



Medical Laboratory Sciences Fact Sheet

Faculty: Dorilyn Hitchcock, Program Director/Assistant Professor; Dr. Kyle Riding, Assistant Professor; Greg Weigel, Associate Instructor; Kathleen Janda, Senior Teaching Lab Specialist

Profession

The Medical Technologist/Clinical Laboratory Scientist is involved in medical diagnosis, medical treatment, laboratory management, research, and education/training. The use of high thru-put automated analyzers and computers, microscopic analysis, DNA analysis in the examination of the body tissues and fluids is the primary responsibility of the medical technologist. The technologist must possess skills and demonstrate the ability to interpret quality control and patient data, problem solve, teach, and manage in a laboratory setting. The technologist is employed in hospital laboratories, private and governmental laboratories and clinics, public health and research laboratories, pharmaceutical firms, and other laboratory related industries.

Education

High school students interested in Medical Laboratory Sciences are encouraged to take chemistry, algebra, trigonometry, and biology courses. Before applying to the professional phase of the program, students should have all General Education courses complete or the equivalent of an AA degree. Courses in statistics, and courses with laboratories in biology, chemistry, microbiology, anatomy, and physiology are required prerequisites to be completed (see degree requirements on next page).

Upper Division

The last two years of sequential courses constitute the upper division portion of the program. The size of the class to be selected in the Medical Laboratory Science Program is determined by the availability of space and equipment. Admission to the University does NOT constitute admission to the upper division of the Medical Laboratory Science program. A separate application must be submitted to the Medical Laboratory Science program office and priority will be given to applications received before March 1st. Applications will be accepted until the class is filled or beginning of Fall semester.

Clinical Experience

The clinical practical experiences will be ongoing through the senior year. The practical experience will include student laboratory sessions and rotations at the following facilities in and around Orlando: Central Florida Regional, Sanford, FL; Flagler Hospital, St. Augustine,; AdventHealth Daytona; AdventHealth Waterman, Tavares, FL; Health Central, Ocoee, FL; Osceola Regional Medical Center, Kissimmee, FL; Orlando Health Systems, Orlando, FL; Southlake Hospital, Clermont, FL; AdventHealth Orlando; VA Hospital, Gainesville, FL; VA Hospital, Orlando, FL; FL; VAMC Clinics, Viera, and Daytona, FL; Parrish Medical Center, Titusville, FL; Watson Clinic, Lakeland, FL; AdventHealth Tampa, FL; Nemours Children's Hospital, Orlando, OneBlood, Orlando, FL, Leesburg Regional Medical Center, Leesburg, FL,

Admission Criteria

An applicant must meet the following criteria to be considered for the upper division of the Program:

1. A minimum overall Grade Point Average of 2.5 on 4.0 point scale
2. A minimum grade of "C" in all major and prerequisite courses
3. 60 semester hours of appropriate course work
4. An interview with Medical Laboratory Sciences Faculty/Affiliate Preceptors

A minimum grade of "C" is required in all major courses and a 2.5 overall GPA for continuation in the program and entrance into the clinical component. The degree in Medical Laboratory Sciences will be awarded upon satisfactory completion of the University's didactic component and the clinical component in an affiliated hospital laboratory.

The Medical Laboratory Sciences Program is accredited by NAACLS (National Accrediting Agency for Clinical Laboratory Science), 5600 N. River Road, Suite 720, Rosemont, Illinois 60018-5119, Tel. (773) 714-8880.



Bachelor of Science in Medical Laboratory Sciences

Catalog Year 2020

I. University Requirements

- ❑ UCF General Education Program (36 hrs)

**Completion of an AA degree at a state college will fulfill this requirement*

II. Departmental Requirements (100 hrs)

A. Prerequisites for Professional Phase (39 hrs)

- ❑ BSC 2010C Biology I 4 hrs
- ❑ CHM 2045C Chemistry Fundamentals I 4 hrs
- ❑ CHM 2046 Chemistry Fundamentals II 3 hrs
- ❑ CHM 2046L Chemistry Fundamentals II Lab 1 hr
- ❑ CHM 2210 Organic Chemistry I 3 hrs
- ❑ CHM 2211 Organic Chemistry II 3 hrs
- ❑ CHM 2211L Organic Laboratory Techniques I 2 hrs
- ❑ MAC 1105C College Algebra 3 hrs
- ❑ STA 2014C Principles of Statistics 3 hrs

