

### Phlebotomy Technician Syllabus/Course Curriculum

### **Program Information**

• Hours: 70 Hours

• Course Length Access: 4 Weeks

**Program Description** 

Phlebotomy Technician program is designed to teach the knowledge in technical and procedural aspects of basic phlebotomy, including collection of blood specimens and venipuncture required to become a Phlebotomy technician. The Phlebotomy Technician Program includes theory and hands-on instruction. The program will teach students the Concepts of Introduction to Phlebotomy & Infection Control, Legal Issues in Healthcare, Introduction to Human Anatomy & Physiology, Phlebotomy Equipment & Supplies, Phlebotomy Procedures, and Phlebotomy Fundamental Essentials. This program is Designed for leaner's who want to advance their career, or interested in starting a career in the medical field to become a phlebotomy technician. This is a comprehensive 70-hour program.

### **National Exam Testing Requirements**

30 venipuncture and 10 capillary sticks

Assessment Method Type: Objective assessment - multiple-choice, true-false, Unit test, Subjective assessment/Informal observations, Observe students working with partners, Observe students role playing, Dialogue and Discussion, Partner and small group discussions, Whole group discussions, and a Post-test.

Exam taken with NCCT

Textbook

Phlebotomy Technician Textbook: Phlebotomy Essentials 6th Edition Wolters
Kluwer

### Quiz & Exams Grading:

Module 1: 20 Point Exam
Module 2: 20 Point Exam
Module 3: 20 Point Exam
Module 4: 20 Point Exam
Module 5: 20 Point Exam
Module 6: 20 Point Exam
Final Exam: 55 Point Exam

**Total Points:** 

175 Points

### **Theory Points:**

Module 1: 4 Points
Module 2: 2 Points
Module 3: 2 Points
Module 4: 8 Points
Module 5: 8 Points
Module 6: 5 Points
Total Points: 25 Points

### **Grading Schedule:**

Theory: 25% Quizzes: 120% Exam: 55%

Total:

200 %

### **Course Objectives**

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Curriculum Topics Outline	Clock Hours
Introduction to Phlebotomy & Infection Control	6 Clock Hours
Legal Issues in Healthcare	3 Clock Hours
Introduction to Human Anatomy & Physiology	7 Clock Hours
Medical Terminology	4 Clock Hours
Phlebotomy Equipment & Supplies	14 Clock Hours
Phlebotomy Procedures I & II	22 Clock Hours
Phlebotomy Fundamental Essentials	14 Clock Hours
Total Clock Hours	70 Clock Hours

- Describe the role of a phlebotomy technician.
- Discuss the areas of employment of a phlebotomy technician.
- Describe hazards faced by the workers.
- Describe standard precautions.
- Discuss and demonstrate the use of biohazard container in phlebotomy.
- Discuss and describe bloodborne pathogen standards.
- Identify special considerations in phlebotomy.
- Demonstrate techniques of performing venipuncture.
- Demonstrate techniques of performing dermal puncture.
- Discuss functions of human body systems.
- Identify sites of venipuncture.
- Explain chain of infection.
- Discuss latex allergy and prevention.
- Discuss modes of infection transmission.
- Explain breaking of chain of infection.
- Demonstrate hand hygiene.
- Identify and demonstrate the personal protective equipment.
- Select correct personal protective equipment.
- Demonstrate the correct order of wearing personal protective equipment.
- Discuss post exposure to blood borne pathogens.
- Discuss negligence versus malpractice.
- Discuss the standard of care.
- Discuss the basics elements of negligence.
- Discuss and identify patients' rights.
- Explain good samaritan law.
- Explain scope of practice.
- Explain patient self-determination act.
- Discuss and demonstrate patient consents and its types.
- Discuss American with disabilities act (ADA).
- Identify and discuss basic medical terminologies.
- Identify phlebotomy equipment used for performing phlebotomy.
- Identify phlebotomy supplies used for performing phlebotomy.
- Describe correct specimen transport, handling, and processing procedures.
- Apply the knowledge learned to fulfill the job responsibilities of an entry level phlebotomy technician.
- Identify and demonstrate gloves removal techniques.
- Identify and demonstrate bleeding time competency.
- Identify and demonstrate glucose testing competency.
- Identify and demonstrate capillary tube blood collection procedure.
- Identify and demonstrate preparing a blood smear.
- Identify and demonstrate venipuncture using a multisample needle (method).
- Identify and demonstrate venipuncture using a butterfly needle (method).
- Identify and demonstrate venipuncture using a syringe (method).
- Discuss phlebotomy complication.
- Discuss the areas of concerns on phlebotomy.
- Discuss and demonstrate tourniquet test.

