

2003-2004
BIOCHEMISTRY MAJOR – Bachelor of Science Degree
 Department of Chemistry and Biochemistry

Major Requirements	Alternative sequence
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Course	Title	Hrs	Tr	UD
CHM 117	Gen Chem Majors	4		
CHM 118	Gen Chem Majors	4		
CHM 317	Org Chem Majors	3		
CHM 319	Org Chem Lab Majors I			
CHM 318	Org Chem Majors II	3		
CHM 320	Org Chem Lab Maj II	1		
CHM 341	Elem Phys Chem	3		
BCH 461	Gen Biochemistry	3		
BCH 462	Gen Biochemistry	3		
BCH 463	Biophysical Chem	3		
BCH 464	Biophy Chem Lab	2		
BCH 467	Analy Biochem Lab	3		
CHM/BCH elective/ list		3		

Course	Title	Hrs	Tr	UD
CHM 113	Gen Chem	4		
CHM 115	Gen Chem (or 116)	5		
CHM 331	Gen Org Chem	3		
CHM 335	Gen Org Chem Lab	1		
CHM 332	Gen Org Chem	3		
CHM 336	Gen Org Chem Lab	1		

Electives: BCH 392, 465
 CHM 325, 327, 424, 431, 453, 471, 481, 485

Related Courses

BIO 187	Gen Biology	4		
BIO 188	Gen Biology	4		
BIO 340	Gen Genetics	4		
BIO 353	Cell Biology	3		
MAT 270	Calculus w/Geom.I	4		
MAT 271	Calculus w/Geom. II	4		
PHY 111	Gen. Physics	3		
PHY 113	Gen. Physics Lab	1		
PHY 112	Gen. Physics	3		
PHY 114	Gen. Physics Lab	1		

Major must include minimum of 67 hours, 12 hours upper division at ASU, "C" minimum in all upper division courses

University General Studies	College of Liberal Arts & Sciences
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First Year Comp ("C" minimum) _____

Second Language _____
 (proficiency through intermediate level, "C" min.)

Literacy/Critical Inquiry (L) _____
Literacy/Critical Inquiry (upper division satisfied by BCH 467)
Mathematical Studies (CS) _____

Humanities (6 hours, upper division, choose from:
 AFH, CSH, ENG, HPS, HUM, PHI, REL, WSH)
All second language literature or civilization courses.
Can NOT double count with University General Studies.

Mathematical Studies (MA) (satisfied by major)

Humanities/Fine Art (HU)
 (6-9 hours, HU and SB must total 15 hours)

Social Behavioral Sciences (6 hours, upper division
 choose from: AFS, ASB, CSS, ECN, GCU, HST/HIS
 PGS, POS, SOC, WST **except for WST 413, 464 and 470**)
Can NOT double count with University General Studies.

Social Behavioral Sciences (SB)
 (6-9 hours, one HU or SB must be upper division)

Bridge Course (see <http://clasdean.la.asu.edu/student/resources/>)

HU and SB Awareness Areas (must cover all three)
 Cultural (C) _____ Global (G) _____ Historical (H) _____

Natural Science/Mathematics (satisfied by major)

Required: 120 total hours, 45 upper division hours, 30 hours in residence at ASU, 2.00 minimum GPA

The schedule presented below is a model program of study that includes all the departmental requirements for courses in chemistry and related subjects. It presents a sequence that accommodates prerequisites for the required courses. Students and advisers should recognize that the order of courses in this outline is a model program and many other plans will work as well.

Year 1

Semester (Fall)	hrs.	Semester (Spr.)	hrs.
CHM 117 Gen. Chem. - Majors	4	CHM 118 Gen. Chem. - Majors	4
MAT 270 Calculus w/Geom. I	4	MAT 271 Calculus w/Geom. II	4
ENG 101 First-year Comp.	3	ENG 102 First-year Comp.	3
		BIO 187 Gen. Biology	4
*Non-major	<u>4-6</u> 15-17	*Non-major	<u>4</u> 15

Year 2

Semester (Fall)	hrs.	Semester (Spr.)	hrs.
BIO 188 Gen. Biology	4	BIO 340 Gen. Genetics	4
CHM 317 Org. Chem. - Majors	3	CHM 318 Org. Chem. - Majors	3
CHM 319 Org. Chem. Lab - Majors	1	CHM 320 Org. Chem. Lab Majors	1
PHY 111 Physics	3	PHY 112 Physics	3
PHY 113 Physics Lab	1	PHY 114 Physics Lab	1
*Non-major	<u>3-5</u> 15-17	*Non-major	<u>3-5</u> 15-17

Year 3

Semester (Fall)	hrs.	Semester (Spr.)	hrs.
BIO 353 Cell Biology	3	BCH 462 Gen. Biochemistry	3
CHM 341 Elem. Phys. Chem.	3	BCH 463 Biophysical Chem.	3
BCH 461 Gen. Biochemistry	3	BCH 467 Analy. Biochem. Lab	3
*Non-major	<u>6-8</u> 15-17	*Non-major	<u>6-8</u> 15-17

Year 4

Semester (Fall)	hrs.	Semester (Spr.)	hrs.
BCH 464 Biophysical Chem. Lab	2	@CHM/BCH elective	3
*Non-major	<u>13-15</u> 15-17	*Non-major	<u>12-14</u> 15-17

* Non-major courses: Courses that satisfy university general studies and College of Liberal Arts and Sciences graduation requirements and any other interests the student chooses to pursue.

@ May be taken any semester to complete the chemistry hours requirement. NOTE: only 3 hrs. of credit for CHM/BCH elective is required.