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www.txstate.edu/cls (http://www.txstate.edu/cls/)
Facebook: www.facebook.com/txstate.cls (https://www.facebook.com/txstate.cls/)
Twitter: @TXST_MLS
Linkedin: www.linkedin.com/company/texas-state-clinical-laboratory-science-program (https://www.linkedin.com/company/texas-state-clinical-laboratory-science-program/)

The Bachelor of Science in Medical Laboratory Science (BSMLS) degree with a major in Medical Laboratory Science prepares students to function as medical laboratory scientists (clinical laboratory scientists) in a wide variety of settings from physician office laboratories to modern tertiary care hospital laboratories. The medical laboratory scientist can become an indispensable top-level laboratory worker, a supervisor, a specialist, a researcher, or an educator.

The requirements during the first two years of study include courses in biology, chemistry, and mathematics, along with courses in the humanities and social and behavioral sciences. The junior and senior years combine clinical experiences in the affiliated clinical laboratories with advanced academic study in the MLS disciplines.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Graduates of the program are eligible to take the national certification examination for the Medical Laboratory Scientist (MLS) given by the Board of Certification of the American Society for Clinical Pathology (ASCP) or similar entities (e.g., American Medical Technologists. AMT).

Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician or licensed healthcare provider. Certain immunizations are required prior to beginning classes in the MLS program and before the student can be placed in a clinical or internship assignment. Information on these requirements and forms may be obtained through the program office.

Background Check and Drug Screening

Prior to beginning classes in the MLS program, students are required to have a background check. As a condition for placement in professional practice sites during the second year of the program, students will be required to have a drug screening test and meet other requirements set by individual sites. Information on the background check and drug screening process will be provided by the MLS Program.

Clinical Placement (rotation) Requirements

The Medical Laboratory Science (MLS) Program at Texas State provides clinical placements for all MLS students entering the clinical year (senior year / 2nd year of post baccalaureate) in good academic standing. Clinical placements are carefully and methodically assigned while taking into account transportation issues, types of clinical affiliates, and student characteristics. In the event a clinical affiliate is unable to fulfill their prior obligation, alternative clinical rotations will be sought at other affiliate institutions. In the very unlikely event alternative clinical rotations are unable to be secured; affected students will be reassigned to the first available rotation site. The next available clinical rotation will occur as soon as possible but no later than one year from the time the rotation was cancelled. If the clinical rotation cancellation occurs after clinical rotations have commenced, the affected student will be placed first in the queue to receive the first available clinical rotation slot that will occur no later than one year after the cancellation. If the clinical rotation cancellation occurs prior to the start of clinical rotations, affected students will be selected based on GPA calculated from performance in the MLS courses. Students with the lowest GPAs will be required to relinquish their clinical rotation slots which will delay clinical rotations.

Bachelor of Science in Medical Laboratory Science (B.S.M.L.S.)

- Major in Medical Laboratory Science (http://mycatalog.txstate.edu/undergraduate/health-professions/medical-laboratory-science-program/bsmls/)

Minors

- Minor in Medical Laboratory Science (http://mycatalog.txstate.edu/undergraduate/health-professions/medical-laboratory-science-program/mls-minor/)

Courses in Medical Laboratory Science (MLS)

MLS 3105. Introduction to Medical Laboratory Techniques LAB.
This lab class will be for students currently accepted into the Medical Laboratory Science Program and have taken or concurrently taking MLS 3205 lecture course. There will be technical competency demonstrations and hands-on practice in the techniques, procedures, and instrumentation commonly used in clinical laboratories. Corequisite: MLS 3205 with a grade of a "D" or better.
1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 3110. Clinical Chemistry I Laboratory.
This laboratory course is designed to acquaint the medical laboratory science student major with concepts, techniques, standard operating procedures, and instrumentation used in clinical chemistry. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3111. Medical Laboratory Science Review.
This course reviews material presented in the first two semesters of the Medical Laboratory Science coursework to improve retention of material for the national certification exam. Students will review entry-level theory and application in the areas of clinical chemistry, immunology, hematology, coagulation, urinalysis, parasitology, quality control, and microscopy.
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 3112. Clinical Hematology and Hemostasis I Laboratory.
This laboratory course is an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on laboratory principles, methodology, problems encountered, and clinical applications. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
1 Credit Hour. 0 Lecture Contact Hours. 3 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3205. Introduction to Medical Laboratory Techniques.
This course will introduce students, both MLS majors and non-majors, to the main areas of clinical practice including Hematology, Microbiology, Immunohematology (blood banking), Clinical Chemistry, and Immunology. Lectures will cover the techniques, procedures, and instrumentation commonly used in clinical laboratories. (WI).
2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions|Writing Intensive
Grade Mode: Standard Letter

