

## MAS 121: Medical Assisting Laboratory Procedures I

This course explores the laboratory procedures and techniques used in the modern medical office. The primary focus is on safety, quality assurance, quality control, laboratory equipment, supplies, and CLIA waived tests performed in urinalysis, hematology, and coagulation. The course also includes emergency preparedness, CPR, procurement of specimens, laboratory math, recordkeeping, and effective communication with patients and staff. Pre or co-requisites: BIO 115 or BIO 234, and MAS 101. Two lecture hours and three laboratory hours per week. Instructional Support Fee applies.

### Course Student Learning Outcomes

Cognitive 1. Discuss implications for disease and disability when homeostasis is not maintained. 2. Demonstrate knowledge of basic math computations. 3. Apply mathematical computations to solve equations. 4. Identify measurement systems. 5. Describe the infection cycle, including the infectious agent, reservoir, susceptible host, means of transmission, portals of entry, and portals of exit. 6. Discuss infection control procedures. 7. Identify personal safety precautions as established by the Occupational Safety and Health Administration (OSHA). 9. List major types of infectious agents. 10. Compare different methods of controlling the growth of microorganisms. 11. Match types and uses of personal protective equipment (PPE). 12. Identify disease processes that are indications for CLIA waived tests. 13. Describe Standard Precautions, including: transmission based precautions, purpose, activities regulated. 14. Discuss the application of Standard Precautions with regard to: all body fluids, secretions and excretions, blood, non-intact skin, mucous membranes. 15. Identify the role of the Center for Disease Control (CDC) regulations in healthcare settings. 17. Describe personal protective equipment. 18. Identify safety techniques that can be used to prevent accidents and maintain a safe work environment. 20. Describe the importance of Materials Safety Data Sheets (MSDS) in a healthcare setting. 22. Identify safety signs, symbols and labels. 23. State principles and steps of professional/provider CPR. 24. Describe basic principles of first aid. 25. Describe fundamental principles for evacuation of a healthcare setting. 26. Discuss fire safety issues in a healthcare environment. 27. Discuss requirements for responding to hazardous material disposal. 28. Identify principles of body mechanics and ergonomics. 29. Discuss critical elements of an emergency plan for response to a natural disaster or other emergency. 30. Identify emergency preparedness plans in your community. 31. Discuss potential role(s) of the medical assistant in emergency preparedness. Psychomotor 1. Perform venipuncture. 2. Perform capillary puncture. 3. Perform electrocardiography. 4. Perform quality control measures. 5. Perform CLIA waived hematology testing. 6. Perform CLIA waived urinalysis. 7. Screen test results. 8. Maintain laboratory test results using flow sheets. 9. Participate in training on Standard Precautions. 10. Practice Standard Precautions. 11. Select appropriate barrier/ personal protective equipment (PPE) for potentially infectious situations. 12. Comply with safety signs, symbols and labels. 13. Evaluate the work environment to identify safe vs. unsafe working conditions. 14. Develop a personal (patient and employee) safety plan. 15. Demonstrate proper use of the following equipment: eyewash, fire extinguishers, sharps disposal containers. 19. Participate in a mock environmental exposure event with documentation of steps taken. 21. Explain an evacuation plan for a physician's office. 22. Demonstrate methods of fire prevention in the healthcare setting. 23. Maintain provider/professional level CPR certification. 24. Perform first aid procedures. 25. Maintain current list of community resources for emergency preparedness. Affective 1. Distinguish between normal and abnormal test results. 2. Display sensitivity to patient rights and feelings in collecting specimens. 3. Explain the rationale for performance of a procedure to the patient. 4. Recognize the effects of stress on all persons involved in emergency situations. 5. Show awareness of patient's concern regarding their perceptions related to procedures being performed. 7. Demonstrate self-awareness in responding to emergency situations.

**Credits:** 3

**Program:** Medical Assisting