

Lassen Community College Course Outline

HO 88 – Phlebotomy Technician

3.5 Units

I. Catalog Description

This course prepares students to be able to perform venipunctures, capillary punctures, and basic laboratory tests expected of entry-level phlebotomy positions in hospitals and other health care settings consistent with health care regulations in California. With successful completion of this course, including 50 successful venipunctures and 10 successful skin punctures, the student will be eligible to sit for the exam to become a Certified Phlebotomist Technician with the State of California. Students must complete all course hours and must achieve a 75% on their final class grade and must achieve a final exam grade of 75% or better to be eligible to take the California Phlebotomy Technician certification exam. This course requires a clinical rotation, all clinical compliance requirements must be met prior to enrolment. Uniform and lab fee of \$100 will be collected at registration.

Diversity Statement:

Our commitment to diversity requires that we strive to eliminate barriers to equity and that we act deliberately to create a safe and inclusive environment where individual and group differences are valued and leveraged for the growth and understanding as an educational community.

Prerequisite(s): HO 3 Medical Terminology

Licensing Notes:

This will be a full program even if the person has been working as a phlebotomist and can prove 1040 hours of work, they will still be required to take the whole course.

After registering for the Phlebotomy Technician Program the student will:

1. Verify possession of a valid BLS CPR card from ASHI or AHA.
2. Verify that he or she doesn't have a criminal record and can work in a health care setting.
3. Provide documentation of recent two step tuberculosis testing or equivalent.
4. Provide records of vaccinations or titers required for entry in to clinical environments.
5. Comply with testing required for clinical site rotations such as Covid-19 testing.
6. Complete a 10 panel drug screening.
7. Complete a physical exam.
8. Create an account in My Clinical Exchange and complete all competencies.
9. Verify proof of a high school diploma or GED

Does not transfer to UC/CSU

42.5 Hours Lecture, 85 Expected Outside Class Hours, 51 Hours Lab, 178.5 Total Student Learning Hours.

Scheduled: Spring, Fall

II. Coding Information

Repeatability: Not Repeatable, Take 1 Time

Grading Option: Graded or Credit/No Credit
Credit Type: Credit - Degree Applicable
TOP Code: 120510

III. Course Objectives

A. Course Student Learning Outcomes

Upon completion of this course, the student will be able to:

1. Perform venipunctures and capillary punctures on adults, children and infants consistent with Department of Health Services and OSHA standards.

B. Course Objectives

Upon completion of this course, the student will be able to:

1. Understanding of what Phlebotomy Technicians job requirements are.
2. List and describe the various components of blood.
3. Distinguish between various types of blood vessels.
4. Knowledge of rules and regulations in regards to blood collection and patient care.
5. Ability to properly follow infectious control procedures and use PPE (Personal Protective Equipment) correctly.
6. Ability to identify and collect various blood tests.
7. Learn basic anatomy for the bodies systems.
8. Demonstrate professional behavior necessary to perform phlebotomy procedures.
9. Apply the fundamentals of anatomy and physiology to perform phlebotomy procedures.
10. Analyze and apply the appropriate Occupational Safety and Health Administration (OSHA) regulations, standard precautions and safety techniques in obtaining and handling blood specimens in a laboratory setting.
11. List the principles of basic clinical lab techniques.
12. Apply proper phlebotomy techniques to perform a venipuncture on a patient.

IV. Course Content:

A. Phlebotomist Role in Health Care

1. Knowledge of blood tests and processing
2. Providing a sterile and complete blood collection
3. Provide laboratory information and process to other departments
4. Report out results for a quicker turnaround time

B. History of Phlebotomy

1. Blood letting
2. Leaching
3. First blood draw devices

C. Professionalism

1. Approaching the patient
 - a. Social skills
 - b. Empathy/Compassion

D. Laboratory Request forms:

1. Stats requests
2. Reporting laboratory results

3. Understanding collection requirements
4. Greeting and identifying patients
- E. Safety in the Workplace
 1. Occupational Safety and Health Administration (OSHA)
 - a. Blood borne Pathogen Standard
 - b. Infection Control
 2. Standard Precautions
 - a. Hand Hygiene
 - b. Patient room isolations
 - c. Transmission-Based Precautions
 - d. Blood
 - e. Body Fluids/Other Potentially Infectious Material (OPIM)
 - f. Personal Protective equipment (PPE)
 - g. Needle stick
 3. Disease Transmission
 - a. Human immunodeficiency virus/Acquired immunodeficiency syndrome (HIV/AIDS)
 - b. All Hepatitis
 - c. Sexually Transmittable Diseases (STD)
 - d. Prevention and Vaccination
- F. Basics of Anatomy and Physiology as it pertains to Phlebotomy
 1. Body positions
 - a. Frontal, Midsagittal (medial), Sagittal and Transverse Planes
 - b. Body organization: Cell, Tissue, and Metabolism
 2. Body Systems and Functions
 - a. Skeletal System
 - b. Muscular System
 - c. Integumentary System
 - d. Nervous System
 - e. Endocrine System
 - f. Digestive System
 - g. Reproductive System
 - h. Urinary System
 - i. Respiratory System
 - j. Circulatory System
- G. Types of Collection Methods
 1. Arteries, Veins and Capillary
 2. Common Blood Vessels
- H. Blood Collection
 1. Plasma
 2. Serum
 3. Whole blood
 4. Blood cultures
 5. Blood bank
- I. Venipuncture
 1. Equipment
 - a. Syringes
 - b. Butterfly