MLS 3304. Foundations of Medical Laboratory Techniques.
This course will introduce non-MLS students to the main areas of clinical and medical laboratory practice including Hematology, Microbiology, Immunohematology (blood banking), Clinical Chemistry, and Immunology. Lectures will cover the techniques, procedures, and instrumentation commonly used in clinical laboratories. This course may not be used for the MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3305. Introduction to Medical Laboratory Techniques.
This course will introduce MLS majors to the main areas of clinical practice including Hematology, Microbiology, Immunohematology (blood banking), Clinical Chemistry, and Immunology. Lectures will cover the techniques, procedures, and instrumentation commonly used in clinical laboratories. There will be technical competency demonstrations and hands-on practice in the techniques, procedures, and instrumentation commonly used in clinical laboratories. (WI) Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

MLS 3309. Foundations of Clinical Chemistry I.
This course is designed to acquaint the non-MLS student major with concepts, techniques, procedures, and instrumentation used in clinical chemistry. This course may not be used for the MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3310. Clinical Chemistry I.
This course is designed to acquaint the medical laboratory science student major with concepts, techniques, procedures, and instrumentation used in clinical chemistry. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3311. Foundations of Clinical Hematology and Hemostasis I.
This course for non-MLS student majors is a foundational study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications. This course may not be used for the MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grades of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3312. Clinical Hematology and Hemostasis I.
This course is an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3320. Foundations of Clinical Immunology.
This course will introduce non-MLS students to an in-depth study of theoretical and practical aspects of clinical immunology with emphasis on principles, methodology, problems encountered, and clinical applications. This course may not be used for the MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3322. Foundations of Medical Microscopy and Analysis of Body Fluids.
This course is designed to acquaint non-MLS students with concepts, techniques, procedures, and instrumentation for the study of body fluids present in the various anatomical compartments of the body as they differ in health and disease. This course may not be used for the MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3323. Medical Microscopy and Analysis of Body Fluids.
This course is the study of body fluids present in the various anatomical compartments of the body as they differ in health and disease. Physical and chemical tests, and microscopic examination of select body fluids are performed.
3 Credit Hours. 0 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 3324. Clinical Immunology.
This course is an in-depth study of theoretical and practical aspects of clinical immunology with emphasis on principles, methodology, problems encountered, and clinical applications.
3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 3325. Foundations of Medical Parasitology.
This course will introduce non-MLS students to the medically important parasites producing disease in humans with emphasis on epidemiology, life cycles, identifying characteristics, and pathology of these parasites. This course may not be used for the MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 3326. Medical Parasitology.
This course includes lectures and laboratory instruction in medically important parasites producing disease in humans with emphasis on epidemiology, life cycles, identifying characteristics, and pathology of these parasites.
3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 3410. Clinical Chemistry I.
This course is designed to acquaint the medical laboratory science student with concepts, techniques, procedures, and instrumentation used in clinical chemistry.
4 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 3412. Clinical Hematology and Hemostasis I.
This course is an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications.
4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4120. Diagnostic Microbiology I Lab.
This laboratory course is a study of pathogenic and nonpathogenic bacteria with special emphasis on laboratory methods of isolation from body fluids, cultural and differential biochemical characteristics of body pathogens, and identification. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 and [BIO 2400 or BIO 2440] all with a grade of "C" or better.
1 Credit Hour. 0 Lecture Contact Hours. 4 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4121. Directed Study in Medical Laboratory Science.
This course is an in-depth study of a narrow range of topics or a related problem in the medical laboratory sciences. Topics to be announced; may be repeated for credit when topics vary.
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing|Dif Tui- Health Professions
Grade Mode: Credit/No Credit

MLS 4160. Immunohematology Lab.
This laboratory course provides practical consideration of major blood groups with emphasis on grouping and typing, antibody detection and identification, and compatibility testing. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4177A. Community Health Education through Laboratory Science.
This course is a service-learning course designed to teach students about best practices in community health and community health education from a laboratory science perspective. Students will learn about cultural humility in healthcare, social determinants of health, and how clinical laboratory professionals can be integrated into a variety of public health initiatives.
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing|Dif Tui- Health Professions|Topics
Grade Mode: Credit/No Credit

MLS 4221. Directed Study in Medical Laboratory Science.
This course is an in-depth study of a narrow range of topics or a related problem in the medical laboratory sciences. Topics to be announced. Course may be repeated for credit when topics vary.
2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing|Dif Tui- Health Professions
Grade Mode: Credit/No Credit

