LABORATORY ASSISTANT (513)

Information provided includes course descriptions by subject only. For complete 2022-2023 programs/academic plans, please refer to Academic Programs (http://catalog.blackhawk.edu/academics/).

513-102 Principles of Phlebotomy
Credits: 1-3

Principles of Phlebotomy prepares the learner to function as a member of the healthcare delivery team, performing the role of a phlebotomist.The Phlebotomist generally works in a clinical laboratory under the supervision of the appropriate professional. He/She is responsible for collection procedures in both outpatient clinical and hospital inpatient settings for the purpose of laboratory analysis, including emergency and routine collection procedures from veins and skin punctures areas on patients of all age groups. Specimen integrity is emphasized as dependent on collection procedures, proper choice of equipment and knowledge of patient variables. Positive patient identification protocol is an absolute requirement which is stressed throughout as well as transport and processing of specimens. This theory course is designed to prepare the student to enter the laboratory/practicum experience of the program.
Aid Code: 10 - undefined.
Restrictions: Restricted to students admitted to Program.
Pre-requisites: (Background Check, P or Background Check, N)
Co-requisites: (501-101)

Complete Course Listing

513-109 Blood Bank
Credits: 1-4

This course focuses on blood banking concepts and procedures including blood typing , compatability testing, work ups for adverse reaction to transfusions, disease states and donor activities.
Aid Code: 10 - undefined.
Pre-requisites: (513-110 or 506-101) and (513-115)

Complete Course Listing

513-110 Basic Laboratory Skills
Credits: 0.05-1

This course explores health career options and the fundamental principles and procedures performed in the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests.
Aid Code: 10 - undefined.

Complete Course Listing

513-110E Basic Lab Skills Chall Exam
Credits: 0.5-1

Aid Code: 10 - undefined.

Complete Course Listing

513-111 Phlebotomy
Credits: 1-2

This course provides opportunities for learners to perform routine venipuncture, routine capillary puncture and special collection procedures.
Aid Code: 10 - undefined.
Restrictions: Restricted to students admitted to Program.
Pre-requisites: (Background Check, P or Background Check, N) and (513-113)
Co-requisites: (806-177)

Complete Course Listing

513-113 Quality Assurance Laboratory Math
Credits: 0.05-1

This course focuses on performing the mathematical calculations routinely used in laboratory settings. You will explore the concepts of quality control and quality assurance in the laboratory.
Aid Code: 10 - undefined.

Complete Course Listing

513-114 Urinalysis
Credits: 1-2

This course prepares you to perform a complete urinalysis which includes physical, chemical and microscopic analysis. You will explore renal physiology and correlate urinalysis results with clinical conditions.
Aid Code: 10 - undefined.
Pre-requisites: (513-110 or 506-101)

Complete Course Listing

513-115 Basic Immunology Concepts
Credits: 1-2

This course provides an overview of the immune system including laboratory testing methods for diagnosis of immune system disorders, viral and bacterial infections.
Aid Code: 10 - undefined.
Pre-requisites: (Background Check, P or Background Check, N) and (513-113) or 506-101)
Co-requisites: (513-110 and (806-177 or 806-197)

Complete Course Listing

513-116 Clinical Chemistry
Credits: 1-4

Introduces clinical chemistry techniques and procedures for routine analysis using photometric, potentiometric and separation techniques. Topics in this course include pathophysiology and methodologies for carbohydrate, lipids, proteins, renal function and blood gas analysis.
Aid Code: 10 - undefined.
Restrictions: Restricted to students admitted to Program.
Pre-requisites: (513-110) and (806-177) and (806-199)

Complete Course Listing

513-120 Basic Hematology
Credits: 1-3

This course covers the theory and principles of blood cell production and function, and introduces you to basic practices and procedures in the hematology laboratory.
Aid Code: 10 - undefined.
Pre-requisites: (513-110 or 506-101)

