



Department	Chemistry & Biochemistry
Program	BS Biochemistry, ACS Certified
Bulletin	2022-2023
Revised	February 2022

Major	← toc
Cognate	
Gen Ed	
Elective, Minor	

1-Biochem ACS-OddFallStart

Freshperson (First) Year

Fall Semester										Spring Semester										Spring of Even Year									
Course	Title	Cred	M	C	GE	E	UD	L		Course	Title	Cred	M	C	GE	E	UD	L		Course	Title	Cred	M	C	GE	E	UD	L	
1	CHEM131	General Chemistry I	4	.					1	1	CHEM132	General Chemistry II	4	.					1										
2	MATH191	Calculus I	4	.						1	MATH192	Calculus II	4	.															
4	LC ENGL115	College Writing I	3		.					R	REL100	God & Human Life	3		.														
3	PE HLED135	Wellbeing 360°	3		.					LC	COMM104	Communication Skills	3		.														
5																													
6	May substitute ACE/GenEd Courses between years if desired.																												
7	Total of 6 semesters of CHEM210 required (seminar attendance).																												
8	May switch FounBiol and Calc between year 1 & 2																												
2	STEM	SEMESTER TOTAL	14	4.0	4	6	0	0	1	2	STEM	SEMESTER TOTAL	15	4.0	4	7	0	0	1	2	STEM	SEMESTER TOTAL	15	4.0	4	7	0	0	1
1	labs									1	labs									1	labs								

Sophomore (Second) Year

Fall Semester										Spring of Odd Year										
Course	Title	Cred	M	C	GE	E	UD	L		Course	Title	Cred	M	C	GE	E	UD	L		
1	CHEM231	Organic Chemistry I	3	.						1	CHEM232	Organic Chemistry II	3	.						
2	CHEM241	Organic Chem Lab I	1	.				1		CHEM242	Organic Chem Lab II	1	.					1		
4	BIOL165	Foundations of Biology	5	.				1		1	BIOL166	Foundations of Biology	5	.				1		
3	PHYS241	Physics for Scientists I	4	.						1	PHYS142	Physics for Scientists II	4	.						
5	PHYS271	Physics for Scientists Lab I	1	.				1		PHYS272	Physics for Scientists Lab II	1	.					1		
6	Hu MUPFxxx	Music Lessons	1	.						Hu	MUPFxxx	Music Lessons	1	.						
7																				
8																				
3	STEM	SEMESTER TOTAL	15	4.0	10	1	0	0	3	3	STEM	SEMESTER TOTAL	15	4.0	10	1	0	0	3	
3	labs									3	labs									

Junior (Third) Year

Fall Semester										Spring of Even Year									
Course	Title	Cred	M	C	GE	E	UD	L		Course	Title	Cred	M	C	GE	E	UD	L	
1	CHEM431	Physical Chemistry I	3	.				◇		1	BCHM422	Biochem II	3	.				◇	
2	CHEM441	Physical Chemistry I Lab	1	.				◇	1	BCHM430	Biochemistry Lab	1	.					◇	1
4	CHEM210	Chemical Topics	0	.						CHEM210	Chemical Topics	0	.						
3	MATH240	Calculus III	4	.						1	CHEM415	Adv Inorganic Chem	4	.				◇	
5	CHEM330	Quant Chem Analysis	4	.				◇	2	R	REL2xx	Relig Course #3	3	.					
6	Hi HIST110	Cultrs, Worldvws & Gods	3	.						Hu		Arts & Humanities	3	.					
7										LC	ENGL215	College Writing II	3	.					
8		Research	1	.				◇		CHEM415 & CHEM432/442 are usually alternating years. Check with Chair.									
3	STEM	SEMESTER TOTAL	16	8.0	4	3	1	9.0	3	2	STEM	SEMESTER TOTAL	17	8.0	0	9	0	8.0	1
3	labs									1	labs								

Senior (Fourth) Year

Summer BIOCHEM if needed??? IMPORTANT: MCAT / DAT / PCAT should be taken before 4th year

Fall Semester										Spring of Odd Year									
Course	Title	Cred	M	C	GE	E	UD	L		Course	Title	Cred	M	C	GE	E	UD	L	
4th 1	BCHM421	Biochem I (alt prev Summer)	4	.				◇		CHEM210	Chemical Topics	0	.						
4th 2	CHEM418	Chem & Biochem Seminar	2	.				◇		R	REL2xx	Relig Course #2	3	.					
4th 4	CHEM210	Chemical Topics	0	.						1	CHEM432	Physical Chemistry II	3	.				◇	
4th 3		Research	1	.				◇		1	CHEM400	Chemical Separations	2	.				◇	1
4th 5	1	Adv Biol ‡	3	.				◇		1	CHEM430	Instrumental Analysis	2	.				◇	1
4th 6	R	Relig Course #4 (Ethics)	3	.				◇				Elective	3	.					
4th 7		Elective	3	.						SS		Social Science	3	.					
4th 8										‡ Adv Biol=BIO1371,372,315,415,420,447,450,464,465,485;FNDDT485									
2	STEM	SEMESTER TOTAL	16	6.0	3	3	4	13.0	0	3	STEM	SEMESTER TOTAL	16	7.0	0	6	3	7.0	2
0	labs									2	labs								

Credit Breakdown

Course-type Legend
Cred = Course Credit
M = Major
C = Cognate
GE = General Ed
E = Elective
UD = Upper Div

Credit type
 Total Credits
 Major
 Cognate
 Gen Ed
 Electives, Minor, etc
 UD

Chart AU Requirement

124	124	✓
45.0	45	✓
35	34	✓
36	36	✓
8	0	✓
37	30	✓



Legend: ■ Req't NOT Met; ✓ Req't Met

Gen Ed Credits Breakdown

Major Includes 7 ACE credits	Code	Chart	AU Req't
Religion	R	12	12 ✓
Language & Communication	LC	9	9 ✓
History	Hi	3	3 ✓
Humanities	Hu	6	6 ✓
Social Sciences	SS	3	3 ✓
Service	S	0	0 ✓
Computer	C	0	0 ✓
Wellness	PE	3	3 ✓
TOTAL		36	36 ✓