

Phlebotomy workshop course outline

Objectives

- Introduce students to the theory and practice of phlebotomy.
- Teach students how to interact professionally with patients.
- Teach students about occupational health hazards and appropriate precautions, including the Needle-stick Safety and Prevention Act.
- Teach anatomy and physiology appropriate to drawing a blood specimen.
- Show and explain the equipment and supplies used to draw blood.
- Demonstrate phlebotomy procedures.
- Explain specimen identification, labeling, and processing.
- Describe complications of venipuncture and how to handle them.

Prerequisites: High school diploma, GED, College, or equivalent to.

Intended Audience: Phlebotomists, New Trainees, RN, LPN, research coordinator/assistant, phlebotomist review, certified nurse assistant, military personnel, radiology techs , laboratory personnel, EMT , paramedic, medical assistant, physician, physician assistant, physician office associate, Medical intern , front and back office staff in a doctor's office or clinic, nursing student, medical student, radiology student, medical assistant/student, paramedic. A great program for Clinics, Hospitals, Colleges, University students and medical schools.

Course Outline

DAY 1

- Introduction
 - What is Phlebotomy?
 - What is phlebotomy?
 - What is a phlebotomist?
 - What is a phlebotomist's role in a health care facility?
 - Laboratory work flow cycle
 - Laboratory work-flow cycle
 - Work-flow cycle: patient ID to specimen processing
 - Work-flow cycle: test performance to treatment
 - Laboratory work-flow cycle: phlebotomist role
 - Professionalism
 - Professionalism: maintaining confidentiality
 - Professionalism: attitude
 - Professionalism: appearance
 - Professionalism: appearance continued
 - What are bloodborne pathogens?
 - What are bloodborne pathogens?
 - Important bloodborne pathogens
 - Safety precautions
 - OSHA bloodborne pathogens standard
 - Standard precautions
 - Standard precautions continued
 - Personal protective equipment
 - Hand washing
 - Hazardous waste disposal
 - Needlestick safety and prevention act
 - Needlestick safety and prevention act continued
 - Definitions
 - Anatomy & physiology: definitions
 - Anatomy & physiology: essential to phlebotomy
 - Integumentary System
 - Integumentary system: structure
 - Integumentary system : function
 - Cardiovascular System
 - Cardiovascular system : structure & function
 - Circulation: venous portion
 - Circulation: arterial portion
 - Circulation: capillary portion
 - Blood
 - Whole blood: components
 - Plasma
 - Plasma components
 - Plasma water
 - Plasma water continued
 - Plasma electrolytes
 - Plasma sugars
 - Plasma proteins
 - Plasma lipids

- Plasma drugs and toxins
- Whole blood formed elements
- Red blood cells
- White blood cells
- Platelets
- Blood clots
- Serum

DAY 2

- Working In the laboratory
 - Blood Tests
 - Common lab tests
 - Panels or profiles
 - Hemogram (CBC)
 - Electrolytes panel (Lytes)
 - Basic metabolic panel (BMP)
 - Comprehensive metabolic panel (CMP)
 - Obstetric panel
 - Lipid panel
 - Acute hepatitis panel
 - Hepatic function panel
 - TORCH panel
 - Equipment
 - Introduction to phlebotomy equipment
 - Phlebotomy trays
 - Blood collection tubes: introduction
 - Blood collection tubes: types
 - Hemogard™ blood collection tubes
 - Blood collection tubes: inversion
 - Blood collection tubes: sizes
 - Blood collection tubes: expiration dates
 - Blood collection tubes: common types
 - Lavender top tubes
 - Light blue top tubes
 - Green top tubes
 - Red top tubes
 - Speckle top tubes
 - Gray top tubes
 - Yellow top tubes
 - Royal blue top tubes
 - Blood culture bottles
 - Needles
 - Needle components
 - Blood transfer device
 - Single draw needles
 - Multiple draw needles
 - Needles with built-in safety devices
 - Butterfly needles with built-in safety features continued
 - Lancets
 - Plastic holders used with the evacuated tube system
 - Needle holders with built-in protection devices

- Syringes with built-in safety devices
- Tourniquets
- Sterilization materials for phlebotomy
- Bandaging materials
- Gloves
- Sharps disposal containers
- Marking pen

Collecting Blood

- Routine Venipuncture Procedure
 - Greeting
 - Greeting continued
 - Patient Identification
 - Importance of Patient ID
 - Patient Identification continued
 - Special Requests
 - Venipuncture Standard precautions
 - Wash hands and apply gloves
 - Positioning the patient
 - Applying the tourniquet
 - Applying the tourniquet continued
 - Patient clenches fist
 - Choosing a site
 - Choosing a site continued
 - Alternate Sites
 - Sites to avoid

DAY 3

Includes complete HANDS ON TRAINING!

- Routine venipuncture equipment
- Routine Venipuncture equipment continued
- Cleaning the site
- Hold vein in place
- Insert needle
- Push tube onto holder
- Blood won't flow
- Multiple tube collections
- Apply adhesive pressure
- Activation of safety device
- Needle disposal
- Specimen labeling
- Specimen labeling continued
- Finger stick - Specimen collection
- Other Blood Collection Procedures
 - Heelstick - Pediatric collection procedures: Introduction
 - Finger stick - Site preparation
 - Finger stick - puncture
 - Finger stick - Wipe away the first drop
 - Syringe - Transferring blood to collection tubes
- Measuring Bleeding Time
 - Introduction
 -
- Blood Cultures
 - Introduction
 - Avoid skin contamination
 - Equipment
 - Select the site
 - Site preparation
 - Concept of Hollister and similar systems
 - Hollister system: specimen collection and labeling
- Special Patient Procedures
 - Uncooperative patients
 - Patients refusing blood work
 - Fainting
 - Hematosis
 - Blood should not be drawn from arms with IVs
 - Signs
 - Arms to avoid
 - Allergies
- Blood Collection Problems
 - Unsatisfactory Specimens
 - Unsatisfactory specimens
 - Causes
 - Hemolysis
 - Causes of hemolysis
 - Clots
 - Causes of clotting
 - Insufficient volume
 - Partial collection tubes
 - Labeling errors
 - Causes of labeling errors
 - What if no blood flows when the needle is in place?
- **Test Examination with Case Studies questions** must pass exam with a 70% or better.

- Case Study 1
 - Case
 - What crucial step did Julie fail to perform?
 - Discussion
- Case Study 2
 - Case
 - Which site should Bobby choose for the venipuncture?
 - Discussion
- Case Study 3
 - Case
 - What had Marcie done to hemolyze the specimen?
 - Discussion
- Case Study 4
 - Case
 - What could have caused the clotting?
 - Discussion
- Case Study 5
 - Case
 - At this point, what should John know to do?
 - Discussion
- Case Study 6
 - Case
 - What did the phlebotomist do wrong?
 - Discussion
- Case Study 7
 - Case
 - What should Julie have done to prevent the needle stick?
 - Discussion
- Case Study 8
 - Case
 - Place the following plastic evacuated blood collection tubes into the correct order of draw.
 - Discussion
- Case Study 9
 - Case
 - What did Bobby do that could have falsely prolonged the bleeding time?
 - Discussion
- Case Study 10
 - Case
 - What should the phlebotomist do now?
 - Discussion
- Case Study 11
 - Case
 - In what direction should the lancet be placed on the patient's finger ?
 - Discussion
- Case Study 12
 - Case
 - What could the phlebotomist do at this point to renew blood flow?
 - Discussion