

BS CHEM: BIOCHEMISTRY (catalog 2014-15 & later) pre-Medical/Dental/Pharmacy preparation-see Advisor

Major Courses (46 hours):

Course Title	Hrs	Course Number
General Chemistry I (with lab)	4	CHEM 1110/1110L
General Chemistry II (with lab)	4	CHEM 1120/1120L
Scientific Communication	2	CHEM 2810
Organic Chemistry I (with lab)	4	CHEM 3010/3010L
Organic Chemistry II (with lab)	4	CHEM 3020/3020L
Quantitative Analysis (with lab)	4	CHEM 3210/3210L
Inorganic Chemistry	3	CHEM 3310
Physical Chemistry I (with lab)	4	CHEM 3710/3710L

Course Title	Hrs	Course Number
Physical Chemistry II (with lab)	4	CHEM 3720/3720L
Chemical Literature	1	CHEM 3820
Instrumental Analysis (with lab)	4	CHEM 4230/4230L
Biochemistry	3	CHEM 4510
Proteins and Nucleic Acids	4	CHEM 4530/4530L
Seminar	1	CHEM 4830
CHEM Research Recommended		CHEM 4997

Related Courses (43 hours):

Course Title	Hrs	Course Number
Physics – Mech/Heat (with lab)	4	PHYS 1030/1030L
or	or	or
Calculus Based Physics (M/H)	4	PHYS 2300/2300L
Calculus with Analytical Geometry I	4	MATH 1950
Principles of Biology I (with lab)	4	BIOL 1110/1110L
Genetics (lab recommended)	3(4)	BIOL 3250(3260)
1 yr Foreign Language	8	

Course Title	Hrs	Course Number
Physics – Elect/Optics (with lab)	4	PHYS 1040/1040L
or	or	or
Calculus Based Physics (E/M)	4	PHYS 2310/2310L
Calculus with Analytical Geometry II	4	MATH 1960
Principles of Biology II and III	7	BIOL 1120/1120L 1130
Biology Elective	4	BIOL 4220, 4720, 4200, 4280 or 4380

General Education (40-41 hours – some fulfilled within major and thus hours reduced):

Category	Hrs	Courses
Rhetoric & Writing	6	ENGL 1010 & 1020
Humanities/FineArts,NonWestern	12,3	*For 2014-15 CATALOG & LATER
or Cul/Civ and Hum/Fine Arts	9,6	*For 2013-14 CATALOG & EARLIER

Category	Hrs	Courses
Behavioral and Social Sciences	6	PSY 1010, SOC 1510 Med recommended
Natural Sciences	8	Completed with Physics requirement
Mathematics and Statistics	7	Math 1950 and Math 2100

Sample Schedule for 2014-15 Catalog:

Freshman		Sophomore		Junior		Senior	
Fall	Hrs	Fall	Hrs	Fall	Hrs	Fall	Hrs
CHEM 1110/1110L	4	CHEM 3010/3010L	4	CHEM 3710/3710L	4	CHEM 3310	3
ENGL 1010	3	CHEM 3210/3210L	4	CHEM 3820	1	CHEM 4230/4230L	4
MATH 1950	4	PHYS 1030/1030L	4	CHEM 4510	3	CHEM 4830	1
BIOL 1110/1110L	4	BIOL 1130	3	For Lang I	4	Behav/Soc Science	3
				Humanities/FineArts	3	Non-Western	3
Total	15	Total	15	Total	15	Total	14
Spring	Hrs	Spring	Hrs	Spring	Hrs	Spring	Hrs
CHEM 1120/1120L	4	CHEM 2810	2	CHEM 3720/3720L	4	CHEM 4530/4530L	4
ENGL 1020	3	CHEM 3020/3020L	4	MATH 2100	3	Behav/Soc Science	3
MATH 1960	4	PHYS 1040/1040L	4	For Lang II	4	Humanities/FineArts	3
BIOL 1120/1120L	4	BIOL 3250 (3260)	3 (4)	BIOL Elective	4	Humanities/FineArts	3
		Humanities/Fine Arts	3			Elective	3
Total	15	Total	16 (17)	Total	15	Total	15

MATH: Students not placed into MATH 1950 add lower MATH classes and take math every semester until MATH 1960 done.

Math Placement is based on minimum ACT scores such that
 If Math ACT 19–, then MATH 1710
 If Math ACT 24–, then MATH 1730
 If Math ACT 26–, then MATH 1720
 If Math ACT 28–, then MATH 1950

STUDENTS who wish to pursue mathematically oriented graduate studies such as Physical Chemistry or Computational/Quantum Chemistry should consider adding Differential Equations and/or additional Calculus.