

Virginia Western Community College

MDL 105/106

Phlebotomy / Clinical Phlebotomy

Prerequisites

None

Course Description

Introduces basic medical terminology, anatomy, physiology, components of health care delivery and clinical laboratory structure. Teaches techniques of specimen collection, specimen handling, and patient interactions. This course introduces the student to the techniques of obtaining blood samples from patients in health care settings. Students will learn venipuncture, heel, and finger stick techniques for adult and pediatric patients. Students will also be introduced to techniques of specimen preparations, interpretation of nurses and physicians' orders, and proper techniques for handling of blood specimens.

Semester Credits: 4 Lecture Hours: 2 Lab/Clinical/Internship Hours: 4

Required Materials

Textbook:

Phlebotomy Essentials, 6th Edition, by Ruth E. McCall, Cathee M. Tankersley, Wolters Kluwer Philadelphia, 2016. ISBN: 978-1-4511-9452-4

Other Required Materials:

Course Outcomes

At the completion of this course, the student should be able to:

1. Understand basic medical terminology
2. Understand laboratory orders from nurses and physicians.
3. Understand basic human anatomy, especially the circulatory system.
4. Be able to obtain blood from laboratory models such as simulated arms.
5. Understand how to properly handle laboratory blood specimens.
6. Understand how to process blood samples for various clinical laboratories.

Topics Outline

Unit I The Healthcare Setting

Chapter

- 1. Past and Present and the Healthcare Setting**
- 2. Quality Assurance and Legal Issues**
- 3. Infection Control, Safety, First Aid, and Personal Wellness**

Test I - Chapters 1-3

Unit III Blood Collection Procedures

- 7. Blood Collection Equipment, Additives, and Order of Draw**
- 8. Venipuncture Procedures**

Unit II Overview of the Human Body

- 4. Medical Terminology**
- 5. Human Anatomy and Physiology Review**
- 6. The Circulatory System**

Test 2 – Chapters 4-6

Mid-Term Exam – Chapters 1-8

Unit III Blood Collection Procedures

- 9. Preanalytical Considerations**
- 10. Capillary Puncture Equipment and Procedures**

Unit IV Special Procedures

- 11 Special Collections and Point-of-Care Testing**

Test 3 – Chapters 9-11

- 12. Computers and Specimen Handling and Processing**
- 13. Nonblood Specimens and Tests**
- 14. Arterial Puncture Procedures**

Test 4 – Chapters 12-14

Final Exam