

### Suggested degree path for the

## BACHELOR OF SCIENCE DEGREE IN CHEMISTRY-BIOCHEMISTRY (CHBC) 2021-22 Catalog

Name:	ID#:	Phone #:			

	Fall Semester (recommended hours)	Prerequisite Information	Hours	Grade	Year/ Semester	Course Sub / Suggested	
	CHEM 105 Chemistry I (Science majors)	Pre or co MATH101	3				
	CHEM 113 Chemistry I Lab (Chemistry majors)	Co CHEM105, chem. major	1			Schedule first	
	BIOL 155 General Biology I	Eligible for ENGL101, and MATH102	4			Includes lab	
<b>~</b>	ENGL 101 English Comp. I	ACT score or ENGL003(C)	3				
N YEA	Humanities elective		3			101,102,105,106, 150, 151, 160, 161, 201, 255or 256,	
MA	UNIV 101 University Prep (UR)	First time entering freshmen and transfer students < 30 hours.	1				
						Total Hours: 15	
FRESHM	Spring Semester (recommended hours)						
臣	CHEM 106 Chemistry II (Science majors)	Pre CHEM105(C)	3				
	CHEM 114 Chemistry II Lab (Chemistry majors)	Pre chemistry major & CHEM113 co CHEM106	1			Schedule first	
	MATH 165 Calculus I	MATH100(C),101(C) 102 (C) or 108(C)	5				
	ENGL 102 English Comp. II	Pre ENGL100 (C), 101(C) or placement test	3				
	BIOL 156 General Biology II	Pre BIOL 155 (C)	4			Includes lab	
						Total Hours: 16	

Schedule your chemistry lab first since there is only one section of it. Build the rest of your schedule around it. If your math placement requires you to start with a lower math course than 165, start your math in the fall semester. If necessary, chemistry biochemistry majors can postpone BIOL 155/156 until their second or third year.

Scheduling of many general education courses such as the History, Humanities, Literature, Fine Arts, and Social Science electives as well as SPCH 101 and CMPS 130 is flexible. For example, this schedule recommends a history elective in your first semester and a Fine Arts elective in your last semester, but you could switch them. Be sure to check the prerequisites for the course you want to take.

Fall Semester (recommended hours)	Prerequisite Information	Hours	Grade	Year/ Semester	Course Sub / Suggested
CHEM 221 Organic Chem. I	Pre CHEM106	3			
MATH 166 Calculus II	Pre MATH165(C)	4			
PHYS 201 Physics I (Calculus Based)	Pre or co MATH165	3			Postponing physics beyond soph year may delay graduation
PHYS 203 Physics I Lab.	Pre or co PHYS101 or 201	1			
CMPS 130 Intro. Comp. Sci. I	Pre MATH 100 (C) or 101(C)	3			
<b>2</b>					Total Hours: 14
Spring Semester (recommended hours)					
CHEM 222 Organic Chem. II	Pre CHEM221 (C)	3			
CHEM 222 Organic Chem. II  CHEM 226 Org. Chem. Lab.	Pre CHEM221 (C) Pre CHEM114 or 110 co CHEM222	3 2			
	Pre CHEM114 or 110 co				
CHEM 222 Organic Chem. II  CHEM 226 Org. Chem. Lab.  CHEM 300 Quant. Analysis  CHEM 302 Quant. Anal. Lab.	Pre CHEM114 or 110 co CHEM222	2			
CHEW 500 Quant. Analysis	Pre CHEM114 or 110 co CHEM222 Pre CHEM106 & 114 or 110	2 3			Postponing physics after soph year may delay graduation
CHEM 300 Quant. Anal. Lab.	Pre CHEM114 or 110 co CHEM222  Pre CHEM106 & 114 or 110  Pre or co CHEM300	2 3 2			
CHEM 300 Quant. Anal. Lab.  PHYS 202 Physics II (Calculus Based)	Pre CHEM114 or 110 co CHEM222  Pre CHEM106 & 114 or 110  Pre or co CHEM300  Pre PHYS201	2 3 2			



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	CHEM 303 Physical Chem. I	Pre MATH165, CHEM106 & 221, PHYS102 or 202	3			
	CHEM 305 Phys. Chem. I Lab	Co CHEM303	1			
	CHEM 319 Intro. Chemical Lit.	Pre CHEM222, 300	1			
~	CHEM 435 Biochemistry I	Pre CHEM222	3			
	CHEM 437 Biochemistry Lab.	Pre CHEM 226 Co CHEM435	1			
YE	CHEM 451 Research Problems	Pre-permission	2			
IOR	Humanities elective	See catalog	3			See catalog for options
						Total Hours: 14
	Spring Semester (recommended hours)					
5	CHEM 304 Physical Chem. II	Pre CHEM303	3			
	CHEM 306 Phys. Chem. II Lab.	Pre CHEM305 Co CHEM304	1			
	CHEM 405 Instr. Analysis	Pre CHEM302, 303	3			
	CHEM 407 Instr. Anal. Lab.	Pre or Co CHEM405	2			
	CHEM 436 Biochemistry II	Pre CHEM435	3			In-Depth CHEM
	ENGL 368 Tech. & Prof. Writ. or ENGL 468	Pre ENGL102(C)	3			
						Total Hours: 15

Fall Semester (recommended hours)	Prerequisite Information	<u>Hours</u>	Grade	Year/ Semester	Course Sub / Suggested
CHEM 412 Inorganic Chem.	Pre CHEM304	3			
CHEM 413 Inorganic Prep.	Pre CHEM302,306 Co CHEM412	1			
Social Science Elective 1		3			See catalog for options
BIOL 203 Gen Microbiology	Pre BIOL 155&156 (C), co BIOL 204	3			BIOL 203 and 204 must be taken in same semester
BIOL 204 Gen Microbiology Lab	Co BIOL 203 or 205	1			BIOL 203 and 204 must be taken in same semester
Biology/Chemistry Electives  Spring Samastar (racommanded hours)	See note (1) below	*a			Must total 10 hours over 2 semesters
					Total Hours: 11+*a
Spring Semester (recommended hours)					
CHEM 450 Senior Seminar	Pre CHEM306, 319	1			Take during last semester
Social Science Elective 2	300/400 level course	3			See catalog for options.
Fine Arts Elective		3			See catalog for options
Humanities Elective	See catalog.	3			See catalog for options
Biology/Chemistry Electives	See note (1) below	*b			Must total 10 hours over 2 semesters
					Total Hours: 10+*b

### **Total Hours for Degree**

**120** 

### Approved electives:

(1) Biology/Chemistry electives must total at least 10 hours. These hours must come from CHEM 451(2), BIOL 320 (4), BIOL 428 (3), BIOL 429 (2), BIOL 440 (3), or BIOL 441 (1) It is strongly recommended that CHEM 451 be one of the courses that you choose, especially if you plan to pursue an advanced degree.. One of these electives must be either CHEM 490 or CHEM 421. You may distribute these courses between the fall and spring semesters as you choose.

45-Hour Requirement. You are required to have at least 45 hours from courses at the 300 and 400 level. Required courses for this concentration include 44 hours at this level. To fulfill the 45 hour requirement, you must take a 300 or 400 level course as the second social sciences option. If you do not do this, you must take another 3 hours at this level. You must also take 1 additional credit at 300+. Discuss this with your advisor before registering for the first semester of your senior year to be sure that you are meeting this requirement.