## HEALTH SCIENCES CLINICAL AND MEDICAL SCIENCES/ MERCY COLLEGE OF HEALTH SCIENCES SCIENCES CERTIFICATE IN MEDICAL LABORATORY SCIENCES (MLS)

Mercy College of Health Sciences offers a certificate program in Medical Laboratory Sciences (M.L.S.) that can be added to a Bachelor of Science degree earned from Drake University. 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.

## **Program Purpose**

The M.L.S. 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 M.L.S. program provides students with the academic and clinical experiences needed to become caring, ethical, and competent members of the health care team.

## **Clinical Rotation/Experience Information**

M.L.S 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 approximately 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.

M.L.S. 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 M.L.S. program. Cases are presented to the class, instructors and preceptors. Students in the M.L.S. program collaborate throughout on case studies and problembased learning scenarios in the didactic and clinical courses. They write reflection papers in several M.L.S. program courses regarding their experiences.

## Requirements

Code	Title	Hours
BIO 012 & 012L	GENERAL/PRE-PROFESSIONAL BIOLOGY I and GENERAL/PRE-PROFESSIONAL BIOLOGY I LAB	4
BIO 013 & 013L	GENERAL/PRE-PROFESSIONAL BIOLOGY II and GENERAL/PRE-PROFESSIONAL BIOLOGY II LAB	4
CHEM 001 & CHEM 003	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LAB	4
CHEM 002 & CHEM 004	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LAB	4
CHEM 097 & CHEM 098	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LAB	4
Select one of the following:		3
ECON 002	PRINCIPLES OF MICROECONOMICS	
HSCI 102	PRINCIPLES OF HEALTH ECONOMICS	
FYS 0	First Year Seminar	3
HSCI 020	INTRODUCTION TO HEALTH SCIENCES	2
HSCI 021	PROFESSIONALISM IN HEALTH CARE	2
HSCI 025	INTRODUCTION TO US HEALTHCARE SYSTEMS	3
HSCI 055	INNOVATION AND LEADERSHIP IN HEALTH SCIENCES	3
Select one of the following:		3
HSCI 060	STATISTICS IN HEALTH SCIENCES	
STAT 060	STATISTICS FOR THE LIFE SCIENCES	
HSCI 095	MEDICAL TERMINOLOGY	1
HSCI 105	VALUES AND ETHICS IN HEALTH SCIENCES	3
HSCI 106	CULTURE CARE AND HEALTH LITERACY	3
Select one of the following:		4
HSCI 125 & 125L	MEDICAL PHYSIOLOGY and PHYSIOLOGY LAB	
BIO 129 & 129L	MAMMALIAN PHYSIOLOGY and MAMMALIAN PHYSIOLOGY LAB	
PHAR 125	PHYSIOLOGY	
HSCI 141	HUMAN ANATOMY	4
&141L	and HUMAN ANATOMY LAB	
HSCI 172	EVALUATING RESEARCH	3
MATH 050	CALCULUS I	3
PSY 001	INTRODUCTION TO PSYCHOLOGY	4
Electives		34
Mercy College M	LS Coursework	40
Total Hours		138

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For all dual programs where students <u>do not</u> take HSCI 155, HSCI 156, HSCI 196, and HSCI 197, a maximum of 30 graduate credits will be applied to the bachelor's degree. For all dual programs where students <u>do</u> take HSCI 155, HSCI 156, HSCI 196, and HSCI 197, a maximum of 18 credits will be applied.