

MEDICAL LABORATORY SCIENCE (MLS)

Courses

MLS 1990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

MLS 1991. Internship. 1-3 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

MLS 1993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

MLS 2010. Medical Diagnostic Techniques. 0 or 3 Credits.

Introduces the field of Medical Laboratory Science. Using lecture and laboratory practice, students will demonstrate professionalism and interpersonal skills while achieving competence with common laboratory procedures. Students will demonstrate knowledge in using aseptic techniques to handle and analyze specimens, using appropriate laboratory equipment. Prerequisites: CHEM 1100; or CHEM 1400, CHEM 1450.

MLS 2990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

MLS 2991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

MLS 2993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

MLS 2994. Teaching Assistantship. 1-3 Credits.

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

MLS 2995. Undergraduate Research. 1-18 Credits.

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

MLS 3000. Applied Medical Diagnostics. 3 Credits.

Introduces the methodologies, techniques, and clinical applications associated with point of care testing in a community health setting. Students explore community health issues and engage in service-learning hours with a community partner outside of scheduled class time. Service learning combines community service with academic instruction, focusing on critical, reflective thinking. Prerequisites: MLS 2010 or a Medical Laboratory Science major; minimum Junior standing.

MLS 3100. Clinical Chemistry I. 3 or 4 Credits.

Lectures and laboratory experiences introduce basic principles in clinical quantitative analysis and laboratory instrumentation; test results are correlated with clinical case studies. Credit not awarded for both MLS 3100 and MLS 5100. Prerequisites: ANPS 1190 and ANPS 1200; CHEM 1400 and CHEM 1450; CHEM 1580 or CHEM 2580.

MLS 3110. Clinical Chemistry II. 3 Credits.

Advanced instruction in body chemistry and pathophysiology of disease with emphasis on diagnostic lab techniques in chemistry. Prerequisites: MLS 3100, PATH 2010.

MLS 3192. Clinical Practicum: Chemistry. 3 Credits.

Experiences in an approved clinical laboratory education site in the area of clinical chemistry. Prerequisite: Medical Laboratory Science Seniors only.

MLS 3200. Hematology. 3 Credits.

Advanced theory and analysis of blood cell physiology and related pathology. Concepts of hemostasis and clinical assessment methods. Credit not awarded for both MLS 3200 and MLS 5200. Prerequisites: One semester of organic chemistry, one semester of biochemistry.

MLS 3220. Hematology Lab. 1 Credit.

The laboratory sessions will cover four broad areas of hematology practice: 1) laboratory tests associated with hemostasis, 2) laboratory tests and morphology seen in diseases affecting WBC cells, 3) peripheral blood and bone marrow cell morphology, and 4) laboratory tests and the associated morphology diagnostic of various RBC disorders. Prerequisite: One semester of organic chemistry, one semester of biochemistry. Co-requisite: MLS 3200.

MLS 3292. Clinical Practicum:Hematology. 3 Credits.

Experiences in approved clinical laboratory education site in the area of clinical hematology. Prerequisite: Medical Laboratory Science Seniors only.

MLS 3300. Clinical Microbiology II. 3 Credits.

Comprehensive study of non-bacterial pathogenic microorganisms and their disease states in humans. Includes medical mycology, parasitology and virology. Credit not awarded for both MLS 3300 and MLS 5300. Prerequisites: MMG 1650 or MMG 2010.

MLS 3392. Clin Practicum:Microbiology. 3 Credits.

Experiences in an approved clinical laboratory education site in the area of clinical microbiology. Prerequisite: Medical Laboratory Science Seniors only.

MLS 3400. Immunohematology. 4 Credits.

Advanced theory and experience related to human blood groups and transfusion practice. Credit not awarded for both MLS 3400 and MLS 5400. Prerequisite: BHSC 3420 or MMG 3230.

MLS 3492. Clin Practicum:Immunohematolog. 3 Credits.

Experiences in an approved clinical laboratory education site in the area of clinical immunohematology. Prerequisite: Medical Laboratory Science Seniors only.

MLS 3892. Public Health Lab Practicum. 12 Credits.

Public health laboratory experiences under the direction of public health scientists, performing methods for screening and diagnostic purposes as well as good public health practice. MLS Seniors.

MLS 3900. Topics in Medical Lab Science. 2 Credits.

Seminar on topics in the practice and profession of Medical Laboratory Science. Online course. Topics vary by offering; periodic offering at intervals that may exceed four years. Co-requisites: MLS 3192, MLS 3292, MLS 3392, MLS 3492, Medical Laboratory major.

MLS 3910. Fndtn of Interprofessionalism. 1 Credit.

Ensures that Medical Laboratory Science students are adequately prepared for beginning their clinical practica. During this online course, students will develop interprofessional communication skills, explore team dynamics, reflect on professional behaviors and their values, discuss ethics within the field of laboratory sciences, and review the goals, expectations, and responsibilities of a student learner in a professional laboratory environment. Prerequisite: 4th year Medical Laboratory Science student.

MLS 3990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

MLS 3991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

MLS 3993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

MLS 3994. Teaching Assistantship. 1-3 Credits.

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

MLS 3995. Undergraduate Research. 1-18 Credits.

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

MLS 4990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

MLS 4993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.