Complete Course Listing

513-121 Coagulation
Credits: 0.05-1

This course introduces the theory and principles of coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed upon laboratory techniques used to diagnose disease and monitor treatment.
Aid Code: 10 - undefined.
Pre-requisites: (513-110 or 506-101)
Co-requisites: (513-120)

Complete Course Listing

513-130 Advanced Hematology
Credits: 1-2

This course explores mechanisms involved in the development of hematological disorders. Emphasis is placed upon laboratory techniques used to diagnose disorders and monitor treatment.
Aid Code: 10 - undefined.
Pre-requisites: 513-120

Complete Course Listing

513-133 Clinical Microbiology
Credits: 1-4

This course presents the clinical importance of infectious diseases with emphasis upon the appropriate collection, handling and identification of clinically relevant bacteria. Disease states, modes of transmission and methods of prevention and control, including anitbiotic susceptibility testing, will also be discussed.
Aid Code: 10 - undefined.
Pre-requisites: 806-197

Complete Course Listing

513-140 Advanced Microbiology
Credits: 1-2

This course provides an overview of acid fast organisms, fungi, parasites, and anaerobic bacteria. The organisms, their pathophysiology, epidemiology, the diseases and conditions that they cause, laboratory methods of handling, culturing and identification will be discussed.
Aid Code: 10 - undefined.
Co-requisites: 513-133

Complete Course Listing

513-147 Phlebotomy Practicum
Credits: 1-2

Phlebotomy Practicum prepares the learner to function as a staff member in a medical laboratory setting performing venipuncture and other specimen collection procedures on actual patients. Students learn how to process and handle laboratory specimens as well as learning how to function in a busy medical laboratory environment.
Aid Code: 10 - undefined.
Restrictions: Restricted to students admitted to Program.
Pre-requisites: (513-116) or (513-102)

Complete Course Listing

513-151 Clinical Experience 1
Credits: 1-3

In this clinical you will practice the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on Laboratory Information Systems.
Aid Code: 10 - undefined.
Pre-requisites: (513-114) and (513-130) and (513-134) and (513-133)
Co-requisites: (513-140)

Complete Course Listing

513-152 Clinical Experience 2
Credits: 1-4

Provides continuing practice for the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on Laboratory Informations Systems.
Aid Code: 10 - undefined.
Pre-requisites: (513-114) and (513-130) and (513-134) and (513-170) and (513-133)
Co-requisites: (513-140)

Complete Course Listing

513-153 Clinical Portfolio
Credits: 0.05-1

Students prepare a portfolio of professional experiences, assessments and evaluations, clinical reports, class project summaries, a log of community service or professional activities performed while in the MLT program and resume for MLT employment.
Aid Code: 10 - undefined.
Co-requisites: (513-151) and (513-152)

Complete Course Listing

513-170 Introduction to Molecular Diagnostics
Credits: 1-2

The course will focus on normal flow of genetic information within the cell, as well as nucleic acid packaging and modification. Learners will analyze DNA and RNA structure and function. Basic genetic inheritance will be examined as well. Learners demonstrate isolation, amplification, and sequencing reactions in the lab. Learners use molecular techniques in the identification of microorganisms and the characterization of specific gene loci.
Aid Code: 10 - undefined.
Pre-requisites: (806-199) and (806-197)

Complete Course Listing

513-445 Exam Review for MLT
Credits: 0.05-5.6

CLT/MLT Exam Review will prepare the recent CLT/MLT graduates and others wishing to prepare for the national certification exam. The course will include practice exam questions and activities designed to prepare students for the exam.
Aid Code: 47 - undefined.

Complete Course Listing

513-525 Beginning Laboratory Skills for Phlebotomy
Credits: 1

This course explores health career options in waived testing environments, tailored specifically to phlebotomy technicians and medical laboratory assistants. The course explores the fundamental principles and procedures performed in waived testing areas and the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests. The classes will be offered in a Flexlab Hybrid format.
Aid Code: 31 - undefined.

Complete Course Listing