

# Health Sciences (Clinical & Medical Sciences) & Mercy College's Medical Laboratory Sciences Certificate 3+1

## Admissions Requirements & Curriculum Guide

Mercy College of Health Sciences offers a certificate program in Medical Laboratory Sciences (MLS) that can be added to a Bachelor of Science degree earned from their institution or others. This certificate program offers an opportunity for health sciences students to develop an area of health care expertise during their Drake academic career, rather than after graduation. In addition, these certificates are helpful for students applying to graduate programs that require a large amount of patient care hours.

### **Purpose:**

The MLS Program is dedicated to providing students with the educational foundation required to become Medical laboratory scientists through an intensive classroom and clinical curriculum. Guided by the mission of Mercy College, the philosophy of the School of Allied Health, and in compliance with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) Standards of Accredited Educational Programs for the Medical Laboratory Scientist, the primary purpose is to facilitate the personal and professional development of students. The MLS Program provides students with the academic and clinical experiences needed to become caring, ethical, and competent members of the health care team.

### **Program Goals:**

1. Prepare individuals to become laboratory professionals who perform a great variety of laboratory analysis accurately, timely, and efficiently.
2. Develop professionals who think logically, creatively, critically, responsively, and exercise good judgment.
3. Prepare individuals to become leaders in clinical laboratory science/medical laboratory science and the health care community.

### **Clinical rotation/Experience information (information provided by program directors):**

MLS students complete a total of 750 clock hours of clinical rotations in a large medical center laboratory in the following areas: Blood Bank, Chemistry, Hematology, Immunology, Microbiology, Molecular Diagnostics, Phlebotomy, and Urinalysis. Students perform actual patient testing under the supervision of a preceptor. Students also gain ~15 hours of experience at various other optional sites such as a small hospital, fertility clinic, public health lab, and/or shadowing various levels of management.

MLS students complete a large patient case study project in the last semester of the program. The project pulls together material they have learned in all of the courses throughout the MLS Program. Cases are presented to the class, instructors and preceptors. Students in the MLS Program collaborate throughout on case studies and problem-based learning scenarios in the didactic and clinical courses. They write reflection papers in several MLS program courses regarding their experiences.

Should students not complete their coursework at Mercy College and decide to return to Drake University, they will no longer be eligible for their Drake tuition guarantee. They will be responsible for the current University tuition rate.

More information about Mercy's MLS program can be found [here](#).

