

Sample Schedule for Bachelor of Science in Biochemistry

<i>Fall 1</i>		Cr	UD	<i>Spring 1</i>		Cr	UD
\$ CHEM 161/161L	(DP/DY)	4		\$ CHEM 162/162L	(BS req)	4	
\$ BIOL 171/171L (or 172/172L)	(DB)	4		\$ BIOL 172/172L (or 171/171L)		4	
\$ MATH 215 / 241 / 251A	(FQ)	4		\$ MATH 242 / 252A	(BS req)	4	
FW		3		FG-B (or A or C)		3	
		15	0			15	0
<i>Fall 2</i>		Cr	UD	<i>Spring 2</i>		Cr	UD
\$ CHEM 272/272L		5		\$ CHEM 273/273L		4	
\$ PHYS 170/170L	(BS req)	5		\$ PHYS 272/272L	(BS req)	4	
FG-A (or B or C)		3		DS		3	
HSL 101		3		HSL 102		3	
		16	0			14	0
<i>Fall 3</i>		Cr	UD	<i>Spring 3</i>		Cr	UD
CHEM 372	(DB)	3	3	\$ CHEM 274/274L		5	
\$ BIOL 275/275L		4		CHEM 361		3	3
HSL 201		3		Major elective w/ lab		5	5
DH (or DA or DL)		3		HSL 202		3	
DS		3				16	8
		16	3				
<i>Fall 4</i>		Cr	UD	<i>Spring 4</i>		Cr	UD
BIOL 402		4	4	CHEM 462		3	3
CHEM 463L		2	2	Major Elective w/ Lab		5	5
Major Elective		3	3	Major Elective		3	3
DA (or DH or DL)		3		Elective		3	
Elective		1		Elective (Chem 380 recommended)		1	1
		13	9			15	12
Total credits after 8 semesters		120	32	Cr = credit hours for course(s) UD = upper division (300+)			

Major and major-related requirements for the B.S. in Biochemistry are noted in **bold**.

Major Electives: Complete a minimum of 16 credits, including 2 laboratory courses, numbered at the 300-level or above.

At least 1 course must be from CHEM, and 2 courses must be BIOL, MICR, MBBE, or ZOOL.

(refer to the "SUGGESTED Major Electives" page)

\$ These courses are usually offered in the summer.

Keep in mind all course prerequisite(s).

Students must incorporate all focus requirements (ETH,HAP,OC,WI) into this plan.

This sample four-year plan must be used in conjunction with your Arts & Sciences College Program Requirements sheet as all requirements for a B.S. degree (e.g., focus requirements) are not included.

Students may be able to double-dip some requirements.

Actual credit counts vary depending on registration. Check with your advisor as course numbers/credits/prerequisites may change.

updated 02.20.2019

SUGGESTED Major Electives			Credits	Credits
Chemical Sciences	Prerequisites:	Offered in:	Lecture	Lab
CHEM 399: Research		F, S, SS		
CHEM 351: Physical Chem I	CHEM 274, 274L, PHYS 272, PHYS 272L, and MATH 243 or MATH 253A	F	3	
CHEM 352: Physical Chem II	CHEM 351	S	3	
CHEM 352L: Physico-Chemical Measurements	CHEM 274L, 351, and 352 (or concurrent)	S		2
CHEM 425/425L: Synthesis - Inorganic	CHEM 351 (or concurrent) or 361 (or concurrent)	F	3	2
CHEM 427: Advanced Inorganic	C (not C-) in CHEM 425	S	3	
CHEM 445/445L: Synthesis - Organic	C (not C-) or better in CHEM 273/273L	S	3	2
Biological Sciences	Prerequisites:	Offered in:	Lecture	Lab
BIOL 375/375L: Genetics	BIOL 275, 275L	S	3	2
BIOL 401: Molecular Biotechnology	C (not C-) or better in BIOL 275/275L	S	3	
BIOL 407: Molecular Cell Biology I	C (not C-) or better in BIOL 275/275L and CHEM 273	F	3	
BIOL 408: Molecular Cell Biology II	C (not C-) or better in 407; or consent	S	3	
BIOL 483: Bioinformatics	BIOL 171	S	3	
MBBE 412: Environmental Biochemistry	CHEM 152 or CHEM 272, and CHEM 162 or CHEM 171	Irreg (Spring)	3	
MICR 351/351L: Biology of Microorganisms	BIOL 171 or equivalent, CHEM 272/272L; or consent. Co-requisite: 351L.	F, S, SS	3	2
MICR 431/431L: Microbial Physiology	MICR 351	S	3	2
MICR 461/461L: Immunology	MICRO 351 or BIOL 172; or consent. Recommended: BIOL 275/275L.	F	3	2
MICR 463/463L: Microbiology of Pathogens	MICRO 351 and MICRO 461; or consent. Co-requisite: MICRO 463L or consent.	S	3	2
MICR 475/475L: Bacterial Genetics	MICRO 351 or BIOL 275	F	3	2
MICR 490/490L: Virology	MICRO 351 or BIOL 275	F	3	2
ZOOL 430/430L: Animal Physiology	BIOL 275, 275L	S	3	2
ZOOL 442: Introduction to Neuroscience	BIOL 275	F	3	
PHYL 301/301L: Human Anatomy & Physiology	Biol 171, 172, Chem 161	F	4	1
PHYL 302/302L: Human Anatomy & Physiology	PHYL 301/301L	S	4	1

