

College of Science - Medical Laboratory Science, BS				
Catalog Year: 2019 - 2020			Grades	
Mason Core Requirements: 27 credits	Course Information	Credits	Earned	Needed
Written Communication:	ENGH 101 (100)	3		
Oral Communication:		3		
*Quantitative Reasoning	*Satisfied by Major Requirements			
*Information Technology	*Satisfied by Major Requirements			
Arts		3		
Global Understanding		3		
Literature		3		
*Natural Science	*Satisfied by Major Requirements			
Social & Behavioral Sciences		3		
Western Civilization/World History		3		
Written Communication:	ENGH 302	3		
Synthesis/Capstone		3		
Major Requirements (84 - 88 credits in major with Professional Study)				
BIOL 213	Cell Structure and Function	4		
BIOL 214	Biostatistics for Biology Majors	4		
BIOL 311	General Genetics	4		
MLAB 200	Introduction to Medical Laboratory Science	1		
MLAB 300	Science Writing	2		
BIOL 305	Biology of Microorganisms	3		
BIOL 306	Biology of Microorganisms Laboratory	1		
BIOL 430	Advanced Human Anatomy and Physiology I	4		
BIOL 431	Advanced Human Anatomy and Physiology II	4		
BIOL 452	Immunology	3		
BIOL 453	Immunology Laboratory	1		
CHEM 211/213	General Chemistry I with Lab	3/1		
CHEM 212/214	General Chemistry II with Lab	3/1		
CHEM 313 & CHEM 315	Organic Chemistry I and Organic Chemistry Lab I	5		
BIOL 483 or CHEM 314 & 318	General Biochemistry or Organic Chemistry II with Lab	4-5		
One from the following: MATH 111, 113, 123/124		3-6		
CDS 130 or Any approved Mason Core IT req course		3-4		
Professional Study Requirement (30 credits): *Transfer students must have 16 credits of 300/400-level biology or chemistry taken at Mason and may require time to graduate; No grades less than 'C' in senior year of professional study.				
*Generalist Option (30 credits): . MLAB 401 - 407				
*Molecular Biology Concentration (30 credits): MLAB 401 and MLAB 407				
*Microbiology Concentration (30 credits): MLAB 401 and MLAB 405				
Histotechnology Concentration (30 credits): MLAB 401, 408, and 409				
Professional Study Course #1:		3		
Professional Study Course #2:		3		
Professional Study Course #3:		3		
Professional Study Course #4:		3		
Professional Study Course #5:		3		
Professional Study Course #6:		3		
Professional Study Course #7:		3		
Professional Study Course #8:		3		
Professional Study Course #9:		3		
Professional Study Course #10:		3		
Recommended additional basic science courses: BIOL 465, 483-485; CHEM 321; PHYS 243-246				
Degree Notes				
Any remaining credits may be completed with elective courses to bring the degree total to 120 with 45 of these credits at the 300/400 level. This program requires the equivalent of three years of full-time pre-professional study at the college level preceding a senior year of professional education in an affiliated program of medical laboratory science. Affiliated schools (see below) are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Quest Diagnostics in Chantilly, Virginia also provides professional education for this program.				
Advisor Notes:				

B.S. Medical Laboratory Sciences

2019 - 2020

FALL YEAR 1	CREDITS	SPRING YEAR 1	CREDITS	NOTES
BIOL 213	4	BIOL 214	4	*If student started with
CHEM 211	3	CHEM 212	3	BIOL 103, take BIOL 213
CHEM 213	1	CHEM 214	1	in spring and BIOL 214
Mason Core*	3	Mason Core*	3	in summer to catch up
MATH** or Core	3	CDS 130	3	
UNIV 100	1			
Total:	15 credits	Total:	14 credits	

FALL YEAR 2	CREDITS	SPRING YEAR 2	CREDITS	NOTES
BIOL 311	4	BIOL 305	3	
CHEM 313	3	BIOL 306	1	
CHEM 315	2	CHEM 314	3	
Mason Core*	3	CHEM 318 OR	2	
Mason Core*	3	BIOL 483	5	
MLAB 200	1	Mason Core*	3	
		Mason Core*	3	
Total:	16 credits	Total:	15 credits	

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
BIOL 430	4	BIOL 431	4	*Apply to CL schools
BIOL 452	3	Mason Core*	3	And MLAB affiliated
BIOL 453	1	Synthesis*	3	programs during fall
ENGH 302	3	BIOL Elective	3	of Year 3.
Mason Core*	3	MLAB 300	2	
General Elective	1			
Total:	15 credits	Total:	15 credits	

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
MLAB School		MLAB School		*MLAB School
Full Time		Full Time		Full Time for 6
				credits during
				summer after 4th
				year.
Total:	12 credits	Total:	12 credits	

*3+1 Regular Tract indicates that the student will take coursework at Mason for 3 years followed by one year of an off-campus internship.

*Students must earn 120 credits for graduation; 45 credits must be upper-level (courses 300+). The *Total Credits to Graduate* calculated above are likely minimums because many students need to

take a few extra courses to meet requirements, or start out in another major and change to MLAB and need prerequisite courses. Transfer students who don't take the correct courses at VCCS schools (e.g. NVCC) will often need to take more credit hours here to get the correct courses.

*BIOL 305/306 (Microbiology) and BIOL 311 (Genetics) must be taken before the student takes BIOL 452/453 (Immunology). All of these courses are needed before the student enters the GWU CLS Program, based on the courses listed in that first semester. Those course could be taken together in the fall, and the GenEd listed there could be taken then or some other time because that will be a very full semester with two biology courses and a chemistry course!

*In the first semester, students should take Cell Biology (BIOL 213) if they are strong in this subject or took it in high school. Otherwise, students should take BIOL 103 their first semester if their biology experience is not recent.

*Mason Core requirements can be found at catalog.gmu.edu.

*The MATH requirement can be fulfilled by MATH 111, MATH 113, or MATH 123/124, depending on results of the math placement test.

*BIOL 430/431 must be taken during the third year of study!

*MLAB 200 may be taken during the fall semester of the first, second, or third year (second year is recommended).