

College of Science - Chemistry, BA with Concentration in Biochemistry				
Catalog Year: 2019 - 2020			Grades	
Mason Core Requirements: 30 credits	Course Information	Credits	Earned	Needed
Written Communication:	ENGH 101 (100)	3		
Oral Communication:		3		
*Quantitative Reasoning	*Satisfied by Major Requirements			
Information Technology		3		
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		
College Level Requirements for the BA Degree				
Philosophy or Religious Studies		3		
(PHIL 323, 324 cannot be used to fulfill this requirement.)				
Additional Social & Behavioral Sciences		3		
(The two courses used to fulfill the combined college and university requirements must be from different disciplines. This requirement may be fulfilled by completing any course in ANTH, CRIM, ECON, GOVT, HIST (except 100 or 125), LING, PSYC, or SOCI & these courses in GGS: 101, 103, 110, 301, 303, 304, 305, 306, 315, 316, 320, 325, 330, 357, 380)				
Foreign Language		0-12		
(Intermediate level in a single language by completing a course in a foreign language numbered 202 (or higher); or achieving a satisfactory score on an approved proficiency test; or by completing the following ASL three course sequence EDSE 115, 116, and EDSE 219; or students who are already proficient in a second language may be eligible for a waiver of this requirement)				
Non-Western Culture		3		
(Approved courses for this requirement may be found under Degree Requirements for the major listed within the University Catalog. The course used for this requirement may not simultaneously fulfill Mason Core Global Understanding)				
Major with Concentration in Biochemistry Requirements (62 credits) Students must complete the chemistry program requirements with a minimum GPA of 2.30 and present no more than two courses with a grade of 'D' (1.00) in CHEM coursework at graduation. Major termination policy: No chemistry, math, or science course that is required for the major may be attempted more than three times. Students who do not successfully complete such a course with a grade of C or better by the third attempt may be terminated from the major.				
CHEM 211	General Chemistry I	3		
CHEM 213	General Chemistry Laboratory I	1		
CHEM 212	General Chemistry II	3		
CHEM 214	General Chemistry Laboratory II	1		
CHEM 313	Organic Chemistry I	3		
CHEM 314	Organic Chemistry II	3		
CHEM 315	Organic Chemistry Lab I	2		
CHEM 318	Organic Chemistry Lab II	2		
CHEM 321	Quantitative Chemical Analysis	4		
CHEM 331	Physical Chemistry I	3		
CHEM 336	Physical Chemistry Lab I 1	2		
CHEM 446	Bioinorganic Chemistry	3		
CHEM 463	General Biochemistry I	4		
CHEM 464	General Biochemistry II	3		
CHEM 465	Biochemistry Lab 1	2		
BIOL 213	Cell Structure and Function	4		
MATH 113	Analytic Geometry and Calculus I	4		
MATH 114	Analytic Geometry and Calculus II	4		
STAT 250	Introductory Statistics	3		
PHYS 243/244 & PHYS 245/246	College Physics I & II with Labs	8		
Degree Notes				
Approx. 28 credits may be completed with elective courses to bring the degree total to 120 with 45 of these credits at the 300/400 level.				
Advisor Notes:				

Sample Schedule

BA: Concentration in Biochemistry

FRESHMAN YEAR (29 CR)

Semester 1

CHEM 211, 213 General Chemistry I	4
MATH 113 Anal. Geom. & Calc. I	4
BIOL 213 Cell Structure & Function	4
ENGH 101	3
	15

Semester 2

CHEM 212, 214 General Chemistry II	4
MATH 114 Anal. Geom. & Calc. II	4
HIST requirement	3
IT Requirement	3
	14

SOPHOMORE YEAR (28 CR)

Semester 3

CHEM 313 Organic Chemistry I	3
CHEM 315 Organic Chemistry Lab I	2
PHYS 243 College Physics I	3
PHYS 244 College Physics Lab I	1
STAT 250 Introductory Statistics	3
COMM requirement	3
	15

Semester 4

CHEM 314 Organic Chemistry II	3
CHEM 318 Organic Chemistry Lab II	2
CHEM 321 Elementary Quant. Anal.	4
PHYS 245 College Physics II	3
PHYS 246 College Physics Lab II	1
	13

JUNIOR YEAR (32 CR)

Semester 5

CHEM 463 General Biochemistry I	4
CHEM 331 Physical Chemistry I	3
ENGH 302	3
Global Understanding requirement	3
Foreign Language	3
	16

Semester 6

CHEM 464 General Biochemistry II	3
CHEM 465 General Biochemistry Lab	2
CHEM 336 Physical Chemistry Lab I	2
Non-Western Culture requirement	3
Literature requirement	3
Foreign Language	3
	16

SENIOR YEAR (31 CR)

Semester 7

CHEM 446 Bioinorganic Chemistry	3
Foreign Language	3
Social/Behavioral Science req. I	3
Fine Arts requirement	3
Elective	3
	15

Semester 8

Synthesis requirement	3
Foreign Language	3
Philosophy/Religious Studies req.	3
Social/Behavioral Science req. II	3
Elective	4
	16