

Revised 3/10/23			Credits	Lab Hrs	BA chemistry	BS chemistry	BS ACS	ACS biochem emphasis	BS biochem/molec biol
Gen Chem Lecture (either 125 & 126 or 131)			6		required	required	required	required	required
Gen Chem Lab (either 127 & 128 or 132)			2		required	required	required	required	required
Organic 1 (221)			3		required	required	required	required	required
Organic Lab 1 (255)		84	2		required	required	required	required	required
Organic 2 (231)			3		required	required	required	required	required
Organic Lab 2A (256A)		42	1		required	required	required	required	required
Organic Lab 2B (256B)		42	1		elective	elective	elective	elective	elective
Biochem 1 (311)			3		option (1)	elective	required	required	required
Biochem 2 (314)			3		elective	elective	option (2)	required	required
Biochem Lab (315)		42	1		elective	elective	elective	required	required
Inorganic (322)			3		option (1)	required	required	required	option (4)
Inorganic Lab (324)		42	1		elective	elective	required	elective	option (4)
Analytical lecture and lab (331 + 332)		42	4		option (1)	required	required	required	option (4)
Physical Chem 1 (343)			3		option (1)	required	required	required	required
Physical Chem Lab 1 (345)		42	1		elective	required	required	required	required
Physical Chem 2 (344)			3		elective	required	required	option (3)	option (4)
Physical Chem Lab 2 (346)		42	1		elective	required	required	elective	option (4)
Communication in Chem and Biochem (326)			1		elective	elective	elective	elective	option (4)
Neurochem (335) (lecture + lab)		42	4		elective	elective	option (2)	option (3)	option (4)
Advanced Laboratory Techniques (350)		Variable	3		elective	elective	option (2)	option (3)	option (4)
Reactions, Mechanisms and Synth (352)			3		elective	elective	option (2)	option (3)	option (4)
Computational Chemistry (354)		Variable	3		elective	elective	option (2)	option (3)	option (4)
Structures and Materials (356)			3		elective	elective	option (2)	option (3)	option (4)
Env. Geochemistry (GES 430)			3		elective	elective	option (2)	n/a	n/a
Research (490) (42 lab hrs/credit)		84 max	1		elective	elective	elective	elective	elective
Choose electives so Chemistry credits total at least:					25	36			
Lab requirement (beyond General Chemistry)					4 lab credits		400 lab hours	400 lab hours	
Precalculus (Math 123)			3		BA requires 2 semesters of Math (6-8 credits) See Note (1) for CSCI courses				
Calculus with Review I (Math 125)			4						
Calculus with Review II (Math 126)			4						
Calculus 1 (Math 131 or 125+126)			4			required	required	required	required
Calculus 2 (Math 132)			4			required	required	required	required
Introductory Statistics (Math 115)			3			1 additional upper-level course is recommended. Consult advisor for choice.			
Intermediate Statistics (Math 215)			3						
Accelerated Statistical Methods (Math 115+215)			4						
Multivariable Calculus (Math 233)			3						
Linear Algebra and Applications (Math 245)			3						
Differential Equations (Math 270)			3						
Computer Science (CSCI) See Note (1)			3						
College Physics 1 (Phys 105)			3		The BA requires 2 sems of Physics & Lab, See Note 2a for course rec	BS degrees require 2 sems of Physics & Lab, See Note 2b for course recommendation			
College Physics 1 Lab (Phys 107) (or Physics I Lab)			1						
College Physics 2 (Phys 106)			3						
College Physics 2 Lab (Phys 108) (or Physics II Lab)			1						
General Physics 1 (Phys 121)			3						
General Physics 1 Lab (Phys 141)			1						
General Physics 2 (Phys 122)			3						
General Physics 2 Lab (Phys 142)			1						
General Biology I (Bio 105+107)			4		n/a	n/a	n/a	Note (3)	required
General Biology II (Bio 106+108)			4		n/a	n/a	n/a	Note (3)	required
Molecular Biology (Bio 366)		42	3		n/a	n/a	n/a	option (3)	required
Cell Biology (Bio 348) + Lab (Bio 349)		42	3 + 1		n/a	n/a	n/a	option (3)	option (4)
Genetics (Bio 356) + Lab (Bio 357)		42	3 + 1		n/a	n/a	n/a	option (3)	option (4)
Anchor Plan reqs		Total science credits:			39-41	60 (Note 4)	60 (Note 4)	60 (Note 4)	64
FYS 3		General education credits:			41-47	41-47	41-47	41-47	41-47
Health Dy 2		Total committed credits:			80-88	101-107	101-107	101-107	105-121
Religion 6		Credits remaining:			32-40	13-19	13-19	13-19	0-15
Arts 2-3		Option 1: The BA degree requires two of these four courses							
Humanities 9		Option 2: ACS BS degree requires two full-semester courses among indicated options.							
Human Diversities:		Option 3: ACS BS w/ biochem requires 2 full-semester upper level courses: one from among Chem 335, Bio 348, Bio 356, or Bio 366, and one from Chem 335, Chem 344, Chem 350, Chem 352, Chem 354, and Chem 356 (Note that Neurochem/Chem 335 can satisfy either group, not both.)							
Language 6		Option 4: BMB BS requires 8 additional credits from these courses with 4 credits from each department. Beyond courses listed above, others could include General Microbiology (Bio 301), Advanced Topics in Botany (Bio 340 - depending on topic), Virology (Bio 341), and Developmental Biology (Bio 355)							
US Div 3 (overlap?)		Note 1: CSCI 125 (Software Design & Implementation) or any CSCI 200-level or higher may count in place of a second MATH course if MATH 126 or higher has been completed. (CSCI 195 may count with permission from the Chemistry Department)							
Global 3 (overlap?)		Note 2a: The BA requires 2 semesters of Physics with lab. PHYS105/107 and PHYS 106/108 (College Physics I & II with labs) or PHYS 121/141 and PHYS 122/142 (General Physics I & II with labs) are both accepted for a BA, with General Physics (calculus based) recommended for students with a good calculus background (i.e., B or better in MATH 131, 132) because calculus makes physics easier.							
Social science 6		Note 2b: The BS requires 2 semesters of Physics with lab. PHYS 121/141 and PHYS 122/142 (General Physics I & II with labs) are strongly encouraged for a BS for students with a good calculus background (i.e., B or better in MATH 131, 132) because calculus makes physics easier. However, PHYS105/107 and PHYS 106/108 (College Physics I & II with labs) are accepted for the BS.							
Exp Writing 3		Note 3: General Biology I + II are prerequisites for all upper level biology courses							
Senior seminar 3		Note 4: For all Chem BS degrees, additional science credits must add up to at least 60 science credits.							
(approx) total: 41-47									
General Education counts assume that student will need two college classes of foreign language. US Div & Global Learning requirements may or may not be met within previously selected classes, so a range is given.									