- c. Straight Needles
- d. Lancet
- 2. Blood Collection Supply's
 - a. Vacuum tubes
 - b. Additives
 - c. Anticoagulants
 - d. SST Gels-Serum Separating Tubes
 - e. Needle holders
 - f. Tourniquets
 - g. Gauze
 - h. Alcohol wipes
- 3. Draw Requirements
 - a. Order of Draw
 - b. Specimen identification
 - c. Selecting the draw site
 - d. Tourniquet Application
 - e. Safe technique
 - f. Proper tube handling
- 4. Post puncture care
 - a. Patient Reactions
 - b. Syncope
 - c. Nausea
 - d. Fainting
- 5. Unsuccessful venipuncture
 - a. Pediatric blood collection (by weight)
 - b. Dorsal hand-vein
 - c. Maximum draw attempts
 - d. Complicated patient draws
 - e. Pic lines, Arterial lines, and Central line draws
 - f. IV start blood draws
- 6. Rejection of Specimens
 - a. Hemolyzed
 - b. Handling and storage
 - c. Quantity insufficient
 - d. Specimen too old
- 7. Factors affecting laboratory values
- 8. Common laboratory tests
 - a. CBC - Complete blood count
 - b. CMP – CMET – Complete Metabolic Panel
 - c. Sed Rate – ESR- Erythrocyte Sedimentation Rate
 - d. H & H (Hemoglobin and Hematocrit)
 - e. PT-Prothrombin Time, PTT-Partial Thromboplastin Time, & D-Dimer
- 9. Special Handling
- J. Capillary Puncture
 - 1. Equipment
 - 2. Puncture sites
 - a. Adults
 - b. Children
 - c. Infants

3. Site preparation
 4. Blood sample collection
 5. Post puncture care
- K. Special procedures
1. Patient Rights
 2. Consent forms (ex, HIV, Records, Release, Patient Billing)
 3. Refusal of treatment
 4. Confidentiality
- L. Licensing
1. Application process
 2. Certification agencies
 3. State certificate
- M. Continuing education
1. Requirements for continuing education units (CEU)
 2. State requirements for phlebotomy certifications
 3. Approved accrediting agencies

Laboratory

Fifty plus venipunctures to obtain venous blood for testing and ten plus live skin punctures to obtain capillary blood for testing. A minimum of 40 hours is required in a clinical setting.

V. Assignments

A. Appropriate readings

Course textbooks, supplemental readings about infection control, phlebotomy and related topics, and reviewing new advances in phlebotomy through reviewing journals, publications and internet searches.

B. Writing assignments

The Phlebotomy essentials work book is required text for the course. This will be used in and outside of class after each topic to make sure it was retained. Other handouts pertaining to the subject will also be presented on a daily basis. Videos will also be shown to help support a topics information

C. Out of class assignments

Out of class assignments will consist of chapter reading, hand out assignments, and review.

D. Assignments that demonstrate critical thinking

The student will utilize critical thinking in:

1. Selection of the correct equipment for phlebotomy procedures.
2. Selection of the proper site and mode of blood collection for the test requested.
3. Distinguish between the different sites for venipuncture and blood collection procedures for infants, children, and adults.
4. Compliance with OSHA and HIPPA regulations during performance of clinical procedures.

VI. Methods of Evaluation

The student must maintain a 75% in the class and must pass any midterm or final exams with a 75% or better to continue on in the Phlebotomy Program.

Traditional Classroom Instruction

Term paper (topic choice, thesis statement, outline, bibliography, rough draft, final draft), homework, classroom discussion, essay, journals, lab demonstrations and activities, multiple choice quizzes, and participation.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery

Online Delivery

Traditional Classroom Instruction

Lecture, PowerPoint, and other media presentations, discussions, scenarios, and group presentations.

VIII. Representative Texts and Supplies

Textbook:

Strasinger, S.K.; *The Phlebotomy Textbook 4th Edition*, 2019, F.A. Davis Company, ISBN 13: 9780803668423

Included in uniform and lab fee:

-LCC Uniform

-Clinical Supply Kit

IX. Discipline/s Assignment

Heath Care Ancillaries-Phlebotomy, Nursing, Licensed Vocational Nursing

X. Course Status

Current Status: Active

Original Approval Date: 03/17/2015

Board Approval: 04/14/2015

Chancellor's Office Approval: 05/29/2015

Revised By: Christi Myers

Latest Curriculum/Academic Standards Committee Revision Date: 11/29/2022