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## **Phlebotomy Technician Program Courses**

### **PHL 100: Medical Terminology**

This course subject presents a study of basic medical terminology. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. A programmed learning, word building systems approach is used to learn word parts for constructing or analyzing new terms. This provides the opportunity to decipher unfamiliar terms and check their spelling. Emphasis is placed on spelling, definition, usage, and pronunciation.

### **PHL 101: Anatomy & Physiology**

This course subject is a scientific study of the structure of the human body and its parts, including relationships, functions, and diseases processes of the cardiovascular, and respiratory systems.

### **PHL 102: Principles of Phlebotomy**

This course subject discusses the process of blood collection for the purposes of testing and diagnostics. Students will be exposed to the role of a phlebotomist, quality assurance, anatomy and physiology of the circulatory system, safety, equipment, technicians, specimen collections, and special procedures.

### **PHL 103: Phlebotomy Procedures**

This course subject is a review of laboratory and clinical procedures in a medical office. It includes the discussion of possible complications of phlebotomy. The student will perform venipuncture and capillary sticks while using proper safety procedures.

### **PHL 104: Blood Chemistry Analysis**

This course subject introduces students to various methods of analysis used in clinical chemistry laboratories to assist in diagnosing, monitoring treatment, and preventing disease. It includes theory and analysis of chemical constituents of the blood. In addition, detailed theory, testing methodologies, reference ranges, clinical significance, and laboratory analysis of carbohydrates, proteins, lipids, and liver function tests are covered. After learning proper methods of specimen collection, preservation, and the processing of patient specimens, the students learn tests that measure carbohydrate metabolism including glucose testing for hyper and hypoglycemia.

### **PHL 105: Clinical Hematology I**

This course subject is a basic hematology study of cells in the blood. Diseases and conditions that would result in abnormalities in laboratory tests performed are also discussed. Students are introduced to basic techniques in performing and interpreting tests of blood group serology. The ABO and Rh systems are studied with an emphasis on accurate grouping and typing, donation, blood components, hemolytic disease of the newborn, and transfusion practices. Additional topics of discussion include major hematological disorders with identification of typical findings on blood smears are emphasized. The anemia's and leukemia's are studied in detail; cytochemical stains are introduced. The course subject also includes a study of the blood coagulation process, its theory and practice al application.

### **PHL 106: Clinical Hematology II**

This course subject provides further instruction and study of the techniques of blood group serology, compatibility testing, and the selection of the proper blood component for the patient. Adverse reaction to blood products and reaction investigations are discussed. Lab procedures include the use and interpretation of commercial serology test kits. The serological diagnosis of infectious diseases such as spirochetes, streptococcal, viral infections, and HIV are discussed.