WI in Biochem

Biol 171L

updated 01/25/2018

BIOCHEMISTRY COURSES		
Course	Prerequisites needed to register for this course:	Offered in:
CHEM 161	Successful completion of placement exam, C or better in Chem 131 or 151, or consent	F, S, SS
CHEM 161L	CHEM 161 (or concurrent)	F, S, SS
CHEM 162	C (not C-) or better in CHEM 161	F, S, SS
CHEM 162L	CHEM 161L and 162 (or concurrent)	F, S, SS
CHEM 272	C (not C-) or better in CHEM 162 or 171 or 181A	F, S, SS
CHEM 272L	C (not C-) or better in CHEM 162L or 171L, or 181L; C (not C-) or better in CHEM 272 (or concurrent)	F, S, SS
CHEM 273	C (not C-) or better in CHEM 272	F, S, SS
CHEM 273L	CHEM 272L and 273 (or concurrent)	F, S, SS
CHEM 274	C (not C-) or better in CHEM 162 or 171 or 181A; C (not C-) or better in MATH 215 or 241 or 251A	S, SS
CHEM 274L	C (not C-) or better CHEM 162L or 171L or 181L; C (not C-) or better in 274 (or concurrent)	S, SS
CHEM 361	C (not C-) or better in CHEM 162, PHYS 170, and MATH 242 or 252A	S
CHEM 372	C (not C-) or better in CHEM 273, or graduate standing w/consent, or department approval	F
CHEM 380	CHEM 274 (or concurrent)	S
CHEM 462	C (not C-) or better in CHEM 361 and 372; C (not C-) or better in BIOL 402	S
CHEM 463L	C (not C-) in CHEM 274L, CHEM 372, and BIOL 275L; BIOL 402 (or concurrent)	F
BIOL 171	C (not C-) in CHEM 131 (or concurrent),CHEM 151 (or concurrent),CHEM 161 (or concurrent),CHEM 171 (or concurrent), or CHEM 181A (or concurrent), or consent. Co-req:171L	F, S, SS
BIOL 171L	Co-req: BIOL 171	F, S, SS
BIOL 172	C (not C-) in CHEM 131 (or concurrent),CHEM 151 (or concurrent),CHEM 161 (or concurrent),CHEM 171 (or concurrent), or CHEM 181A (or concurrent), or consent. Co-req: 172L	F, S, SS
BIOL 172L	BIOL 172 (corequisite)	F, S, SS
BIOL 275	C or better in BIOL 171/171L, C or better in CHEM 272, or consent	F, SS
BIOL 275L	C or better in BIOL 171/171L, C or better in CHEM 272, or consent	F, SS
BIOL 402	C or better in BIOL 275/275L; C or better in CHEM 273, or consent	F, S, SS
Check the catalog for chemistry elective courses that are not listed above.		
Related Requirements (including prerequisite courses)		
MATH 241	C or better in MATH 140 or 215, or assessment exam	F, S, SS
MATH 242	C or better in MATH 241 or 251A, or grade of B or better in MATH 215	F, S, SS
PHYS 170	MATH 242 or 252A (either course may be concurrent)	F, S, SS
PHYS 170L	PHYS 170 or 170A (either course may be concurrent)	F, S, SS
PHYS 272	PHYS 151 or 170; and MATH 242 or 252A (MATH 216 substitutable with consent)	F, S, SS
PHYS 272L	PHYS 151L or 170L; PHYS 272 (or concurrent) or 272A (or concurrent)	F, S, SS
Tentative semesters when courses are offered: F = Fall ; S = Spring; SS = Summer		