Discuss on how to avoid hemolysis.

- Discuss and demonstrate proper specimen handling techniques.
- Discuss and demonstrate proper specimen transporting.
- Discuss the precautions to be considered.
- Identify and discuss rejection of specimen.
- Identify phlebotomy test requisition.
- Discuss and demonstrate blood collection from pediatric and neonates.
- Discuss and demonstrate blood sugar tests.
- Discuss and demonstrate blood cultures.
- Discuss and demonstrate blood collection for legal purposes.
- Explain and discuss therapeutic drug monitoring.
- Discuss and demonstrate urine specimen collection.
- Discuss and demonstrate stool specimen collection.
- Discuss and demonstrate sputum specimen collection.
- Discuss and demonstrate throat swab specimen collection.
- Discuss and demonstrate blood donation procedure.
- Discuss and demonstrate safety data sheets,
- Describe incident report.
- Demonstrate proper documentation skills.

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### Course Topics & Learning Objectives

Course Name: Phlebotomy 101

Module 1: Section 1 Introduction to Phlebotomy & Infection Control

**Learning Objectives** 

### In this module the students will learn

Introduction & Duties to Phlebotomy Technician

Training, Professionalism, Licenses & Certification

Areas of Employment

**Laboratory Departments** 

Occupational safety and health hazard administration OSHA

What type of hazards do workers face?

Healthcare safety hazards

Latex allergy and prevention

Chain of infection

Modes of transmission

Identifying potentially infectious patients

Contact precautions

Droplet precautions

Airborne precautions

Breaking the chain of infection

Hand hygiene

Personal protective equipment

Types and functions of PPE

Selecting PPE

Order of donning and removing PPE

Standard precautions

What are blood borne pathogens

What can be done to control the bloodborne pathogens

Post-exposure to bloodborne pathogens

Bloodborne pathogen standards

### Course Name: Phlebotomy 101 Module 1: Section 2 Legal Issues in Healthcare Learning Objectives In this module the students will learn

Civil law, Tort law Negligence vs. malpractice What is the standard of care? Basic elements of negligence Types of damages Special damage General damage Punitive damage Criminal law, sources of laws, consent & its types, patient abuse & types Patients' rights Patient self-determination act, advance directives, false imprisonment Scope of practice, good samaritan law, and uniform anatomical gift act American with Disabilities Act (ADA)

### Course Name: Phlebotomy 102

### Module 2: Introduction to Human Anatomy & Physiology

### Learning Objectives

### In this module the students will learn

Vascular system

Human Blood & Connective Tissue

Formed Elements & Proportion of Blood

Red blood cell (RBC)

White blood cells (WBC)

Types

Function

Process of Phagocytosis

**Platelets** 

Hemostasis

Stage 1: vasoconstriction

Stage 2: platelet plug formation

Stage 3: coagulation of blood

Blood plasma

Blood serum

Antibody and antigen

Blood transfusion and blood groups

Blood vessels

Arterial system: Function & Structure

Vasodilation

Vasoconstriction

Venous system: Function & Structure

Capillaries: Function

Veins for phlebotomy

Human Anatomy: Introduction to Integumentary system

Human Anatomy: Introduction to Heart

Human Anatomy: Introduction to Pulmonary System Human Anatomy: Introduction to Skeleton System Human Anatomy: Introduction to Nervous System Human Anatomy: Introduction to Urinary System Human Anatomy: Introduction to Digestive System Human Anatomy: Introduction to Endocrine System

