

ORAL ROBERTS UNIVERSITY  
 DEGREE: **Bachelor of Science**  
 MAJOR: **Biomedical Chemistry (BMC)**  
 MINOR: **Biology**

**DEGREE PLAN SHEET 2017-2018**  
**Biology and Chemistry Department**

TOTAL HOURS REQUIRED 128  
 Hours in General Education 56  
 Hours in Major 34  
 Hours in Cognate 14  
 Hours in Minor 21  
 Hours in Electives 3

Name \_\_\_\_\_  
 Z No. \_\_\_\_\_ Date \_\_\_\_\_  
 Telephone \_\_\_\_\_ Email \_\_\_\_\_

COURSE EARNED	COURSE CODE	COURSE TITLE	CREDIT HOURS	COURSE EARNED	COURSE CODE	COURSE TITLE	CREDIT HOURS
<b>FRESHMAN Semester 1</b>				<b>FRESHMAN Semester 2</b>			
_____	CHE 111	General Chemistry I Lecture	3	_____	CHE 112	General Chemistry II Lecture	3
_____	CHE 111L	General Chemistry I Laboratory	1	_____	CHE 112L	General Chemistry II Laboratory	1
_____	MAT 201	Calculus I	4	_____	MAT 202	Calculus II	4
_____	BIO 111	Introductory Biology I Lecture	3	_____	BIO 112	Introductory Biology II Lecture	3
_____	BIO 111L	Introductory Biology I Laboratory	1	_____	BIO 112L	Introductory Biology II Laboratory	1
_____	PRF 070	Swimming Proficiency	0	_____	COM 101	Oral Communication	3
_____	GEN 150	Whole Person Assessment	1	_____	HPE 001	Health Fitness I	1
_____	COMP 102	Composition II	3	_____	PHP 100	Prehealth Seminar	1
			<u>16</u>				<u>17</u>

<b>SOPHOMORE Semester 3</b>				<b>SOPHOMORE Semester 4</b>			
_____	CHE 211	Organic Chemistry I Lecture	3	_____	CHE 212	Organic Chemistry II Lecture	3
_____	CHE 211L	Organic Chemistry I Laboratory	1	_____	CHE 212L	Organic Chemistry II Laboratory	1
_____	PHY 101	General Physics I Lecture	3	_____	CHE 300	Quantitative Analysis Lecture	2
_____	PHY 101L	General Physics I Laboratory	1	_____	CHE 300L	Quantitative Analysis Laboratory	2
_____	BIO 310	Microbiology Lecture	3	_____	PHY 102	General Physics II Lecture	3
_____	BIO 310L	Microbiology Laboratory	1	_____	PHY 102L	General Physics II Laboratory	1
_____	BLIT 110	Survey of Old Testament Literature	3	_____	BLIT 120	Survey of New Testament Literature	3
_____	HPE 002	Health Fitness II	0.5	_____	HUM 103	Christian Worldview and Culture	3
			<u>15.5</u>	_____	HPE ____	HPE Activity	0.5
							<u>18.5</u>

<b>JUNIOR Semester 5</b>				<b>JUNIOR Semester 6</b>			
_____	CHE 400	Chemical Instrumentation Lecture	2	_____	CHE 449	Chemistry Research	1
_____	CHE 400L	Chemical Instrumentation Laboratory	2	_____	CHE ____	Chemistry Elective	3
_____	CHE 459	Biochemistry Lecture	3	_____	COMP 303	Critical Reading and Writing	3
_____	BIO 290	Methods in Biotechnology	1	_____	THE 103	Spirit Empowered Living	3
_____	BIO ____	Biology Elective Lecture	3	_____	PSY ____	Behavioral Science Elective	3
_____	BIO ____	Biology Elective Lab	1	_____	HPE ____	HPE Activity	0.5
_____	PSY 201	Principles of Psychology	3	_____	<b>Prepare for Summer Internship Program</b>		
_____	HPE ____	HPE Activity	0.5				<u>0</u>
			<u>15.5</u>				<u>13.5</u>

