

ALH 0010 - INTRODUCTION TO PHLEBOTOMY

Catalog Description

Hours: 91 (43 lecture, 48 laboratory)

Description: Introduction to the principles of Phlebotomy. Emphasis on phlebotomy techniques, infection control, safety, specimen collection and handling, medical and legal considerations, patient care and preparation and performance in venipunctures, capillary punctures, and basic laboratory tests expected of the entry level phlebotomy position (CPT 1). Upon successful completion of ALH 10 and ALH 11, students will be eligible to sit for the phlebotomy exam to become a Certified Phlebotomy Technician I (CPT 1) with the state of California. (letter grade only) (CSU)

Course Student Learning Outcomes

- CSLO #1: Employ basic infection control, universal precautions and safety techniques, and dispose of sharps, needles and waste using the appropriate disposal techniques.
- CSLO #2: Apply principles of anatomy, physiology and medical terminology of the circulatory system in the practice of phlebotomy.
- CSLO #3: Perform venipuncture procedures safely and professionally on patients of a variety of ages and health conditions within the scope of practice of a phlebotomist.
- CSLO #4: Perform proper identification of patient and specimens, and explain the importance of accuracy in overall patient care.
- CSLO #5: Perform proper site selection and preparation of skin.
- CSLO #6: Identify and utilize blood collection equipment, types of tubes and additives, draw in proper order of draw when additives are required and identify special precautions.
- CSLO #7: Perform proper post-puncture care.

Effective Term

Fall 2020

Course Type

Credit - Degree-applicable

Contact Hours

91

Outside of Class Hours

86

Total Student Learning Hours

177

Course Objectives

Lecture Objectives:

1. Explain what Phlebotomy Technicians job requirements are.
2. List and describe the various components of blood.
3. Distinguish between various types of blood vessels.
4. Identify and apply knowledge of rules and regulations in regards to blood collection and patient care.

5. Demonstrate ability to properly follow and understand infection control procedures and use of Personal Protective Equipment properly.
6. Demonstrate ability to identify and collect various blood tests.
7. Identify anatomical and physiological landmarks in relation to phlebotomy procedures.
8. Apply the fundamentals of anatomy and physiology to perform phlebotomy.
9. Analyze and apply the appropriate OSHA regulations, standard precautions and safety techniques in obtaining and handling blood specimens.

Lab Objectives:

1. Demonstrate and list the principles of basic clinical lab techniques.
2. Demonstrate and apply proper technique in specimen collection and handling.
3. Demonstrate and describe the professional behavior necessary to perform phlebotomy procedures.
4. Demonstrate safe and correct phlebotomy techniques and procedures in order to perform venipunctures and capillary punctures on a patient.
5. Maintain patient confidentiality at all times.

General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- CSU Transferable

Methods of Evaluation

- Classroom Discussions
 - Example: After completion of specific chapter and instructor lecture, students will be required to discuss and respond to critical thinking exercises. Standard Grading. Example question: Char, the hematology supervisor, notices that many of the blood specimens collected by dermal puncture are hemolyzed. Char schedules a continuing education in-service session for the Phlebotomy team. a. Why should preparation of the collection site be stressed? b. Why is it important for the phlebotomist to obtain rounded drops of blood to prevent hemolysis? Explain your answer.
- Objective Examinations
 - Example: After completion of specific chapter, students will be required to take weekly quizzes and submit via LMS for grade. The students will then take Unit Tests in class. These quizzes and tests will be designed to prepare students for the certification exam. Standard Grading. Example: Point of Care Testing 1. What is the recommended specimen for urine pregnancy testing?
- Reports
 - Example: Students will be required to complete a disease project based on the various purposes of chemistry, plasma, serum, microbiology, hematology and medication lab testing. Portfolio: Completion of Phlebotomy course Clinical Handbook including: 1. Signed statement of confidentiality 2. Acknowledgment of student responsibilities 3. Record of each successful venipuncture with preceptor verification 4. Evaluation of Behavioral Objectives on the California Phlebotomy Practical Training Form (required by California Department of Public Health Note: This provides proof of completion of the Practical Training

completed by the student and is mailed to California Department of Public Health).

- Skill Demonstrations
 - Example: 1. Students will demonstrate correct selection of equipment for selected phlebotomy procedure. 2. Students will demonstrate proper site selection and mode of blood collection for test requested. 3. Students will demonstrate compliance with OSHA and HIPPA regulations during performance of clinical procedure. Standard Grading.

Repeatable

No

Methods of Instruction

- Laboratory
- Lecture/Discussion

Lab:

1. Following lecture and discussion, instructor will demonstrate how to properly place fingers along radial artery. Students will then work with lab partners to complete discovery activity on taking and recording radial pulse and locating carotid artery, femoral artery.
2. Following lecture and discussion, instructor will instruct student to draw with different color highlighters the various vessels of the arm identifying the Brachial artery, Basilic Vein, Cephalic Vein, Median Cubital Vein and Median Cephalic Vein as well as identifying the lateral antebrachial cutaneous nerve. Students will then refer to figure 8-10 and 8-11 before they are prompted to apply tourniquet to assess correct locations and blindly feel possible venipuncture sites.

Lecture:

1. Instructor PowerPoint presentation on Circulatory System. This will be followed by discussion distinguishing various types of blood vessels. Students will then be able to break down the various components of the blood utilizing Figure 6-1
2. Instructor PowerPoint presentation on Routine Venipuncture. This will be followed by discussion on how to apply and demonstrate proper phlebotomy techniques in order to perform venipunctures and capillary punctures on a patient.

Typical Out of Class Assignments

Reading Assignments

1. Read section from textbook on venipuncture procedures. Be prepared to summarize and discuss procedure for tourniquet application and vein selection.
2. Read section from textbook on infectious disease exposure. Be prepared to discuss both prevention and management and demonstrate proper PPE.

Writing, Problem Solving or Performance

1. Read section on Variables and Venipuncture Complications and respond to a critical thinking clinical application question. For example: Tania, an outpatient, enters the blood drawing station, properly identifies herself, and states that she had a mastectomy 3 months ago. She holds her left hand out for Trevor, the phlebotomist. a. What should Trevor Ask Tania? b. If blood is drawn from the incorrect arm, state two possible dangers to Tania. c. If blood is drawn from the incorrect arm, state two possible effects on laboratory tests.
2. Read section on The Clinical

Laboratory and answer critical thinking exercises for section in the textbook. For example: A phlebotomist delivering a specimen to the UA section is instructed to place the specimen in the refrigerator. Is this an acceptable procedure? Please explain and support with information from the text.

Other (Term projects, research papers, portfolios, etc.)

1. Write short research paper utilizing online resources on general lab safety and OSHA regulations.

Required Materials

- The Phlebotomy Textbook
 - Author: Susan King Strasinger and Marjorie Schaub Di Lorenzo
 - Publisher: FA Davis
 - Publication Date: 2019
 - Text Edition: 4th
 - Classic Textbook?:
 - OER Link:
 - OER:

Other materials and-or supplies required of students that contribute to the cost of the course.