Body planes

Directional terms

Movement terminologies

## Course Name: Phlebotomy 103 Module 3: Medical Terminology Learning Objectives In this module the students will learn

Medical Terminology

A Alphabet Medical Terminology

B Alphabet Medical Terminology

C Alphabet Medical Terminology

D Alphabet Medical Terminology

E Alphabet Medical Terminology

F Alphabet Medical Terminology

G Alphabet Medical Terminology

H Alphabet Medical Terminology

I Alphabet Medical Terminology

K Alphabet Medical Terminology

L Alphabet Medical Terminology

M Alphabet Medical Terminology

N Alphabet Medical Terminology

O Alphabet Medical Terminology

P Alphabet Medical Terminology

R Alphabet Medical Terminology

S Alphabet Medical Terminology

T Alphabet Medical Terminology

U Alphabet Medical Terminology

V Alphabet Medical Terminology

### Course Name: Phlebotomy 104 **Module 4: Phlebotomy Equipment & Supplies Learning Objectives**

Specimen processing

In this module the students will learn
Phlebotomy equipment & supplies
Gloves
Tourniquet
Alcohol pads
Gauze
Bandage
Needles
Needle holder
Sharps container
Evacuated blood collection tubes & tube inversion technique
Blood specimens in phlebotomy
Tube additives
Blood collection color coded tubes
Order of draw
Dermal puncture
Understanding capillary blood
Equipment & supplies required for dermal puncture
Containers
Capillary tubes
Lancet
Warming device
Dermal puncture order of draw
Centrifuge

## Course Name: Phlebotomy 105 Module 5: Phlebotomy Procedures I & II Learning Objectives In this module the students will learn

Competency checklist 5.1: Gloves removal

Competency checklist 5.2: Bleeding time competency

Competency checklist 5.3: Glucose testing competency

Competency checklist 5.4: Capillary tube blood collection procedure

Competency checklist 5.5: Blood smear

Competency checklist 5.6: Venipuncture using a multisample needle (method)

Competency checklist 5.7: Venipuncture using a butterfly needle (method)

Competency checklist 5.8: Venipuncture using a syringe (method)

# Course Name: Phlebotomy 106 Module 6: Phlebotomy Fundamental Essentials Learning Objectives In this module the students will learn

Venipuncture complications
Areas of concerns  Tourniquet test
How to avoid hemolysis
Specimen labeling
Specimen handling (light, time & temperature)
Specimen transporting
Precautions to be considered
Rejection of Specimen
Test requisition
Blood Collection from Pediatric and Neonates
Blood Sugar Tests
Blood Cultures
Blood Collection for Legal Purposes
Therapeutic Drug Monitoring (TDM)
Urine Specimen Collection
Stool Specimen Collection
Sputum Specimen Collection
Throat Swab Specimen Collection
Blood Donation Procedure
Safety data sheets
Incident report

Module #	Module Title	For Each Module	For Each Module
Module 1 S1	Introduction to Phlebotomy & Infection Control	6 Clock Hours	2 Points
Module 1 S2	Legal Issues in Healthcare	3 Clock Hours	2 Points
Module 2	Introduction to Human Anatomy & Physiology	7 Clock Hours	2 Points
Module 3	Medical Terminology	4 Clock Hours	2 Points
Module 4	Phlebotomy Equipment & Supplies	14 Cleck Heurs	8 points
Module 5	Phlebotomy Procedures 1 & 2	32 Clock Hours	8 Points
Module 6	Phlebotomy Fundamental Essentials	14 Clock Hours	5 Points
		80 Clock Hours	25 Points