**CHEMISTRY INTERNSHIP DURING THE SUMMER**

<b>SENIOR Semester 7</b>				<b>SENIOR Semester 8</b>			
_____	CHE 303	Physical Chemistry I Lecture	3	_____	CHE 303L	Physical Chemistry I Laboratory	1
_____	CHE 499	Individual Research and Senior Paper	3	_____	CHE 452	Seminar	1
_____	HIS 101	American History	3	_____	CHE ____	Chemistry Elective	3
_____	HUM ____	Humanities Elective	3	_____	HUM ____	Humanities Elective	3
_____	HUM ____	Humanities Elective	3	_____	GOV 101	American Government	3
_____	HPE ____	HPE Activity	0.5	_____	BIO ____	Biology Elective Lecture and Lab	4
			<u>15.5</u>	_____	BIO ____	Human Cadaver Dissection	1
				_____	HPE ____	HPE Activity	0.5
							<u>16.5</u>

\*\*\*See pre-med advisor and recommendations on back page.

This degree plan sheet is intended to be used as a guide to make academic choices of the courses offered. This does not constitute a contract.

# Biology and Chemistry Department

## B.S. in Biomedical Chemistry (BMC) - Minor: Biology

2017-2018

Credit Hours

### General Education

Whole Person Assessment (GEN 150)	1
General Chemistry I and II Lecture and Laboratory	8
Oral Communication (COM 101)	3
English (COMP 102, COMP 303)	6
American History (HIS 101)	3
Christian Worldview and Culture (HUM 103)	3
Humanities Electives (Choice of three of the following: HUM 222*, 233*, 244*, 333*, 250, 255, 260, 270; COMP 101)	9
American Government (GOV 101)	3
Mathematics (MAT 201)	4
Biblical Literature (BLIT 110, 120)	6
Theology (THE 103)	3
Health, Leisure and Sport Sciences (HPE 001, 002; PRF 070) One HPE course per full-time semester at ORU	4
Social Science Electives (Choice of one of the following): FIN 244; PSY 201; SOC 201; MUS 208; SWK 202; SOC 101; SOC 323; BUS 201	3

### General Education Total

56

### Major

Organic Chemistry I and II Lecture and Laboratory (CHE 211 and CHE 212)	8
Quantitative Analysis Lecture and Laboratory (CHE 300) (S)	4
Physical Chemistry I Lecture and Laboratory (CHE 303) (F), (CHE 303L) (S)	4
Chemical Instrumentation Lecture and Laboratory (CHE 400) (F)	4
Chemistry Research (CHE 449) (S)	1
Seminar (CHE 452) (S)	1
Individual Research and Senior Paper (CHE 499) (F)	3
Choose <b>two</b> from the following courses: CHE 459, CHE 455, CHE 473	6
Choose <b>one</b> from the following courses: CHE 469, CHE 456, CHE 304	3

### Major Total

34

### Cognate

Calculus II (MAT 202)	4
Prehealth Seminar (PHP 100)	1
General Physics I Lecture and Laboratory (PHY 101) (F)	4
General Physics II Lecture and Laboratory (PHY 102) (S)	4
Human Cadaver Dissection (BIO 200)(F/S)	1

### Cognate Total

14

### Minor

BIO 111	Introductory Biology I Lecture and Laboratory	4
BIO 112	Introductory Biology II Lecture and Laboratory	4
BIO 209	Methods in Biotechnology	1
BIO 310	Microbiology Lecture and Laboratory (F)	4

### Choose two from the following courses:

BIO 311	Medical Genetics Lecture and Laboratory (S)	8
BIO 312	Human Ecology or Biology Field Course Lecture and Lab (F)	
BIO 410	Medical Parasitology Lecture and Lab (F)	
BIO 411	Molecular Cell Biology Lecture and Laboratory (F)	
BIO 421	General and Comparative Physiology Lecture and Laboratory	
BIO 431	Developmental Biology Lecture and Laboratory (S)	
BIO 454	Special Topics Lecture and Laboratory	
BIO 457	Principles of Immunology Lecture and Laboratory (S)	

### Minor Total

21

### Choose one from the following courses:

PSY 212	Social Psychology	3
PSY 301	Developmental Psychology	
PSY 338	Psychology of Abnormal Behavior	
PSY 305	Physiological Psychology	

### Degree Total

128