

## Course Sequence — BS Biochemistry

<b>First Semester</b>			<b>Second Semester</b>		
CHM 115	Elements & Compounds	3	CHM 116	Chemical Reaction	3
CHM 113	Elements & Cpds Lab I	1	CHM 114	Chemical Reaction Lab	1
MTH 111	Calculus I	4	MTH 112	Calculus II	4
BIO 121	Princ. of Modern Biology I	4	BIO 122	Princ. of Modern Biology II	4
FYF 101	Freshman Foundations	3	ENG 101	Composition	4
	Distribution Requirement	3			
<b>Total Credits</b>		<b>18</b>	<b>Total Credits</b>		<b>16</b>
<b>Third Semester</b>			<b>Fourth Semester</b>		
CHM 231	Organic Chemistry I	3	CHM 232	Organic Chemistry II	3
CHM 233	Organic Chemistry Lab I	1	CHM 234	Organic Chemistry Lab II	1
PHY 201	Physics I	4	PHY 202	Physics II	4
CS 125	Computer Science I	4	CHM 248	Analytical Chemistry	3
	Distribution Requirement	3	CHM 246	Analytical Chemistry Lab	1
	Distribution Requirement	3	MTH 212	Multivariable Calculus	4
<b>Total Credits</b>		<b>18</b>	<b>Total Credits</b>		<b>16</b>
<b>Fifth Semester</b>			<b>Sixth Semester</b>		
CHM 351	Physical Chemistry I	3	CHM 352	Physical Chemistry II	3
CHM 353	Physical Chemistry I Lab	1	CHM 354	Physical Chemistry II Lab	1
CHM 361	Biochemistry I	3	CHM 362	Biochemistry II	3
CHM 341	Instrumental Analysis	3	CHM 370	Integrated Laboratory	1
CHM 343	Instrumental Analysis Lab	1	CHM 390	Junior Seminar	1
	Distribution Requirement	3	BIO 226	Cellular and Molec. Biology	4
				Distribution Requirement	3
<b>Total Credits</b>		<b>14</b>	<b>Total Credits</b>		<b>16</b>
<b>Seventh Semester</b>			<b>Eighth Semester</b>		
CHM 391	Senior Research	2	CHM 392	Senior Research	2
	Distribution Requirement	3	CHM 322	Advanced Inorganic Chem.	3
CHM 371	Integrated Chemistry Lab	1	CHM 372	Integrated Chemistry Lab	1
	Biology Elective	3-4		Biology Elective	3-4
	Free elective	3		Free Elective	3
<b>Total Credits</b>		<b>12-13</b>	<b>Total Credits</b>		<b>12-13</b>
			<b>Grand Total Credits</b>		<b>122</b>

## BS—Biochemistry

Student Name: \_\_\_\_\_

e-mail: \_\_\_\_\_

cell phone/contact info: \_\_\_\_\_

### **General Education Requirements** (29)

#### Skills Requirements (11)

Part 1. Computer Literacy  
\_\_\_ CS 125 (4)

Part 2. Written Communication  
\_\_\_ ENG 101 (4)

Part 3. Oral Communication  
Satisfied with Senior Capstone Project

Part 4. Quantitative Reasoning  
Satisfied with MTH 111  
First Year Foundations  
\_\_\_ FYF 101 (3)

#### Distribution Requirements (18)

##### Area I (Humanities) (9)

\_\_\_ ENG 120  
\_\_\_ HST 101  
\_\_\_ PHL 101 or Foreign Language

##### Area 2 (Scientific World)

Trust me, you'll get enough "science"  
Area 3 (Social Sciences) (6)

\_\_\_ EC 102  
\_\_\_ PS 111                      \_\_\_ PSY 101  
\_\_\_ ANT 101                    \_\_\_ SOC 101

##### Area 4 (Visual/Perform. Arts) (3)

\_\_\_ ART 101                    \_\_\_ MUS 101  
\_\_\_ DAN 101                   \_\_\_ THE 101

### **Math and Physics Requirements:** (20)

\_\_\_ MTH 111 Calculus I (4)  
\_\_\_ MTH 112 Calculus II (4)  
\_\_\_ MTH 212 Multivariable Calculus (4)  
\_\_\_ PHY 201 Physics I (4)  
\_\_\_ PHY 202 Physics II (4)

### **TOTAL Credit Summary**

General Education	29
Math/Physics	20
Chemistry	49
Biology	12
Biology major Electives	6
Free Electives	6
<b>Total needed for Graduation</b>	<b>122</b>

### **Chemistry Major Requirements:** (49)

___ CHM 113	General Chem Lab I	(1)
___ CHM 114	General Chem Lab II	(1)
___ CHM 115	General Chem I	(3)
___ CHM 116	General Chem II	(3)
___ CHM 231	Organic Chem I	(3)
___ CHM 232	Organic Chem II	(3)
___ CHM 233	Organic Chem Lab	(1)
___ CHM 234	Organic Chem Lab II	(1)
___ CHM 246	Analytical Chem Lab	(1)
___ CHM 248	Analytical Chem	(3)
___ CHM 322	Inorganic Chem	(3)
___ CHM 341	Instrumental Analysis	(3)
___ CHM 343	Instrumental Analysis Lab	(1)
___ CHM 351	Physical Chemistry	(3)
___ CHM 352	Physical Chemistry II	(3)
___ CHM 353	Physical Chemistry Lab	(1)
___ CHM 354	Physical Chemistry Lab II	(1)
___ CHM 361	Biochemistry I	(3)
___ CHM 362	Biochemistry II	(3)
___ CHM 370	Integrated Chemistry Lab	} (3 total)
___ CHM 371	Integrated Chemistry Lab	
___ CHM 372	Integrated Chemistry Lab	
___ CHM 390	Junior Seminar	(1)
___ CHM 391	Senior Research	(2)
___ CHM 392	Senior Research	(2)

All Chemistry majors are required to take a total of three (3) credits of Integrated laboratories (CHM 370, 371, 372).

### **Biology Major Requirements:** (12)

\_\_\_ BIO 121 Princ. of Modern Biology I (4)  
\_\_\_ BIO 122 Princ. of Modern Biology II (4)  
\_\_\_ BIO 226 Cell & Molecular (4)

### **Major Bio Electives:** (6-8)

\_\_\_ BIO 325 Endocrinology (4)  
\_\_\_ BIO 326 Immunology & Immunochemistry (4)  
\_\_\_ BIO 327 Medical Microbiology (4)  
\_\_\_ BIO 329 Virology (3)  
\_\_\_ BIO 330 Bioinformatics (3)  
\_\_\_ BIO 345 Genetics (4)

### **Free Electives:** (6)