

Guided Pathway to The George Washington University School of Medicine and Health Sciences BSHS in Molecular Diagnostic Sciences Advising Worksheet

The Molecular Diagnostic Sciences Program focuses on the molecular and genetic theory and techniques used to diagnose and monitor disease, detect risk, and make patient treatment decisions. Molecular testing is used in a variety of medical specialties, including infectious disease, oncology, human leukocyte antigen typing, forensics, identity testing, and pharmacogenomics. By analyzing the specific biological markers of a patient, molecular diagnostics offers the prospect of personalized medicine.

For more information, contact:

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Program Delivery: *Online & GW Virginia Science & Technology Campus (VSTC)*

Program Website: <https://smhs.gwu.edu/academics/health-sciences-programs/departments/biomedical-laboratory-sciences>

**Admission Requirements - Completed Associates Degree
(38 General Education + 22 Electives)**

- English Composition (3 credits)
- Pre-Calculus I, Statistics, or higher math (3 credits)
- General Biology (8 credits)
- Microbiology (4 credits)
- General Chemistry (8 credits)
- Organic Chemistry or Biochemistry (3 credits)
- Humanities (3 credits)
- Social Sciences (6 credits)
- Elective Courses (22 credits)

Junior Year – GW Molecular Diagnostic Sciences						
<input checked="" type="checkbox"/>	Course #	Course Title	College	Credits	Semester	Delivery Mode
	HSCI 2112W	Writing in the Health Sciences	SMHS	3	F, Sp, S	O
	MLS 3000	Laboratory Mathematics	SMHS	3	F, Sp, S	O
	MLS 3001	Ethics for Laboratory Science	SMHS	3	F, Sp, S	O
	HSCI 1106	Introduction to Biotechnology for Health Sciences	SMHS	3	F	O
	HSCI 3117	Biostatistics	SMHS	3	F	O
	HSCI 4106	Epidemiology	SMHS	3	F	O
	MLS 4141	Immunology and Serology	SMHS	3	F, Sp, S	O
	MLS 4158	Laboratory Management and Operations	SMHS	3	F, Sp, S	O
		Choose 2 Electives	SMHS	6	F, Sp, S	O
		Total Credits		30		

Senior Year – GW Molecular Diagnostic Sciences						
<input checked="" type="checkbox"/>	Course #	Course Title	College	Credits	Semester	Delivery Mode
	HSCI 4112W	Research and Writing in Health Sciences	SMHS	3	F, Sp, S	O
	MLS 4242	Application of Molecular Testing	SMHS	3	F	O
	MLS 4151	Molecular Diagnostics	SMHS	3	F	O
	MLS 4266	Molecular Practicum	SMHS	6	F, Sp, S	F
	MLS 4172	Molecular Capstone	SMHS	3	F, Sp, S	O
	MLS 4252	Applications of Molecular Testing Laboratory	SMHS	2	F	F
	MLS 4170	Molecular Biology	SMHS	3	Sp	O
	MLS 4171	Human Genetics	SMHS	3	Sp	O
	MLS 4217	Molecular Techniques	SMHS	3	Sp	O
	MLS 4251	Molecular Diagnostics Laboratory	SMHS	1	F	F
		Total Credits		30		

	Requirements	Credits
General Education + Electives		38 + 22
TOTAL Transferred Credits from Associate's Degree		60
Required Credits for GW Bachelor's Completion		60
Total Credits - Bachelor's of Science in Health Sciences Biomedical Informatics		120

Semester Offered = F-Fall, Sp-Spring, S-Summer

Delivery Mode = O-Online, H-Hybrid, F-Face-to-Face