BA CONCENTRATION in BIOLOGICAL CHEMISTRY

	REQUIRED CHEMISTRY & CORE COURSES	Year	SEM	CR	GR	Pts	TOT P
	GENERAL Chemistry I CHEM 131 OR AP Equivalent (4-5 credits)						
	CHEM 131: Chemical Concepts I (5) or AP/Equiv		Fall			0.0	0.0
	ORGANIC Chemistry: FIRST-YEAR ORGANIC OR STANDARD Sequence (11 credits)						
	FIRST-YEAR ORGANIC Sequence						
	CHEM 171: First-Year Organic Chemistry I (4)		Fall			0.0	0.0
	CHEM 173: First-Year Organic Chemistry I LAB (1)		Fall			0.0	0.0
	CHEM 172: First-Year Organic Chemistry II (4)		Spring			0.0	0.0
	CHEM 210W: Honors Organic Chemistry Lab II (2)		Spring			0.0	0.0
	OR STANDARD Sequence						
	CHEM 203: Organic Chemistry I (4)		Fall			0.0	0.0
	CHEM 207: Organic Chemistry I LAB (1)		Fall			0.0	0.0
	CHEM 204: Organic Chemistry II (4)		Spring			0.0	0.0
	CHEM 210W: Honors Organic Chemistry Lab II (2)		Spring			0.0	0.0
	Three (3) of the following THEORY courses (12-13 credits)						
	CHEM 132: Chemical Concepts II (5)		Spring			0.0	0.0
	CHEM 211: Inorganic Chemistry (4)		Fall			0.0	0.0
	CHEM 251: Physical Chemistry I (4)		Fall			0.0	0.0
	CHEM 252: Physical Chemistry II (4)		Spring			0.0	0.0
	Upper-Level Laboratory Courses (6 credits)						
	CHEM 210W: Honors Organic Chemistry II Lab (2)		Spring			0.0	0.0
	CHEM 234 or 234W: Advanced Laboratory Techniques (choose) (4)		Spring			0.0	0.0
	Upper-Level Courses (8 credits)						
	CHEM 262: Biological Chemistry (4 credits)					0.0	0.0
	+ Four (4) credits from following courses (4 credits):						
	Approved 2XX Biology or Biochemistry Course (4 credits)					0.0	0.0
	CHEM 402: Biophysical Chemistry (2 credits)					0.0	0.0
	CHEM 440: Bioorganic Chemistry (4 credits)					0.0	0.0
	CHEM 461: Spectroscopy Techniques Applied to Biological Systems (2 credits)					0.0	0.0
	Optional Additional CHEM courses (NOT Required but will count in CHEM GPA)						
						0.0	0.0
						0.0	0.0
						0.0	0.0
						0.0	0.0
	:AP/Transferred Chem Credits	CHEM Credits:		0.0		0.0	0.0

0.0 Total Chem Cr.

Student: _____ **Date:** _____

Class & ID#: _____ **Other Major?:** _____

Email: _____ **CHM GPA:** _____

AC Advisor: _____ **General GPA:** _____

	REQUIRED ANCILLARY & ALLIED COURSES	Year	SEM	CR	GR
	MATHEMATICS - 140 OR 160 Sequence (8-12 credits)				
	MATH 140 Sequence				
	MATH 141: Calculus I (4)				
	MATH 142: Calculus II (4)				
	MATH 143: Calculus III (4)				
	OR MATH 160 Sequence				
	MATH 161: Calculus IA (4)				
	MATH 162: Calculus IIA (4)				
	+ One (1) of the following courses (4 credits):				
	MATH 163: Ordinary Differential Eq (4)				
	MATH 165: Linear Algebra w/ Diffential Equations (4)				
	CSC 161: Intro to Programming (4)				
	CSC 171: Intro to Computer Science (4)				
	STAT 180: Intro to Applied Statistical Methodology (formerly STAT 211) (4)				
	STAT 190: Intro to Statistical Methodology (formerly STAT 212) (4)				
	STAT 201: Intro to Probability (4)				
	PHYSICS - Two (2) of the following PHYSICS courses (8 credits)				
	General Physics Sequence				
	PHYS 113: General Physics I (4)				
	PHYS 114: General Physics II (4)				
	Mechanics and Electricity & Magnetism				
	PHYS 121: Mechanics (4)				
	PHYS 122: Electricity & Magnetism (4)				
	Honors Mechanics and Electricity & Magnetism				
	PHYS 141: Mechanics (honors) (4)				
	PHYS 142: Electricity & Magnetism (honors) (4)				
	Primary Writing Requirement (WRT 105 or Equivalent)				
	WRTG 105 **OR** Equiv:				
	Upper-Level Writing Requirement Satisfaction				
	CHEM 210W: Honors Org Chem Lab II (2)				
	XXX 2XXW 2nd ULW (4)				

Any CHEM labs taken as a W can be carried down to this area to meet this requirement.
Do not duplicate credits. Students may use one writing course from another department.

