

College of Science - Mathematics, BS without Concentration				
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 (CS 112)			
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 (63 - 69 credits in major with Traditional Mathematics) A maximum of 6 credits of grades below 2.00 in coursework designated MATH or STAT may be applied toward the major				
MATH 113	Analytic Geometry and Calculus I	4		
MATH 114	Analytic Geometry and Calculus II	4		
MATH 203	Linear Algebra	3		
MATH 213	Analytic Geometry and Calculus III or	3		
or MATH 215	Analytic Geometry and Calculus III (Honors)			
MATH 214	Elementary Differential Equations or	3		
or MATH 216	Theory of Differential Equations			
MATH 290	Introduction to Advanced Mathematics	3		
MATH 322	Advanced Linear Algebra	3		
CS 112	Introduction to Computer Programming	4		
Science Requirement: Select a one-year sequence of a laboratory science from the following courses (8-9 credits):				
BIOL 213 and One from the following: BIOL 300, 308, or 311	Cell Structure and Function AND Biodiversity, Foundations of Ecology & Evolution, OR General Genetics			
CHEM 211/213 & CHEM 212/214	General Chemistry I & II with Labs			
GEOL 101 & GEOL 102	Introductory Geology I & II			
PHYS 160/161 or 260/261	University Physics I & II with Labs			
Traditional Mathematics (28-33 credits)				
MATH 125	Discrete Mathematics I (Mason Core)	3		
MATH 315	Advanced Calculus I	3		
MATH 316	Advanced Calculus II	3		
MATH 321	Abstract Algebra	3		
or MATH 431	Topology			
Select 12 additional credits of MATH courses numbered above 300				
Additional Math above 300 Course #1:				
Additional Math above 300 Course #2:				
Additional Math above 300 Course #3:				
Additional Math above 300 Course #4:				
Additional Science: Select additional science credits from one of the following three options (4-9 credits):				
A second sequence from the choices under "Science" above				
6 credits from more advanced courses in biology, chemistry, geology, or physics 2				
The 4-credit option of PHYS 262 and PHYS 263				
Degree Notes				
Approx. 24 - 30 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. All graduating seniors are required to have an exit interview.				
Advisor Notes:				

FALL YEAR 1	CREDITS	SPRING YEAR 1	CREDITS	NOTES
MATH 113	4	MATH 114	4	*S.B.S = Social and Behavioral Science
Core (Written)	3	MATH 125	3	
Core (Oral)	3	Core (W.C.)	3	*W.C. = Western Civilization
Core (S.B.S)	3	Core (N.S.)	4	
Core (Arts)	3	Core (G.U.)	3	*N.S. – Natural Science
UNIV 100	1			*G.U = Global Understanding
Total:	17 credits	Total:	17 credits	

FALL YEAR 2	CREDITS	SPRING YEAR 2	CREDITS	NOTES
MATH 213 or 215	3	MATH 214 or 216	3	*Some Literature courses have a required pre-requisite of 45 completed credits.
MATH 203	3	MATH 290	3	
Core (N.S.)	4	Core (Lit)	3	
Foreign Language	4	Foreign Language	4	
		General Elective	3	
Total:	14 credits	Total:	16 credits	

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
MATH 322	3	MATH 3xx	3	*P.R.S. = Philosophy or Religious Studies
CORE (IT)	3	MATH 3xx	3	
Foreign Language	4	Foreign Language	4	*UL = Upper level
P.R.S. Req.	3	S.B.S. (College Req)	3	
		General Elective (UL)	3	
Total:	13 credits	Total:	16 credits	

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
MATH 3xx	3	MATH 3xx	3	*N.W.C. = Non-Western Culture
ENGH 302	3	MATH 400 (Synth.)	3	
N.W.C. Req.	3	General Elective (UL)	3	
General Elective (UL)	3	General Elective (UL)	3	
General Elective (UL)	3			
Total:	15 credits	Total:	12 credits	

*Students must earn 120 credits for graduation; 45 credits must be upper-level (courses 300+).