

# B.S. Biochemistry and Molecular Biology Degree

## A Four Year Outline

FALL			SPRING		
<b>FIRST YEAR</b>					
CH1150 University Chemistry I	AND	3	CH1160 University Chemistry II	AND	3
CH1151 University Chemistry Lab I	AND	1	CH1161 University Chemistry Lab II	AND	1
CH1153 University Chemistry I Recitation		1	CH1163 University Chemistry II Recitation		1
	OR			OR	
CH1112 University Chem-Studio Lab I		5	CH1122 University Chem-Studio Lab II		5
CH1130 Orientation		1	MA2160 Calculus with Technology II		4
BL1040 Principles of Biology		4	PH1100 Physics by Inquiry I		1
MA1160 Calculus with Technology I		4	PH2100 University Physics I-Mechanics		3
UN1001 Perspectives on Inquiry		3	UN1002 World Cultures		4
<b>TOTAL</b>		<b>17</b>	<b>TOTAL</b>		<b>17</b>
<b>SECOND YEAR</b>					
CH2410 Organic Chemistry I		3	CH2420 Organic Chemistry II		3
CH2411 Organic Chemistry Lab I		1	CH2421 Organic Chemistry Lab II		2
PH1200 Physics by Inquiry II		1	MA2321 Elementary Linear Algebra		2
PH2200 University Physics II – E&M		3	MA3521 Elementary Differential Equations		2
CS1121 Intro to Programming I		3	UN2001 Composition		3
UN2002 Institutions		3	General Education Distribution		3
General Education Distribution		3			
<b>TOTAL</b>		<b>17</b>	<b>TOTAL</b>		<b>15</b>
<b>THIRD YEAR</b>					
CH3510 Physical Chemistry I		3	CH3540 Biophysical Chemistry		3
CH3511 Physical Chemistry Lab I		2	CH3541 Biophysical Chemistry Lab		2
CH4710 Biomolecular Chemistry I		3	CH4720 Biomolecular Chemistry II		3
CH4222 Bioanalytical Chemistry		5	CH4721 Research Methods Biomolecular Chem		3
General Education Distribution		3	BL2200 Genetics		3
			General Education Distribution		3
<b>TOTAL</b>		<b>16</b>	<b>TOTAL</b>		<b>17</b>
<b>FOURTH YEAR</b>					
BL3210 General Microbiology		4	CH4910 Chemistry Seminar		1
BL3300 Introduction to Genomics		3	CH4995 Undergrad Research in Biochemistry**		3
BL4030 Molecular Biology		3	Free Electives		9
CH4995 Undergrad Research in Biochemistry**		3			
General Education Distribution		3			
<b>TOTAL</b>		<b>16</b>	<b>TOTAL</b>		<b>13</b>
<b>GRAND TOTAL = 128 Credits</b>					

**\*\*Concentration Requirements: 6 credits of CH4995 OR BL4840 AND 3 credits of CH or BL 3000-4000 course(s).**

**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.**