

MEDICAL LABORATORY SCIENCES (MLS) BACHELORS OF SCIENCE DEGREE

The MLS degree is an allied health career opportunity for students interested in working in a clinical laboratory. Medical Laboratory Scientists are healthcare professionals who perform chemical, hematological, immunological, histopathological, cytopathological, microscopic, and bacteriological diagnostic analyses on patient samples. Medical Laboratory Scientists commonly work in hospital clinical laboratories, commercial laboratories, for pharmaceutical, chemical, or biotechnology companies, and in research and teaching institutions.

This four year degree includes experience working in the clinical laboratories of Lakeland Regional Health, a major health care provider in central Florida. Students will begin taking courses at the Medical Center hospital beginning in their third year, before transitioning into a full time internship at Lakeland Regional Health during their fourth year.

Students are required to maintain an overall Florida Southern GPA of 3.0, and have a final grade of C or better in all major and prerequisite courses. Students who are unable to maintain the required academic standards may be unenrolled from the MLS program.

Application Procedure

Enrollment in the MLS major is restricted to six students per year. There are two entry pathways into the MLS pre-certification program:

Direct Entry Applicants

High school students may declare the MLS major on their admissions application, as long as they have been admitted to the College and, at a minimum, have an SAT score of 1100 or ACT score of 24.

Students entering FSC with more than 30 hours of *total* coursework are strongly encouraged to meet with the MLS director, Dr. Morvillo, prior to selecting the MLS degree to ensure timely degree progression.

Internal Transfer Applicants & External Transfer Applicants

Students with < 19 credits earned at FSC may apply to the MLS major as long as they have, at a minimum, an SAT score of 1100 or ACT score of 24.

Student with ≥ 19 earned at FSC must meet all requirements for direct entry, including completion of at least four prerequisite courses including BIO 1500, BIO 1600, CHE 1111 and CHE 1112 all with a grade of C or higher, and having an overall GPA of 3.0 with a C or better in all major and prerequisite courses.

Applications for internal transfer applicants and external transfer applicants may be picked up in the FSC Registrar's Office and are due by March 1st.

Students who have completed more than 30 hours of *total* coursework are strongly encouraged to meet with the MLS director, Dr. Morvillo, prior to selecting the MLS degree to ensure timely degree progression. The dean of the School of Arts and Sciences and the MLS director will review all internal transfer applicants and all external transfer applicants and make a final decision based on merit and available space in the program.

Students will submit a mid-degree check in December of their second year to ensure they are on track for the program. Students not on track at this time may be encouraged to pursue a different degree program to ensure timely graduation.

Suggested Medical Laboratory Sciences B.S. Major Four Year Plan

Some flexibility is possible. Talk with your advisor.

<u>Fall year 1</u>	<u>Spring year 1</u>
BIO 1500 – Biology I: Biological Essentials (4- Natural World/Major) CHE 1111 – Principles of Chemistry I (4-Major) ENG 1005 or HON 1700 (4-Effective Communication A) SOC 1100 (4-Social World) <i>Total: 16 credits</i>	BIO 2215 – Human Anatomy and Physiology I (4-Major) CHE 1112 – Principles of Chemistry II (4-Major) MAT 2032 – Biostatistics (4- Quantitative/Major) COM 1500 or HON 1701 (4-Effective Communication B) <i>Total: 16 credits</i>
<u>Fall year 2</u>	<u>Spring year 2</u>
BIO 2216- Human Anatomy and Physiology II (4-Major) CHE 2221 – Organic Chemistry I (4-Major) Quantitative Course (4-BS requirement) PSY 1106 (4-Social World) <i>Total: 16 credits</i>	BIO 3850 Parasitology (4-Major) CHE 2222 – Organic Chemistry II (4-Major) PED 1005 – Wellness Management (2-Personal Wellness) PHI 1109 – What is Philosophy (4-Meaning & Value/Qualitative) Elective (4) <i>Total: 18 credits</i>
<u>Fall year 3</u>	<u>Spring year 3</u>
BIO 3400 – Microbiology (4- Major) CHE 3371 Biochemistry: Structure and Function (3-Major) THE 1050 – Introduction to the Theater (4-Fine Arts) MLS 3100 Introduction to Clinical Lab Sciences (3-Major) PSY 2209 or PSY 2214 or PSY 3309 (4-BS Social Science Requirement) <i>Total: 18 credits</i>	BIO 3362 – Biochemistry: Molecular Biology (4-Major) BIO 4300 Immunology (4-Major) MLS 3300 Phlebotomy (3-Major) PHI 2204 – Ethics (4-Meaning and Value) <i>Total: 15 credits</i>
<u>Fall year 4</u>	<u>Spring year 4</u>
MLS 3200 Clinical Chemistry and Immunology (3- Major) MLS 4100 Clinical Hematology (3- Major) MLS 4200 Clinical Immunohematology (3- Major) MLS 4300 Clinical Hemostasis, Urinalysis and Body Fluids (2- Major) MLS 4400 Clinical Microbiology (3- Major) <i>Total: 14 credits</i>	MLS 4500 Molecular Pathology Methods (1-Major) MLS 4800 MLS Practicum (8- Major) MLS 4900 MLS Capstone (4- Effective Communication C/Major) <i>Total: 13 credits</i>

Parentheses indicate number of credit hours for the course and the graduation requirement fulfilled by the course.