

SECONDARY BACHELOR OF SCIENCE IN HEALTH SCIENCES WITH A MAJOR IN MEDICAL GENETICS AND MOLECULAR BIOLOGY

This is a secondary degree completion program.

The following requirements must be fulfilled: 120 credits, 60 credits of which must be taken at GW.

Code	Title	Credits
Must be completed prior to coming to GW		
General Education and prerequisite courses		
3 credits in English composition		
8 credits in General Biology with lab		
8 credits in General Chemistry with lab		
3 credits in Humanities		
3 credits in Quantitative Reasoning (college algebra, statistics, or higher)		
6 credits in Social Sciences		
Can be transferred in as part of 60 credits or taken at GW		
3 credits in Biotechnology (HSCI 1106 if taken at GW)		
3 credits in Organic Chemistry or Biochemistry (MLS 3003 if taken at GW)		
4 credits in Microbiology w/lab (HSCI 3106 and HSCI 3108 if taken at GW)		
16 credits in Electives		
Major courses that must be taken at GW		
MLS 3000	Clinical Laboratory Mathematics	3
MLS 3001W	Professional Ethics for Medical Laboratory Scientists	3
CERT 3005	Current Topics in Biomedical Sciences	3
MLS 4141	Immunology and Serology	3
MLS 4151	Molecular Diagnostics	3
MLS 4158	Laboratory Management and Operations	3
MLS 4170	Introduction to Molecular Biology	3
MLS 4171	Human Genetics	3
MLS 4172	Molecular Diagnostics Capstone	3

MLS 4217	Molecular Techniques	3
MLS 4242	Applications of Molecular Testing	3
MLS 4266	Molecular Diagnostics Practicum	6

Choose one from the following:

MLS 2007W	Microbes and Society	
HSCI 4112W	Research and Writing in Health Sciences	
HSCI 2112W	Writing in the Health Sciences	

Additional required courses for the hybrid program option only.

MLS 4251	Molecular Diagnostics Laboratory	1
MLS 4252	Applications of Molecular Testing Laboratory	2

Electives—hybrid and online program options

Students pursuing the hybrid option must take 15 credits in HSCI, MLS or CERT elective courses.

Students pursuing the fully online option must take 18 credits in HSCI, MLS or CERT elective courses.

Optional concentrations

All students may choose to complete one of the following concentrations. Credits taken in the concentration count toward the elective requirement.

Microbiology concentration:

MLS 2005	Plagues, Pandemics, and Epidemics	3
MLS 4116	Clinical Bacteriology I	3
MLS 4117	Clinical Bacteriology II	2
MLS 4119	Parasitology, Mycology, and Virology	2
MLS 4164	Clinical Microbiology Practicum	4
MLS 4216	Clinical Bacteriology Laboratory	1
MLS 4219	Parasitology, Mycology, and Virology Laboratory	1
MLS 4995	Independent Research in Biomedical Laboratory Science	1-3

Assisted reproductive technology concentration:

CERT 3004	Endocrinology for Health Sciences	3
CERT 4010	Clinical Human Embryology	3
CERT 4012	Clinical Human Andrology	3

CERT 4014	Human Reproductive Cryobiology	3
MLS 4995	Independent Research in Biomedical Laboratory Science	1-3