

Bachelor of Science in Biochemistry

The following is the Department's recommended guide for planning the academic coursework required to complete the B. Sc. Biochemistry major semester by semester.

Entry Level Skills Tests

ENGLISH		MATHEMATICS	
EPT Waiver:	SAT I 550, ACT 24, AP 3 or EAP	ELM Waiver:	SAT I & II 550, ACT 23, AP 3 or EAP
000-141	ENG 088 & ENG 099	00-40	MAT 011, 012, 013, 014, 015, & 016
142-150	ENG 099	42-48	MAT 014, 015, & 016
151	ENG 110	50	G.E. Math

Curriculum

Course Title	Units	Course Title	Units
<i>First Semester:</i>		<i>Second Semester:</i>	
GE A1* Freshman Composition I	3	GE A1* Freshman Composition II	3
CHE 110 General Chemistry I	5	CHE 112 General Chemistry II	5
MAT 191 Calculus I (meets GE B4)	5	MAT 193 Calculus II	5
PHY 130 General Physics I	5	PHY 132 General Physics II	5
<i>Third Semester:</i>		<i>Fourth Semester:</i>	
CHE 230 Quantitative Analysis	4	CHE 460 Chemical Literature	2
BIO 120 Principles of Biology I	4	BIO 122 Principles of Biology II	4
GE E* The Whole Person area	3	GE C2* Humanities - Art Courses area	3
GE A2* Logic/Critical Reasoning area	3	GE A3* Oral Communication area	3
GE B2* Life Science area	3	GE D3* Perspectives on U.S. History area	3
		GE D1* Perspectives on Individuals, Groups, & Society area	3
<i>Fifth Semester:</i>		<i>Sixth Semester:</i>	
CHE 310 Organic Chemistry I	4	CHE 312 Organic Chemistry II	3
CHE 311 Organic Chemistry Lab I	1	CHE 313 Organic Chemistry Lab II	2
CHE 320 Physical Chemistry I	5	CHE 322 Physical Chemistry II	3
GE D2* Global & Historical Perspectives area	3	CHE 420 Advanced Applications for Chemistry	2
GE C3* Humanities - Letters Courses area	3	GE C1* Humanities area	3
Optional Independent Study/Research		Optional Independent Study/Research	
<i>Seventh Semester:</i>		<i>Eighth Semester:</i>	
CHE 450 Biochemistry I	5	CHE 452 Biochemistry II	4
CHE 451 Biochemistry Lab I	1	CHE 453L Biochemistry Lab II	2
BIO 314 Embryology	4	BIO 340 Genetics	3
GE D4* Perspectives on U.S. and California Government area	3	GE F1* Studies in the Humanities area	3
GE F2* Studies in the Natural Sciences area	3	GE F3/G* Studies in Social Science area/Cultural Pluralism area	3
Optional Independent Study/Research		Optional Independent Study/Research	
		Total Units:	130

***General Education (GE) Requirements**

GE A1 courses:	ENG 110, ENG 111 (both required)	GE D1 courses:	AFS 212, ANT 100, ECO 200, PSY 101, SOC 101, SOC 102 (select only one)
GE A2 courses:	PHI 120 or PSY 110 (select only one)	GE D2 courses:	ANT 102, GEO 100, HIS 120, HIS 121, POL 100 (select only one)
GE A3 course:	THE 120	GE D3 course:	HIS 101
GE A4 courses:	LIB 150 (optional)	GE D4 course:	POL 101
GE B1 courses:	CHE 102, EAR 100, GEO 200, PHY 100 (select one)	GE E courses:	HEA 100, HSC 201, KIN 235, REC 100, UNV 101, SOM 201
GE B2 courses:	ANT 101 or BIO 102 (select only one)	GE F1 courses:	HUM 310, 312, 314
GE B3 courses:	BIO 103L or EAR 101L (select only one)	GE F2 courses:	SMT 310, 312, 314, 416
GE B4 courses:	MAT 105, 131, 153, 171, 191 (select only one)	GE F3 courses:	SBS 316, 318**
GE C1 course:	HUM 200	GE F4 courses:	Students may select a course from this category to satisfy one or more of the upper division G.E. requirements from F1-F3 courses above.
GE C2 courses:	ART 100, ART 101, COM 130, DAN 130, MUS 101, MUS 110, THE 100, THE 160 (select only one)	GE G courses:	ANT 312, 335, 389, CHS 300, HIS 305, MUS 401, PHI 383, POL 343, SBS 318, SOC 322, SOC 331, SOC 383, SPA 352
GE C3 courses:	AFS 200, AFS 231, APP 101, CHS 100, ENG 230, FRE 220, HUM 212, PHI 101, PHI 102, SPA 151, SPA 221 (select only one)		

**SBS 318 satisfies both F3 and G areas. Students will receive only three units credit, but will have met both requirements.

Career Options

This program provides the pre-requisites for most medical schools. Graduates also will be prepared for teaching chemistry in secondary schools, employment with industry or government, entry into professional schools such as pharmacy, or dentistry, or entry into law school with a view toward specialization in patent law. It will also prepare students for graduate work to pursue a M.Sc. or Ph. D. in chemistry or biochemistry.

Students are strongly urged to refer to the University Catalog, Class Schedule, or consult with an academic advisor each semester to ensure that they are progressing toward graduation in as timely a manner as possible. Please contact the Chemistry Department for further information: (310) 243-3376.