

# B.S. Biochemistry and Molecular Biology Chemistry Degree

## A Four Year Outline

FALL	SPRING
<b>FIRST YEAR</b>	
CH1110 University Chemistry I AND CH1111 University Chemistry Lab I OR CH1112 University Chem-Studio Lab I	CH1120 University Chemistry II OR CH1122 University Chem-Studio Lab II
4	4
1	5
5	4
CH1800 Biochemistry Orientation	MA2160 Calculus II
1	4
BL1040 Principles of Biology	PH1100 Physics by Inquiry I
4	1
MA1160 Calculus I	PH2100 University Physics I-Mechanics
4	3
UN1001 Perspectives	UN1002 World Cultures
3	4
<b>TOTAL</b>	<b>TOTAL</b>
<b>17</b>	<b>16-17</b>
<b>SECOND YEAR</b>	
CH2410 Organic Chemistry I	CH2420 Organic Chemistry II
3	3
CH2411 Organic Chemistry Lab I	CH2421 Organic Chemistry Lab II
1	2
PH1200 Physics by Inquiry II	MA2321 Elementary Linear Algebra
1	2
PH2200 University Physics II – E&M	MA3521 Elementary Differential Eq.
3	2
CS1121 Intro to Computer Science	UN2001 Revisions
3	3
UN2002 Institutions	Free Electives
3	4
General Education Distribution	
3	
<b>TOTAL</b>	<b>TOTAL</b>
<b>17</b>	<b>16</b>
<b>THIRD YEAR</b>	
CH3510 Physical Chemistry I	CH3540 Biophysical Chemistry*
3	3
CH3511 Physical Chemistry Lab I	CH3541 Biophysical Chemistry Lab
2	2
CH4710 Biomolecular Chemistry I	CH4222 Intro Quant & Instrumental Analysis
3	5
General Education Distribution	CH4720 Biomolecular Chemistry II
6	3
	BL2200 Genetics
	3
<b>TOTAL</b>	<b>TOTAL</b>
<b>14</b>	<b>16</b>
<b>FOURTH YEAR</b>	
CH4995 Research Projects in Biochemistry	CH4910 Senior Seminar II
3	1
BL3210 General Microbiology	CH4995 Research Projects in Biochemistry
4	3
BL3300 Introduction to Genomics	BL4820 Biochemical Lab Techniques I
3	2
BL4030 Molecular Biology	Free Electives
3	3-4
BL4840 Molecular Biology Techniques	General Education Distribution
3	6
<b>TOTAL</b>	<b>TOTAL</b>
<b>16</b>	<b>15-16</b>
<b>GRAND TOTAL = 128 Credits</b>	

\*MA3160 is strongly recommended before taking this course.

**NOTE: 3 Units of co-curricular activities are required (P.E. courses are taught in 0.5 unit classes. Thus, 6 of these are needed for 3 units). It is highly recommended that students take at least one P.E. class during each semester of their first year, if possible.**