



## PLB 102: Principles and Methods of Phlebotomy

This course explores the history of phlebotomy and related topics necessary for the phlebotomist to work in a clinical laboratory or other medical setting. A continuation of MED 101, it covers a variety of topics at a more advanced and in depth level, including anatomy and physiology of the vascular system, CPR training/certification, computer applications, arterial/venous and capillary specimen procurement, as well as maintenance of equipment used in specimen collection. Also covered are difficult draws, ECG testing, microbiological specimen processing, blood donor collection, glucose POC testing, and routine computer applications. Prerequisite: MED 101. Open to students enrolled in Phlebotomy Certificate Program only. This course includes 45 hours lecture/lab to be completed at the College during the first half of the semester, and 120 hours of phlebotomy experience at an affiliate agency during the second half of the semester. Instructional Support Fee applies.

### Course Student Learning Outcomes

1. Apply knowledge of the anatomy of the cardiovascular and lymphatic system to the phlebotomy procedure.
2. Apply knowledge of the physiology of the cardiovascular and lymphatic system to the phlebotomy procedure.
3. Properly perform venipuncture on training arms and peer "patients" using proper equipment, technique and order of draw.
4. Properly maintain all equipment used in phlebotomy.
5. Follow laboratory regulations to prevent pre-analytical errors in specimen collection.
6. Properly perform capillary puncture including heel sticks and finger sticks on training heels and peer "patients".
7. Properly perform arterial specimen collection on training arms.
8. Properly perform EKG testing on training patient.
9. Properly collect microbiological samples and process non-blood samples.

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1. Properly perform blood donor collection process on training patient.

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1. Perform point of care testing (POC) including capillary blood glucose levels, urinalysis testing and urine pregnancy testing.

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1. Properly perform special collections on training arms and peer "patients".

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1. Apply routine computer applications in the laboratory setting.

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1. Discuss professionalism and the appropriate ethical conduct required to work in a clinical setting and in the delivery of health care to the diverse ethnic population in the service area.

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1. Communicate appropriately using proper medical and laboratory terminology.

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1. Discuss and utilize standard safety practices as outlined by OSHA and CDC.

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1. Maintain patient confidentiality.

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1. Discuss and interpret quality control and quality assurance applications necessary to ensure reliability of test results and equipment.

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1. Prepare materials and supplies for laboratory testing.

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1. Follow the program safety policies in the Phlebotomy classroom.

21. Work cooperatively with fellow students, instructors and College staff.

**Credits:** 4

**Program:** Phlebotomy