P = Planned IP = In Progress X = Complete ✓ = Section Requirements Met

Bachelor of Arts (B.A.) Program in Chemistry

The B.A. program makes fewer specification at the advanced level than the B.S. degree and encourages a wide range of elective courses. It is particularly suitable for students with interdisciplinary scientific interests in the health professions, biology, physics, geological sciences, engineering, or education. B.A. students may elect advanced courses in chemistry, including independent research, and can, thereby, create a curriculum best suited to their individual interests. For more information, please contact our Undergraduate Studies Coordinator at: ugradadm@chem.rochester.edu.

Blank POS Worksheet

Plan Your Own POS for CHEM BA

Total: at least 41 credit-hours in chemistry,
and at least 61 credit-hours overall

Year 1/First Year			
Fall	**Cr**	**Spring**	**Cr**

Year 2/Sophomore Year			
Fall	**Cr**	**Spring**	**Cr**

Year 3/Junior Year			
Fall	**Cr**	**Spring**	**Cr**

Year 4/Senior Year			
Fall	**Cr**	**Spring**	**Cr**

Year 5/for Take 5 Students			
Fall	**Cr**	**Spring**	**Cr**

AP Credit/Transfer Credit/Summer Credit			
Class	**Cr**	**Class**	**Cr**

Sample Program Of Studies

While the required courses leading to a B.A. in chemistry may be scheduled with some flexibility (e.g., the mathematics and physics courses), one of the following programs are suggested:

SAMPLE Regular Sequence POS

Year 1/First Year			
Fall	**Cr**	**Spring**	**Cr**
CHEM 131	5	CHEM 132	5
MATH 141/161	4	MATH 142/162	4
Elective	4	Elective or PHYS 121	4
Elective	4	Elective	4

Year 2/Sophomore Year			
Fall	**Cr**	**Spring**	**Cr**
CHEM 203	4	CHEM 204	4
CHEM 207	1	CHEM 210W	2
PHYS 113 or PHYS 122	4	PHYS 114	4
Elective or MATH 143	4	MATH Elective	4

Year 3/Junior Year			
Fall	**Cr**	**Spring**	**Cr**
CHEM 211	4	CHEM 234W	4
CHEM 251	4	CHEM 262	4
Math Elective	4	Elective	4
Elective	4	Elective	4

Year 4/Senior Year			
Fall	**Cr**	**Spring**	**Cr**
Upper-Level Elective	4	Upper-Level Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4

SAMPLE First-Year Organic Sequence POS

Year 1/First Year			
Fall	**Cr**	**Spring**	**Cr**
CHEM 171	4	CHEM 172	4
CHEM 173	1	CHEM 210W	2
MATH 161	4	MATH 162	4
Elective	4	Elective or PHYS 121	4
Elective	4	Elective	4

Year 2/Sophomore Year			
Fall	**Cr**	**Spring**	**Cr**
CHEM 211	4	CHEM 234W	4
PHYS 113/122	4	PHYS 114	4
MATH Elective	4	Elective	4
Elective	4	Elective	4

Year 3/Junior Year			
Fall	**Cr**	**Spring**	**Cr**
CHEM 251	4	CHEM 262	4
Upper-Level Elective	4	CHEM 252	4
Elective	4	Elective	4
Elective	4	Elective	4

Year 4/Senior Year			
Fall	**Cr**	**Spring**	**Cr**
Upper-Level Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4

Notes:

- Total at least 41 hours in chemistry and at least 60 credit hours overall.
- The First-Year Organic sequence is designed for first year students with good preparation in chemistry (e.g. two years of general chemistry and an Advanced Placement score 4 or 5, or equivalent preparation). This sequence fast tracks students to more advanced chemistry courses and fulfillment of degree requirements in other disciplines.
- B.A. candidates considering employment in the chemical profession or graduate work in chemistry should include: CHEM 210, 211, 231, 232, 251, and 252 in their curriculum.
- Students should speak with a chemistry advisor to tailor their programs specifically to their career goals. Particular electives that are not included in the chemistry curriculum may be required for some graduate programs.
- Students who are interested in pursuing a double major or double degree, are advised to consult the College website which outlines the course overlap rules and additional credit requirements.

www.chem.rochester.edu/undergrad