Biochemistry

For Undergraduates Entering the University before Fall 2012

(All Chemistry/Biochemistry Courses Require a Grade of "C" or Better)

Majors Sequence

CHEM 146 (3) Principles of Gen Chem	_____	OR	CHEM 131 (3) Fundamentals of Gen Chem	_____
CHEM 147 (1) Principles Lab	_____		CHEM 132 (1) Fundamentals Lab	_____
CHEM 237 (4) Organic I with Lab	_____	OR	CHEM 231 (3) Organic I	_____
			CHEM 232 (1) Organic I Lab	_____
CHEM 247 (4) Organic II with Lab	_____	OR	CHEM 241 (3) Organic II	_____
			CHEM 242 (1) Organic II Lab	_____
CHEM 276 (2) Gen Chem and Energetics	_____	OR	CHEM 271 (2) Gen Chem and Energetics	_____
CHEM 277 (3) Bioanalytical Lab	_____			

Supporting Courses

(Grade of "C" or Better Required)

BSCI 105 (4) _____
MATH 140 (4) _____
MATH 141 (4) _____
MATH 241 (4) _____ (recommended)

PHYS 141 (4) _____
PHYS 142 (4) _____

or

PHYS 161 (3) _____
PHYS 260 (3) _____
PHYS 261 (1) _____

Biological Sciences – Lower Level

(One Course Minimum, Grade of "C" or Better)

BSCI 207 (3) Organismal Biology	_____	
BSCI 222 (4) Principles of Genetics	_____	
BSCI 223 (4) General Microbiology	_____	
BSCI 330 (4) Cell Biology & Physiology	_____	(formerly BSCI 230)

1st Semester Freshman Seminar (1-2 cr)

HONR 100 (1) / UNIV 100 (1) / UNIV 101 (2) _____

CORE Program

Fundamental Studies

ENGL 101 _____
ENGL 391 or 393 or 395 _____

Humanities and Arts (9 cr)

HL: Literature _____
HA: Arts _____
HL/HA/HO: Third Course _____

Social Sciences (9 cr)

SH: Social/Political History _____
SB: Behavioral/Social Sciences _____
SB: Behavioral/Social Sciences _____

Diversity course (3 cr) _____

Required Upper Level Courses

CHEM 395	(1)	Professional Issues in Chem/Bchm	_____	Spring semester only
CHEM 425	(4)	Instrumental Methods	_____	
CHEM 481	(3)	Physical Chemistry I	_____	
BCHM 485*	(3)	Physical Biochemistry	_____	Spring semester only
CHEM 483	(2)	Physical Chemistry Lab I	_____	
BCHM 461	(3)	Biochemistry I	_____	
BCHM 462	(3)	Biochemistry II	_____	
BCHM 465	(3)	Biochemistry III	_____	
BCHM 464	(3)	Biochemistry Lab	_____	

* May take CHEM 482 instead

Biological Sciences – Upper Level

(One Course Minimum, Grade of "C" or Better)

BSCI 341	(4)	Introductory Plant Pathology	_____
BSCI 410	(3)	Molecular Genetics	_____
BSCI 411	(3)	Plant Genetics and Molecular Biology	_____
BSCI 413	(3)	Recombinant DNA	_____
BSCI 421	(4)	Cell Biology	_____
BSCI 424	(4)	Pathogenic Microbiology	_____
BSCI 426	(3)	Membrane Biophysics	_____
BSCI 430	(4)	Developmental Biology	_____
BSCI 432	(3)	Cell Differentiation	_____
BSCI 433	(3)	Biology of Cancer	_____
BSCI 434	(4)	Mammalian Histology	_____
BSCI 437	(3)	General Virology	_____
BSCI 440	(4)	Mammalian Physiology	_____
BSCI 442	(4)	Plant Physiology	_____
BSCI 443	(3)	Microbial Physiology	_____
BSCI 445	(4)	Neurophysiology	_____
BSCI 447	(3)	General Endocrinology	_____
BSCI 453	(3)	Cellular Neurophysiology	_____
BSCI 471	(3)	Molecular Evolution	_____
BSCI 485	(4)	Protozoology	_____
BSCI 490	(4)	Plant Structure	_____

Upper Level CORE

Advanced Studies (6 credits – NOT a LFSC course, except Honors Thesis or Capstone)

Course 1: _____

Capstone: Fulfilled with BCHM 465

Courses Needed for Certification by the American Chemical Society:

CHEM 401 and BCHM 461