

## Biochemistry Major (B.S.) (Option 1)

Fall			Spring		
<b>Freshman Year</b>					
	Num	Cr		Num	Cr
Principles of Chemistry	CHEM-12100	4	Organic Chemistry	CHEM-22100	3
Topics in Chemistry and Biochem	CHEM-12000	1	Principles of Biology	BIOL-12200	4
Principles of Biology	BIOL-12100	4	Calculus II	MATH-11200	4
Calculus I	MATH-11100	4	Experimental Chemistry I	CHEM-12400	2
Writing Course <sup>(1)</sup>	WRTG-1xx00	4	Total		13
	Total	17			
<b>Sophomore Year</b>					
	Num	Cr		Num	Cr
Organic Chemistry	CHEM-22200	3	Quantitative Chemistry	CHEM-23200	3
Experimental Chemistry II	CHEM-22500	2	Experimental Chemistry III	CHEM-32400	3
Introduction to Physics I <sup>(2)</sup>	PHYS-10100	4	Introduction to Physics II <sup>(2)</sup>	PHYS-10200	4
Electives		6	Electives		6
	Total	15	Total		16
<b>Junior Year</b>					
	Num	Cr		Num	Cr
Biochemistry I	BIOC-35300	3	Biochemistry II	BIOC-35400	3
Physical Chemistry I	CHEM-33100	3	Genetics	BIOL-22700	4
Electives		9	Electives		9
	Total	15	Total		16
<b>Senior Year</b>					
	Num	Cr		Num	Cr
Cell Biology	BIOL-35400	4	Topics in Biochemistry	BIOC-48100	3
Electives		12	Electives		12
	Total	16	Total		16

- 1) All students must complete WRTG-10800, or 11100, or 16400 and be certified as meeting the H&S writing effectiveness requirement.
- 3) Principles of Physics PHYS-11700 (4) and 11800 (4) may be substituted.
- 4) Electives in Biology or Chemistry (must take at least 3 credits):  
Neurobiology BIOL-31500 (4), Developmental Biology BIOL-34500 (4), Endocrinology BIOL-37600 (4), Environmental Toxicology BIOL-37800 (4), Microbiology BIOL-45200 (4), Plant Physiology BIOL-47300 (4), Experimental Chemistry V CHEM-32600 (3), Physical Chemistry II CHEM-33200 (3), Inorganic Chemistry CHEM-34200 (3), Nuclear Magnetic Resonance CHEM-35600 (3), Advanced Organic CHEM-42100 (3), Advanced Inorganic CHEM-42200 (3), Bio-organic Chemistry CHEM-44200, or Instrumental Analysis CHEM-45200.

**Biochemistry Major (B.S.)  
(Option 2)**

Fall			Spring		
<b>Freshman Year</b>					
	Num	Cr		Num	Cr
Principles of Chemistry	CHEM-12100	4	Organic Chemistry	CHEM-22100	3
Topics in Chemistry and Biochem	CHEM-12000	1	Principles of Biology	BIOL-12200	4
Principles of Biology	BIOL-12100	4	Statistics with Probability	MATH-24400	4
Calculus for Decision Making	MATH-10800	4	Experimental Chemistry I	CHEM-12400	2
Writing Course <sup>(1)</sup>	WRTG-10600	4	Total		13
	Total	17			
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<b>Sophomore Year</b>					
	Num	Cr		Num	Cr
Organic Chemistry	CHEM-22200	3	Quantitative Chemistry	CHEM-23200	3
Experimental Chemistry II	CHEM-22500	2	Experimental Chemistry III	CHEM-32400	3
Introduction to Physics I <sup>(2)</sup>	PHYS-10100	4	Introduction to Physics II <sup>(2)</sup>	PHYS-10200	4
Electives		6	Electives		6
	Total	15	Total		16
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<b>Junior Year</b>					
	Num	Cr		Num	Cr
Biochemistry I	BIOC-35300	3	Biochemistry II	BIOC-35400	3
Physical Chemistry I	CHEM-33100	3	Genetics	BIOL-22700	4
Electives		9	Electives		9
	Total	15	Total		16
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<b>Senior Year</b>					
	Num	Cr		Num	Cr
Cell Biology	BIOL-35400	4	Topics in Biochemistry	BIOC-48100	3
Electives		12	Electives		12
	Total	16	Total		15
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- 1) All students must complete WRTG-10800, or 11100, or 16400 and be certified as meeting the H&S writing effectiveness requirement.
- 2) Principles of Physics PHYS-11700 (4) and 11800 (4) may be substituted.
- 3) Electives in Biology or Chemistry (must take at least 3 credits):  
 Neurobiology BIOL-31500 (4), Developmental Biology BIOL-34500 (4), Endocrinology BIOL-37600 (4), Environmental Toxicology BIOL-37800 (4), Microbiology BIOL-45200 (4), Plant Physiology BIOL-47300 (4), Experimental Chemistry V CHEM-32600 (3), Physical Chemistry II CHEM-33200 (3), Inorganic Chemistry BIOL-34200 (3), Nuclear Magnetic Resonance CHEM-35600 (3), Advanced Organic CHEM-42100 (3), Advanced Inorganic CHEM-42200 (3), Bio-organic Chemistry CHEM-44200, or Instrumental Analysis CHEM-45200.