

## MEDICAL LABORATORY SCIENCES *SAMPLE SEQUENCE OF COURSES*

### Medical Laboratory Sciences Program

**Medical Laboratory Sciences (MLS)** is a diagnostic branch of healthcare and the instruction within our program provides students with all of the didactic coursework and clinical laboratory training required by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). By successfully completing the program outlined below, students are eligible to sit for the national examination offered by the Board of Certification of the American Society for Clinical Pathology (ASCP) and become a certified Medical Laboratory Scientist.

The Medical Laboratory Sciences major is a professional program offered to students in their junior and senior years. For entry into the competitive program, students should complete the following prerequisite coursework by the beginning of spring semester of your junior year:

- General Chemistry (CHEM 1127Q & CHEM 1128Q - or - CHEM 1124Q & CHEM 1125Q)
- Organic Chemistry (CHEM 2241 - or - CHEM 2443 & CHEM 2444)
- Biochemistry (MCB 2000)
- Principles of Biology (BIO 1107)
- Statistics (STAT 1000Q or STAT 1100Q)
- Math (MATH 1060 or higher)
- Genetics (MCB 2400 or MCB 2410)
- Medical Terminology (AH 2001)
- Microbiology (MCB 2610 or PATH 2710)
- Immunology (PATH 3401 or MCB 4211)
- Research for Health Professionals (AH 4241 or AH 4239)

Some flexibility with pre-requisite courses is available. Please contact Bruce Blanchard, MLS Program Director at [bruce.blanchard@uconn.edu](mailto:bruce.blanchard@uconn.edu) with questions.

Additionally, students should meet the following criteria:

- Minimum cumulative GPA of 3.0 or higher is considered competitive
- Clarity of written communication
- Quality of References
- Completed all general education requirements
- Completed one W course and one E course

In addition to these prerequisites, specific graduation requirements for all University students may be found in the University's catalog. Applications are accepted in the fall and spring semesters of the sophomore year for program entry the following fall. Following is the suggested course sequencing in the program:

## MEDICAL LABORATORY SCIENCES

Catalog Year 2026-2027

### SAMPLE SEQUENCE OF COURSES§

#### FIRST YEAR

##### **FALL**

CHEM 1124Q or 1127Q Gen Chemistry I (TOI-6L)	4
MATH 1060Q Pre-calculus* (or above)	3-4
ENGL 1007, 1010 or 1011	4
Common Curriculum (TOI 1, 2, 3, 4, or 5)*	3
UNIV 1800 FYE (recommended)	1

Total credits: 15-16

##### **SPRING**

CHEM 1125Q or 1128Q Gen Chemistry II (TOI-6L)	3-4
BIOL 1107 General Biology I (TOI-6L)	4
Common Curriculum (TOI 1, 2, 3, 4, or 5)*	3
Common Curriculum (TOI 1, 2, 3, 4, or 5)*	3

Total credits: 13-14

#### SECOND YEAR

##### **FALL**

CHEM 2241 Organic Chemistry	3
STAT 1000Q or 1100Q Statistics	4
Common Curriculum (TOI 1-5, <b>W</b> course)	3
ELECTIVE*	3

Total credits: 13

##### **SPRING**

MCB 2000 Biochemistry	4
ELECTIVE*	3
Common Curriculum (TOI 1, 2, 3, 4, or 5)*	3
Common Curriculum (TOI 1, 2, 3, 4, or 5)*	3

Total credits: 13

**Admission into the junior/senior year requires separate application**

#### THIRD YEAR

##### **FALL**

MCB 2400 Human Genetics	3
AH 2001 Medical Terminology	2
PATH 3401 or MCB 4211 Immunology	3
MCB 2610 Microbiology	4
AH 4241 Research for Health Prof.	2

Total credits: 14

##### **SPRING**

MLSC 3301 Fund. Med. Lab. Sci.	3
MLSC 3333 Mycology, Parasitology & Virology	3
MLSC 4500/4500W Lab Ops. & Prof. Practice	2-3
DGS 4234 Diag. Molecular Tech.	3
DGS 4235 Lab in Molecular Diagnostics	2
AH 3025 Hum. Physio. in Health/Disease	3

Total credits: 16-17

#### SUMMER SESSION

MLSC 4321 Clinical Immunology	2
MLSC 4341 Clinical Microbiology	4

Total Credits: 6

#### FOURTH YEAR

##### **FALL**

MLSC 3365 Theory of Phlebotomy	1
MLSC 4301 Clinical Chem. & Instrument.	3
MLSC 4311 Hematology	4
MLSC 4351 Transfusion Services	3
MLSC 4371 Urinalysis & Hemostasis	2
MLSC 4094W Seminar in MLS	2

Total credits: 15

##### **SPRING**

MLSC 4302 Clinical Chemistry Lab	3
MLSC 4312 Hematology Lab	3
MLSC 4322 Clinical Immunology Lab	1
MLSC 4342 Clinical Microbiology Lab	4
MLSC 4352 Transfusion Services Lab	3
MLSC 4372 Urinalysis Lab	1

Total credits: 15

§ Course sequence is a sample. Actual course sequence subject to change based on advising and student goals.

\* These courses need not be taken in the semester indicated; however, it is strongly recommended that they be completed prior to the third year.

UConn Graduation Requirements—Are found at [catalog.uconn.edu](http://catalog.uconn.edu) these include major and common curriculum requirements (Topics of Inquiry – TOIs 1 to 6; and, the following competencies: **Writing**, **Quantitative**, and **Second Language Proficiency**)

Students normally average 15 credits per semester over a 4-year period (fall/spring only) to meet the 120 academic credits required.

- **Electives** - The total number of elective courses needed to meet the 120 credits for graduation will vary depending on the number of credits assigned to each course. *Students may need to take additional electives.* Students should track credits for graduation carefully and take elective credits accordingly.
- This plan of study assumes the **foreign language** is completed prior to admission to the university. If a language is required, students may elect to take these courses as electives.
- **W course requirement:** Students are required to take 2 “W” skill coded courses. MLSC 4094W satisfies the “W” in the major. Students **must** take the second “W” as a general education or elective.
- **TOI-4 (Environmental Literacy):** Students may complete the Environmental Literacy (TOI-4) requirement as either a general education requirement, elective or MLS major requirement.

Students can elect to enroll in Summer/Winter sessions. Course options can be found at [summerwinter.uconn.edu](http://summerwinter.uconn.edu).

Students interested in [Education Abroad](#) should discuss options (semester, winter or summer) with major advisor.

*Your academic advisor will work with you every semester to help determine the best sequence of courses specific to your career goals.*