommodations to participate in the course activities, please contact your instructor as soon as possible. This information will be made available in an alternate form, such as Braille, large print, or cassette tape, upon request. If you wish to contact the college ADA Coordinator, call that office at 507-389-7222.

Disabilities page http://southcentral.edu/academic-policies/disability-rights.html

CAAHEP/MAERB Competencies

_____ Discuss the application of Standard Precautions with regards to:
* All body fluids, secretions and excretions

* Blood
* Non intact skin
* Mucus membranes **AppB III.CIII.12**

_____ Participate in training on Standard Precautions **AppB III.PIII.1**

_____ Practice Standard Precautions **AppB III.PIII.2**

_____ Describe Standard Precautions, including:
* Transmission based precautions
    * Purpose
* Activities regulated **AppB III.CIII.11**

_____ Describe the infection cycle, including the infectious agent, reservoir, susceptible host, means of transmission portals of entry, and portals of exit **AppB III.CIII.1**

_____ Describe personal protective equipment **AppB XI.CXI.1**

_____ Identify safety techniques that can be used to prevent accidents and maintain a safe work environment **AppB XI.CXI.2**

_____ Identify principles of body mechanics and ergonomics **AppB XI.CXI.10**

_____ Identify safety signs, symbols and labels **AppB XI.CXI.4**

_____ Comply with safety signs, symbols and labels **AppB XI.PXI.1**

_____ Describe the importance of Material Safety Data Sheets (MSDS) in a healthcare setting **AppB. XI.CXI.3**

_____ Discuss requirements for responding to hazardous material disposal **AppB XI.CXI.9**

_____ Match types and uses of personal protective equipment (PPE) **AppB III.CIII.7**

_____ Select appropriate barrier/personal protective equipment (PPE) for potentially infectious situations **AppB III.PIII.3**

_____ Perform hand washing **AppB III.PIII.4**

_____ Identify the role of the Center for Disease Control (CDC) (regulations in healthcare settings **AppB III.CIII.13**

_____ Identify personal safety precautions as established by the Occupational Safety and Health Administration (OSHA) **AppB III.CIII.4**

_____ Develop an environmental safety plan (equipment)

* Eyewash
* Sharps disposal containers
* Fire extinguishers **AppB XI.PXI.5**

_____ Discuss potential role(s) of the medical assistant in emergency preparedness
AppB XI.CXI.13

_____ Develop a personal (patient and employee) safety plan **AppB XI.PXI.3**

_____ Participate in a mock environmental exposure event with documentation of steps taken
AppB XI.PXI.6

_____ Evaluate the work environment to identify safe vs. unsafe working conditions
AppB XI.PXI.2

_____ Complete an incident report **AppB IX.PIX.6**

_____ Recognize the effects of stress on all persons involved in emergency situations
AppB XI.AXI.1

_____ Demonstrate self-awareness in responding to emergency situations
AppB XI.AXI.2

_____ Perform an office inventory **AppB V.PV.10**

_____ Perform venipuncture **AppB I.PI.1**

_____ Perform capillary puncture **AppB I.PI.3**

_____ Identify disease processes that are indicators for CLIA waived tests
AppB III.CIII.10

_____ List major types of infectious agents **AppB III.CIII.5**

_____ Compare different methods of controlling the growth of microorganisms
AppB III.CIII.6

_____ Discuss infection control procedures **AppB III.CIII.3**

_____ Discuss quality control issues related to handling microbiological specimens
AppB III.CIII.9

_____ Obtain specimens for microbiological testing **AppB III.PIII.7**

_____ Perform CLIA waived microbiology testing **AppB III.PIII.8**

_____ Perform CLIA waived hematology testing **AppB I.PI.12**

_____ Perform CLIA waived chemistry testing **AppB I.PI.13**

_____ Perform CLIA waived urinalysis **AppB I.PI.14**

_____ Perform CLIA waived immunology testing **AppB I.PI.15**

_____ Screen test results **AppB I.PI.16**

_____ Distinguish between normal and abnormal test results **AppB II.AII.2**

_____ Use language/verbal skills that enable patients' understanding **AppB I.AI.2**

_____ Display sensitivity to patient rights and feelings in collecting specimens
AppB III.AIII.1

_____ Explain the rationale for performance of a procedure to the patient
AppB III.AIII.1

_____ Show awareness of patient's concerns regarding their perceptions related to the procedure being performed **AppB III.AIII.3**

_____ Perform quality control measures **AppB I.PI.11**

_____ Maintain laboratory test results using flow sheets **AppB II.PII.2**

_____ Demonstrate proper use of the following equipment

- Eye wash
- Fire extinguisher

Sharps disposal **AppB XI.PXI.5**

Grading Scale

It is expected that each student will successfully demonstrate competency in classroom work along with laboratory and clinical skills. Because this is a competency-based program, students must pass all competencies cognitive (knowledge), psychomotor (skill), and affective (behavior)

A = 90 – 100%
B = 80 – 89%
C = 74 – 79%
F = 73% and below

An overall grade of "C" or above is required to pass all Medical Assisting core courses.

If a student scores lower than 74% in any Medical Assisting core course but wishes to continue in the Program, the student must notify the Medical Assisting Program Director of their intention. The student may be allowed to continue the program and repeat the failed course, the student and the Medical Assisting Program Director will determine the course of action required. The student will be placed on probation until such time the failed course has been successfully completed. If a student wishes to re-enter after more than one year has lapsed, the student may be required audit or retake all Medical Assisting core courses previously taken.