

# MEDICAL LAB SCIENCE (ONLINE) (MLSO)

MLSO 301: Molecular Biology

Credits: 3

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

MLSO 304: Biochemistry

Credits: 3

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

MLSO 310: Intro to Molecular Diagnostics

Credits: 1

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

# MLSO 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: 2

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

### MLSO 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.

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

#### MLSO 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: 2

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

## MLSO 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: 2

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

# MLSO 331: 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 341: Clinical Hematology I

Credits: 2

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

MLSO 343: Clinical Hematology II

Credits: 2

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

MLSO 351: Immunohematology

Credits: 2

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

MLSO 352: Immunohematology II

Credits: 2

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

MLSO 375: MLS Seminar

Credits: 2

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

MLSO 376: Urinalysis and Body Fluids

Credits: 2

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

MLSO 377: Lab Informatics Fundamentals

Credits: 3

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

MLSO 378: Infection Prevention & Control

Credits: 3

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

MLSO 379: Special Topics in MLS

Credits: 3

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



MLSO 403: Human Genetics

Credits: 3

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

MLSO 410: Molecular Diagnostic Technique

Credits: 2

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

MLSO 412: MLS Practicum I

Credits: 1

College: Jefferson College of Health Professions

Schedule Type: Practicum

MLSO 416: Comprehensive Exam

Credits: 0

College: Jefferson College of Health Professions

Schedule Type: On-Line
MLSO 422: MLS Practicum II

Credits: 1

College: Jefferson College of Health Professions

Schedule Type: Practicum

MLSO 430: Laboratory Standard & Practice

Credits: 3

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

MLSO 440: Current Research Biosciences

Credits: 2

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

MLSO 442: MLS Practicum III

Credits: 1

College: Jefferson College of Health Professions

Schedule Type: Practicum
MLSO 454: MLS Practicum IV

Credits: 1

College: Jefferson College of Health Professions

Schedule Type: Practicum