## Curriculum Guide

First Year					
<b>Fall Semester</b>			<b>Spring Semester</b>		
FYS ---	First Year Seminar	3 CR	<b>HSCI 021</b>	<b>Professionalism in Health Care</b>	<b>2 CR</b>
<b>HSCI 020</b>	<b>Introduction to Health Sciences</b>	<b>2 CR</b>	CHEM 002/4	General Chemistry II & Lab	4 CR
CHEM 001/3	General Chemistry I & Lab	4 CR	BIO 013/L	Pre-Professional Biology II & Lab	4 CR
BIO 012/L	Pre-Professional Biology I & Lab ( <i>SCI AOI</i> )	4 CR	MATH 050	Calculus I ( <i>QUAN AOI</i> )	3 CR
ELEC ---	Drake Curriculum/Electives	3 CR	ELEC ---	Drake Curriculum/Electives	3 CR
<b>Total Semester Credit Hours</b>		<b>16</b>	<b>Total Semester Credit Hours</b>		<b>16</b>
Second Year					
<b>Fall Semester</b>			<b>Spring Semester</b>		
HSCI 025*	Introduction to the US Health Care System	3 CR	HSCI 125/L	Physiology/Lab <sup>1</sup>	4 CR
CHEM 097/98	Org Chem I/Lab	4 CR	HSCI 106*	Culture Care & Health Literacy ( <i>GLOB/CITZ AOI</i> )	3 CR
HSCI 141/L	Human Anatomy/Lab	4 CR	PSY 001	Introduction to Psychology	4 CR
HSCI 060*	Statistics in Health Sciences <sup>3</sup>	3 CR	ELEC ---	Electives (CHEM 108/110: Org Chem II/Lab)	4 CR
ELEC ---	Elective (BIO 165: Cell Biology)	4 CR			
<b>Total Semester Credit Hours</b>		<b>18</b>	<b>Total Semester Credit Hours</b>		<b>15</b>
Third Year (Apply to Mercy MLS Program)					
<b>Fall Semester</b>			<b>Spring Semester</b>		
<b>HSCI 172</b>	<b>Evaluating Research Literature (<i>INFO AOI</i>)</b>	<b>3 CR</b>	<b>HSCI 105</b>	<b>Values &amp; Ethics in Health Sciences (<i>VE AOI</i>)</b>	<b>3 CR</b>
HSCI 095*	Medical Terminology	1 CR	ECON 002	Microeconomics <sup>2</sup>	3 CR
HSCI 055*	Innovation & Leadership in Health Sciences	3 CR	ELEC ---	Electives (BIO 103/L: Microbiology/Lab)	5 CR
ELEC ---	Electives (PHAR 130: Biochemistry & BIO 182: Immunology)	7 CR	ELEC ---	Drake Curriculum/Electives	6 CR
<b>Total Semester Credit Hours</b>		<b>14</b>	<b>Total Semester Credit Hours</b>		<b>17</b>
Fourth Year					
<b>Fall Semester</b>			<b>Spring Semester</b>		
MLS ---	Certificate Coursework	14 CR	MLS ---	Certificate Coursework	14 CR
<b>Total Semester Credit Hours</b>		<b>14</b>	<b>Total Semester Credit Hours</b>		<b>14</b>
<b>Summer Semester</b>					
MLS ---	Certificate Coursework	12 CR			
<b>Total Semester Credit Hours</b>		<b>12</b>			
<b>Total Program Hours: 136</b>					

**Bolded courses** must be taken in the designated semester unless prior approval by the College is provided.

\***Asterisked HSCI courses** have multiple offerings each year; they should be taken within the designated year but can be taken during an alternative semester.

1 = BIO 129/L – Mammalian Physiology or PHAR 125 can be substituted for requirement (courses offered only in fall semester)

2 = HSCI 102 – Health Economics can be substituted for requirement (course offered only in fall semester)

3 = STAT 071: Statistics I – an exception to program policy request may be submitted to fulfill this requirement

**Electives (minimum 45 credits):** Elective credits include [Drake Curriculum](#) requirements not fulfilled by required coursework (outlined below) as well as non-required coursework that permits exploration of and/or advanced study in areas of professional interest within the student's primary degree. Students should review the [student handbook](#) for the complete elective policy. A maximum of 30 graduate level credits can be equated to this undergraduate Health Sciences degree.

**Drake Curriculum Areas of Inquiry not fulfilled by required coursework (12 credits):** Artistic Literacy, Engaged Citizen, Historical Foundations, and Written Communication.

**Mercy MLS Course Equates (24 credits):** For students who complete the 3+1 program, Mercy College MLS coursework will fulfill the following undergraduate requirements, resulting in earning a Bachelor of Science in Health Sciences degree.

Electives – 14 credits

HSCI 155 & 156 – Guided Research I & II – 4 cr.

HSCI 196 & 197 – Health Sciences Internship I & II – 6 cr.

\*\*If not admitted to the MLS program at Mercy College, all credit minimums for **Electives** must be fulfilled. The senior capstone (**HSCI 155, 156, 196, & 197**) must also be completed at Drake to earn a Bachelor of Science in Health Sciences degree.

Students will be required to send an official transcript to the Drake University Office of the Registrar to apply their transfer coursework to the health sciences major requirements. **A minimum of 120 total hours will be required to earn a Bachelor of Science in Health Sciences from Drake University.** Degrees from Drake University and Mercy College will be conferred at the same time. This may result in total program hours higher than 120.