MLS 4225. Laboratory Management & Supervision.
This course is an in-depth study of theoretical and practical aspects of laboratory management, with emphasis on active discussions of general principles of management and supervision of the clinical laboratory and its personnel.
2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions|Writing Intensive
Grade Mode: Standard Letter

MLS 4241. Molecular Diagnostics.
This course consists of an introduction to the principles, methodologies, and applications of molecular diagnostic procedures used in clinical laboratories. Emphasis is placed on the procedures used in the identification of infectious agents that cause human disease, the diagnosis of inherited diseases, and the diagnosis of cancer.
2 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4317. Foundations of Clinical Hematology and Hemostasis II.
This course will introduce non-MLS students to an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications. This course may not be used for MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 and MLS 3311 all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4318. Clinical Hematology and Hemostasis II.
This course is an in-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications.
3 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4319. Foundations of Diagnostic Microbiology I.
This course for non-MLS majors is a foundational study of pathogenic and nonpathogenic bacteria with special emphasis on methods of isolation from body fluids, cultural, and differential biochemical characteristics of body pathogens. This course may not be used for MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 and [BIO 2400 or BIO 2440] all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4320. Diagnostic Microbiology I.
This course is a study of pathogenic and nonpathogenic bacteria with special emphasis on methods of isolation from body fluids, cultural, and differential biochemical characteristics of body pathogens. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 and [BIO 2400 or BIO 2440] all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4321. Directed Study in Medical Laboratory Science.
This course provides an in-depth study of a narrow range of topics or a related problem in the clinical laboratory sciences. Topics to be announced. May be repeated for credit when topics vary.
3 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing|Dif Tui- Health Professions
Grade Mode: Credit/No Credit

MLS 4333. Bridge to Clinical Practice.
This course will discuss professional and technical laboratory competence requirements for clinical laboratory science students as well as the student's role as a unit of the healthcare team. This course focuses on the four Cs: critical thinking, communication, cultural humility, and core competencies. Students will reflect upon their own cultural beliefs and examine a variety of cultural perspectives, behaviors, disparities, and barriers to transcultural communication. (MULTI).
3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions|Writing Intensive
Grade Mode: Standard Letter

MLS 4340. Diagnostic Microbiology II.
This course is a study of medically important fungi, viruses, chlamydiae, rickettsiae, mycobacteria, and advanced topics in clinical microbiology. Automated identification of microorganisms, database management, and epidemiologic techniques will be discussed.
3 Credit Hours. 2 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4359. Foundations of Immunohematology.
This course for non-MLS majors is a foundational study of theoretical aspects of major blood groups with emphasis on grouping and typing, antibody detection and identification, compatibility testing and component therapy in blood transfusion service. This course may not be used for MLS major. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 and MLS 3320 all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4360. Immunohematology.
This course is a study of theoretical aspects of major blood groups with emphasis on grouping and typing, antibody detection and identification, compatibility testing and component therapy in blood transfusion service. Prerequisite: [MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471] and BIO 1330 and BIO 1130 and BIO 1331 and BIO 1131 and CHEM 1341 and CHEM 1141 and CHEM 1342 and CHEM 1142 all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

MLS 4361. Medical Laboratory Research Methods.
This course provides a working knowledge of research designs, analysis, and presentation for medical laboratory professionals. Students will complete a directed independent research project covering the principles of research and validation of medical laboratory methodologies. (WI).
3 Credit Hours. 3 Lecture Contact Hours. 3 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions|Writing Intensive
Grade Mode: Standard Letter

MLS 4370. Clinical Chemistry II.
This course is designed to acquaint the medical laboratory science student with advanced concepts, techniques, procedures, and instrumentation used in clinical chemistry.
3 Credit Hours. 3 Lecture Contact Hours. 4 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4440. Diagnostic Microbiology I.
This course is a study of pathogenic and nonpathogenic bacteria with special emphasis on methods of isolation from body fluids, cultural and differential biochemical characteristics of body pathogens. An overview of major classes of antibiotics, antimicrobial resistance, and antibiotic susceptibility testing platforms will be covered.
4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4460. Immunohematology.
This course is a study of theoretical and practical consideration of major blood groups with emphasis on grouping and typing, antibody detection and identification, compatibility testing and component therapy in blood transfusion service.
4 Credit Hours. 3 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4463. Clinical Practice I.
This course provides a structured clinical experience assigned on an individual basis for observation, study, interpretation, and practical application of techniques and methodology in the medical laboratory.
4 Credit Hours. 4 Lecture Contact Hours. 20 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

MLS 4465. Clinical Practice II.
Structured clinical experience assigned on an individual basis for observation, study, and practical application of techniques and methodology in the medical laboratory.
4 Credit Hours. 4 Lecture Contact Hours. 20 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter