

# MEDICAL LAB SCIENCE (ONLINE) (MLSO)

MLSO 504: Biochemistry

Credits: 3

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 510: Intro to Molecular Diagnostics

Credits: 1

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

# MLSO 512: 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: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

### MLSO 513: 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: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

# MLSO 523: 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: 2.5

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

# MLSO 524: 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: 2.5

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

# MLSO 531: Immunology

Examines basic principles and mechanisms of the immune system in the physiologic condition and in disease. Immune mechanisms in infections, hypersensitivity reactions, autoimmunity, immunodeficiencies, as well as tumor and transplantation immunology are discussed. Lecture. This is an online course.

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 541: Clinical Hematology I

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 543: Clinical Hematology II

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 551: Immunohematology I

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 552: Immunohematology II

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 577: Laboratory Inform Fundamentals

Credits: 3

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 578: Infection Prevention & Control

Credits: 3

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 603: Human Genetics

Credits: 3

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 606: Bioinformatics

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

MLSO 610: Reg & Fiscal Issues Lab Mgmt

Credits: 3

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line



MLSO 611: Molecular Diagnostic Technique

Credits: 2

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture/On-Line, On-Line

# MLSO 812: Med Lab Sci Comp - Chemistry

Students participate in all phases of laboratory functions common to contemporary clinical laboratory practice in their field of study. Components include practical work experience, participation in and/or observation of specialty area(s), and quality. Graduate practical internships in affiliated clinical and/or research laboratories.

Credits: 1

College: Jefferson College of Health Professions

Schedule Type: Lecture, Lecture/On-Line, On-Line, Practicum

MLSO 813: Med Lab Sci Comp - Microbiolgy

Credits: 1

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture, Lecture/On-Line, On-Line

MLSO 814: Med Lab Sci Comp - Hematology

Credits: 1

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture, Lecture/On-Line, On-Line

MLSO 815: Med Lab Sci Comp - Immunohema

Credits: 1

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture, Lecture/On-Line, On-Line

MLSO 816: Molecular Technique Competency

Credits: 1

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture, Lecture/On-Line, On-Line

MLSO 817: Med Lab Science Competency

Credits: 1

**College:** Jefferson College of Health Professions **Schedule Type:** Lecture, Lecture/On-Line, On-Line