MONTGOMERY COLLEGE A.S. in Science – Biological Science Area of Concentration		GW School of Medicine & Health Sciences B.S.H.S. in Medical Genetics and Molecular Biology and M.S.H.S in Clinical Microbiology (Dual Degree) 2025-26 Catalog Year	
CREDITS	**MONTGOMERY COLLEGE** Requirements for Associate's Degree		**GEORGE WASHINGTON UNIVERSITY** Requirements for Bachelor's Degree
3	ENGL 101 - Introduction to College Writing*		Qualifies towards 3 of 6 credits in English Composition
4	MATH 165 or MATH 170 or MATH 181 (MATF)		Qualifies towards 3 credits in College Mathematics
4	CHEM 131 - Principles of Chemistry I (NSLD)		Qualifies towards 4 of 8 credits of Chemistry with lab*
3	Behavioral and Social Sciences Distribution (BSSD)**		Qualifies towards 3 of 6 credits of Social Sciences
3	English Foundation (ENGF)*** ENGL102 or ENGL103		Qualifies towards 3 of 6 credits in English Composition
4	BIOL 150 - Principles of Biology I (NSLD)		Qualifies towards 4 of 8 credits of Biology with lab*
4	CHEM 132 - Principles of Chemistry II		Qualifies towards 4 of 8 credits of Chemistry with lab*
4	MATH 170 or MATH 181 or Program Elective †		Qualifies towards 3 credits in College Mathematics if not previously satisfied
3	Humanities Distribution (HUMD)		Qualifies towards 3 credits in Humanities
4	BIOL 151 - Principles of Biology II (NSLD)		Qualifies towards 4 of 8 credits of Biology with lab*
3	COMM 108 or COMM 112 (GEEL)		Advanced Standing
3	Arts Distribution (ARTD)		Advanced Standing
4	Program Elective †		Advanced Standing
4	BIOL 222 - Principles of Genetics		Advanced Standing
3	Behavioral and Social Sciences Distribution (BSSD)**		Qualifies towards 3 of 6 credits of Social Sciences
4	Program Elective †		Advanced Standing
3	Program Elective †		Advanced Standing
60	**TOTAL CREDITS TRANSFERRED**		

REMAINING GEORGE WASHINGTON UNIV DEGREE REQUIREMENTS RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE	
MLS 2007W: Microbes & Society	3
MLS 3001W: Professional Ethics in MLS	3
MLS 6141: Advanced Immunology and Serology	3
MLS 6158: Advanced Lab Management and Operations	3
MLS 3000: Lab Math	3
CERT 3005: Current Topics	3
MLS 4170: Molecular Biology	3
MLS 4171: Human Genetics	3
MLS 4217: Molecular Techniques	3
MLS 4242: Applications of Molecular Testing	3
MLS 4252: Applications of Molecular Testing Lab (in person)	2
MLS 6151: Advanced Molecular Diagnostics	3
MLS 4251: Molecular Diagnostics Laboratory (in person)	1
MLS 4266: Molecular Diagnostics Practicum	6
MLS 4172: Capstone Seminar (Completed during final semester)	3
Elective	15
TOTAL CREDITS REMAINING AT GEORGE WASHINGTON UNIVERSITY	**60**

MONTGOMERY COLLEGE NOTES

* ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103, or program elective.

** Behavioral and Social Science Distribution (BSSD) courses must come from different disciplines.

*** If ENGF has already been taken, then choose an arts distribution course (ARTD).

† Program electives: Program electives range from 2-5 credits. Students are encouraged to speak with their transfer institution when selecting program electives. It is recommended that in a 2 semester chemistry sequence, both courses be taken at the same institution (e.g. CHEM 203 and CHEM 204), BIOL 202, BIOL 210, BIOL 212, BIOL 213, BIOL 217, BIOL 226, BIOL 228, BIOL 230, BIOL 252, BIOT 120, CHEM 203, CHEM 204, CMSC 140, CMSC 203, CMSC 204, MATH 171, MATH 182, MATH 280, MATH 282, PHYS 161, PHYS 203, PHYS 204, PHYS 233, PHYS 234, PHYS 262, PHYS 263, SCIR 297.

GEORGE WASHINGTON UNIVERSITY NOTES

Admission requirements:

- 6 credits English Composition
- 3 credits College Mathematics
- 3 credits Critical Thinking in the Humanities
- 6 credits Critical Thinking in the Social Sciences
- 8 credits of Biology with lab*
- 8 credits of Chemistry with lab*

*Must include in-person lab

Additional program requirements include 3 credits of Biotechnology, 4 credits of Microbiology with lab, and 3 credits of Organic Chemistry/Biochemistry. These are required to graduate from GW but are not admission requirements. Students are recommended to take these courses, when possible, before attending GW.

Dual degree students must graduate from the BSHS program with a 3.0 or higher to remain eligible to enter the graduate version of the program. During the BSHS portion of the program, students take 3 graduate MLS courses in lieu of 3 undergraduate MLS courses. Upon successful completion of the BSHS, students transition into the MSHS degree. The 3 graduate courses taken during the BSHS portion of the program are applied toward the MSHS degree. The MSHS is 36 credit hours. Students complete 9 credits as an undergraduate student and the remaining 27 as a graduate student.

Admission/Eligibility requirements:

- To be eligible for transfer, courses must be completed with a grade of C or higher; C- will not transfer.
- Coursework/credits meeting the minimum grade requirement that are not applied toward General Education requirements will count toward the 16 credits of additional coursework required to transfer, also called Advanced Standing.
- Graduated with a cumulative GPA in the applicable associate degree of 3.0 or greater and science GPA of 2.5 in prerequisite science courses.
- If additional transcripts exist, a cumulative GPA that includes all institutions must be a minimum of 3.0.
- If a science prerequisite is repeated, all grades will be factored into the GPA.
- AP/IB scores may be accepted for credit toward General Education or Advanced Standing credits. Refer to https://undergraduate.admissions.gwu.edu/bringing-credits-gw for details. GW does not accept AP credit for English Composition.
- Learn more about the program: https://smhs.gwu.edu/academics/health-sciences/academics/guaranteed-admission-agreements