**STA 2014C can be substituted with STA 2023*

- ❑ MCB 3020C General Microbiology 5 hrs

**MCB 3020C can be substituted with MCB 2010C from a state college*

- ❑ PCB 3703C Human Physiology 4 hrs
- ❑ ZOO 3733C Human Anatomy 4 hrs

**PCB 3703C and ZOO 3733C can be substituted with Anatomy & Physiology I and II*

***ZOO 3733C can be substituted with Genetics + Lab (PCB 3063 + PCB 3063L)*

B. Upper Division Professional Phase (61 hrs)

- ❑ MLS 3220C Techniques in Clinical Microscopy 3 hrs
- ❑ MLS 4430C Clinical Microbiology I + Lab 4 hrs
- ❑ MLS 4625 Clinical Chemistry I 3 hrs
- ❑ MLS 4625L Clinical Chemistry I Lab 1 hr
- ❑ PCB 3233 Immunology 3 hrs
- ❑ PCB 3233L Immunology Lab 1 hr
- ❑ MLS 3305 Hematology 3 hrs
- ❑ MLS 3305L Hematology Lab 2 hrs
- ❑ MLS 4460C Clinical Microbiology II + Lab 5 hrs
- ❑ MLS 4630 Clinical Chemistry II 3 hrs
- ❑ MLS 4XXXL Clinical Applications of Laboratory Automation 1 hr
- ❑ MLS 4334 Hemostasis 3 hrs
- ❑ MLS 4550 Clinical Immunohematology 4 hrs
- ❑ MLS 4830L Chemistry Laboratory Practicum 3 hrs
- ❑ MLS 4831L Immunohematology Laboratory Practicum 3 hrs
- ❑ MLS 4832L Hematology Laboratory Practicum 3 hrs
- ❑ MLS 4833L Microbiology Laboratory Practicum 3 hrs
- ❑ BSC 3403C Quantitative Biological Methods 4 hrs
- ❑ MLS 3705 Concepts in Education/Management 3 hrs
- ❑ MLS 4505C Immunodiagnostics 3 hrs
- ❑ MLS 4910 Introduction to Clinical Research 1 hr
- ❑ MLS 4933 MLS Senior Seminar 2 hrs



**Bachelor of Science in Medical Laboratory Sciences
Suggested Plan of Study**

| Freshman Year | | | | | |
|---------------|---------------|--------------|---------------|--|--|
| Fall | | Spring | | Summer | |
| CHM 2045C | 4 hrs | BSC 2010C | 4 hrs | Plan your 9 required summer hours into your course of study. | |
| ENC 1101 | 3 hrs | CHM 2046 | 3 hrs | | |
| MAC 1105C | 3 hrs | CHM 2046L | 1 hr | | |
| GEP #3 | 3 hrs | ENC 1102 | 3 hrs | | |
| GEP #9 | 3 hrs | GEP #4 | 3 hrs | | |
| | | GEP #5 | 3 hrs | | |
| Total | 16 hrs | Total | 17 hrs | | |

| Sophomore Year | | | | | |
|----------------|---------------|--------------|---------------|--------|--|
| Fall | | Spring** | | Summer | |
| CHM 2210 | 3 hrs | CHM 2211 | 3 hrs | | |
| MCB 3020C | 5 hrs | CHM 2211L | 2 hrs | | |
| ZOO 3733C* | 4 hrs | PCB 3703C | 4 hrs | | |
| GEP #6 | 3 hrs | STA 2014C | 3 hrs | | |
| | | GEP #10 | 3 hrs | | |
| Total | 15 hrs | Total | 15 hrs | | |

**Can be substituted with Genetics + Lab (PCB 3063 + PCB 3063L)*

***Application to professional phase of MLS program should be submitted by March 1st*

Start of Professional Phase of MLS Program

****Must submit application and be accepted****

| Junior Year | | | | | |
|--------------|---------------|--------------|---------------|--------------|--------------|
| Fall | | Spring | | Summer | |
| MLS 3220C | 3 hrs | MLS 3305 | 3 hrs | MLS 4334 | 3 hrs |
| MLS 4430C | 4 hrs | MLS 3305L | 2 hrs | MLS 4550 | 4 hrs |
| MLS 4625 | 3 hrs | MLS 4460C | 5 hrs | | |
| MLS 4625L | 1 hr | MLS 4630 | 3 hrs | | |
| PCB 3233 | 3 hrs | MLS 4XXXL | 1 hr | | |
| PCB 3233L | 1 hr | | | | |
| Total | 15 hrs | Total | 14 hrs | Total | 7 hrs |

| Senior Year | | | | | |
|--------------|---------------|--------------|---------------|--------|--|
| Fall | | Spring | | Summer | |
| MLS 4830L | 3 hrs | BSC 3403C | 4 hrs | | |
| MLS 4831L | 3 hrs | MLS 3705 | 3 hrs | | |
| MLS 4832L | 3 hrs | MLS 4505C | 3 hrs | | |
| MLS 4833L | 3 hrs | MLS 4910 | 1 hr | | |
| | | MLS 4933 | 2 hrs | | |
| Total | 12 hrs | Total | 13 hrs | | |

COM Undergraduate Student Advising

HS II 335 | (407) 823-5932 | med.ucf.edu/biomed | BSBSAdvising@ucf.edu