

MEDICAL LABORATORY SCIENCE (MLS)

MLS 300: Intro to Medical Lab Science**Credits:** 1**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture, Lecture/Lab, Lab/Lecture/Online, On-Line**MLS 312: Clinical Microbiology I**

Study the biology of clinically significant bacteria. Emphasizes pathophysiology and diagnostic procedures and tests used for their detection and identification. Topics of learning include, but not limited to, epidemiology, signs and symptoms of disease, mechanisms of infection and treatment. Contemporary laboratory methodologies used to examine, process and analyze clinical specimens are also discussed.

Credits: 4**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture, Lecture/Lab, Lab/Lecture/Online, On-Line**MLS 313: Clinical Microbiology II**

Continuation of Clinical Microbiology I. Study the biology of clinically significant bacteria such as, but not limited to, obligate anaerobes, partially acid fast bacilli and mycobacteria. Parasitology, mycology and virology will also be studied. Emphasizes pathophysiology and diagnostic procedures and tests used for their detection and identification. Topics of learning include, but not limited to, epidemiology, signs and symptoms of disease, mechanisms of infection and treatment. Contemporary laboratory methodologies used to examine, process and analyze clinical specimens are also discussed.

Credits: 3.5**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture, Lecture/Lab**MLS 323: Clinical Chemistry I**

Study of the significance of chemical analytes indicative of human health and disease. Topics of learning include, but not limited to, analytical methodologies, operating principles, and utilization of biochemical laboratory instrumentation, equipment and analyzers for analyte determinations; clinical and research. Chemical analytes that will be discussed throughout the duration of this course include, but not limited to, carbohydrates, electrolytes, proteins, enzymes, non-protein nitrogen compounds, lipids and blood gases. Quality control and preventative maintenance methods are also discussed.

Credits: 3.5**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Lab, Lecture, Lecture/Lab, Lab/Lecture/Online, On-Line**MLS 324: Clinical Chemistry II**

Continuation of Clinical Chemistry I. Topics of learning include, but not limited to, analytical methodologies, operating principles, and utilization of biochemical laboratory instrumentation, equipment and analyzers for analyte determinations; clinical and research. Emphasis on the study of organ function, endocrinology, heme derivatives, nutrition assessment, toxicology, therapeutic drug monitoring, tumor markers, specialized care and special chemistry and problem solving in the clinical chemistry laboratory.

Credits: 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Lab, Lecture, Lecture/Lab**MLS 341: Clinical Hematology I****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Lab, Lecture, Lecture/Lab, Lab/Lecture/Online, On-Line**MLS 343: Clinical Hematology II****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Lab, Lecture, Lecture/Lab**MLS 351: Immunohematology I****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture, Lecture/Lab**MLS 352: Immunohematology****Credits:** 4**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture, Lecture/Lab**MLS 375: Medical Laboratory Science Sem****Credits:** 2**College:** Jefferson College of Health Professions**Schedule Type:** Lecture, Lecture/On-Line**MLS 376: Urinalysis and Body Fluids****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Lab, Lecture, Lecture/Lab**MLS 412: Med Lab Sci Practicum I****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Practicum**MLS 413: Clinical Hematology Seminar****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** On-Line**MLS 416: Comprehensive Exam****Credits:** 0**College:** Jefferson College of Health Professions**Schedule Type:** Exam, On-Line, Seminar**MLS 422: Med Lab Sci Practicum II****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Practicum**MLS 423: Clinical Chemistry Seminar****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** On-Line**MLS 442: Med Lab Sci Practicum III****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Practicum**MLS 443: Clinical Microbiology Seminar****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** On-Line**MLS 454: Med Lab Sci Practicum IV****Credits:** 3**College:** Jefferson College of Health Professions**Schedule Type:** Clinical, Practicum

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MLS 455: Immunohematology Seminar

Credits: 3

College: Jefferson College of Health Professions

Schedule Type: On-Line