

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

DEGREE PLAN SHEET 2018-2019
Biology and Chemistry Department

TOTAL HOURS REQUIRED 129
Hours in General Education 57
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
FRESHMAN Semester 1				FRESHMAN Semester 2			
_____	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
_____	BIO 111	Introductory Biology I Lecture	3	_____	COMP 102	Composition II	3
_____	BIO 111L	Introductory Biology I Laboratory	1	_____	BIO 112	Introductory Biology II Lecture	3
_____	PRF 070	Swimming Proficiency	0	_____	BIO 112L	Introductory Biology II Laboratory	1
_____	GEN 150	Intro. to Whole Person Education	1	_____	HPE 155	Health Fitness	1
_____	COM 101	Oral Communication	3	_____	PHP 100	Prehealth Seminar	1
_____	THE 104	Spirit-Empowered Living I	2	_____	THE 105	Spirit-Empowered Living II	2
			14				15

SOPHOMORE Semester 3				SOPHOMORE Semester 4			
_____	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 111	Christian Life Through Biblical Engagement I	2	_____	BLIT 122	Christian Life Through Biblical Engagement II	2
_____	HPE _____	HPE Activity	0.5	_____	HPE _____	HPE Activity	0.5
_____	MAT 202	Calculus II	4	_____	BIO 200	Human Cadaver Dissection	1
			18.5				15.5

JUNIOR Semester 5				JUNIOR Semester 6			
_____	CHE 400	Chemical Instrumentation Lecture	2	_____	CHE 449	Chemistry Research	1
_____	CHE 400L	Chemical Instrumentation Laboratory	2	_____	CHE _____	Major Elective	3
_____	CHE _____	Major Elective	3	_____	COMP 303	Critical Reading and Writing	3
_____	BIO 290	Methods in Biotechnology	1	_____	PSY _____	Psychology Elective	3
_____	BIO _____	Biology Field Elective Lecture	3	_____	HPE _____	HPE Activity	0.5
_____	BIO _____	Biology Field Elective Lab	1	_____	HUM _____	Humanities Elective	3
_____	PSY 201	Principles of Psychology	3	_____	GEN _____	General Education Elective	3
_____	HPE _____	HPE Activity	0.5	_____	Prepare for Summer Internship Program		0
			15.5				16.5

CHEMISTRY INTERNSHIP DURING THE SUMMER

SENIOR Semester 7				SENIOR Semester 8			
_____	CHE 303	Physical Chemistry I Lecture	3	_____	CHE 303L	Physical Chemistry I Laboratory	1
_____	CHE 499	Individual Research and Senior Paper (F)	3	_____	CHE 452	Seminar	1
_____	_____	Civics Elective	3	_____	CHE _____	Major Elective	3
_____	GEN _____	General Education Elective	3	_____	MAT 232	Quantitative Literacy	3
_____	_____	Foreign Language	3	_____	HUM _____	Humanities Elective	3
_____	HPE 400	Lifelong Wellness	0.5	_____	GEN _____	General Education Elective	3
			15.5	_____	BIO _____	Biology Elective Lecture and Lab	4
				_____	HPE _____	HPE Activity	0.5
							18.5

***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 (BMCH) - Minor: Biology

2018-2019

General Education

Credit Hours

Introduction to Whole Person Education (GEN 150) - counts as HPE activity	1
Oral Communication (COM 101)	3
Composition (COMP 102, COMP 303)	6
Civics (GOV 101, GOV 103, HIS 110, HIS 111, OR HIS 200)	3
Humanities (HUM 201*, 202*, 203*, 204*, 333; ART 103, 104, 307; DANP 125; DRAM 215, 304; MUS 300)	6
*At least one course must be chosen from courses marked with asterisks	
Foreign Language (101, 102, 203, or 204)	3
Biblical Literature (BLIT 111 and 122 or BIB 222 and BIB 261)	4
General Chemistry I Lecture and Lab (CHE 111)	4
General Chemistry II Lecture and Lab (CHE 112)	4
Theology (THE 104, 105)	4
Quantitative Literacy (MAT 232)	3
Health, Leisure and Sport Sciences (HPE 155, 400; PRF 070) One HPE course per full-time semester at ORU	4
Social Science (SOC 101, 201, 323, PSY 201, SWK 202, MUS 208, BUS 201, FIN 244)	3
Scaffolding Interdisciplinary Courses (GEN 301, 380**, 420**, 434**, 456)	9

**At least one course must be chosen from courses marked with two asterisks

General Education Total

57

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 two from the following: CHE 459 Biochem. Lec; CHE 475 Biochem. II-Onco. Chem.; CHE 458 Internship	6
Choose one from the following: CHE 304 Phys. Chem. II; CHE 456 Inorganic; CHE 471 Structure & Bonding	3

Major Total

34

Cognate

Human Cadaver Dissection (BIO 200)	1
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

Cognate Total

14

Electives

Choice of one of the following electives

3

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

Biology Minor

BIO 111	Introductory Biology I Lecture and Laboratory	4
BIO 112	Introductory Biology II Lecture and Laboratory	4
BIO 290	Methods in Biotechnology	1

Choice of one of the following field courses:

4

BIO 312	Human Ecology Lecture and Laboratory
BIO 458	Marine Ecology Lecture and Laboratory
BIO	Biology field course Lecture and Laboratory
AUS	Au Sable field course Lecture and Laboratory

Choice of two of the following courses:

8

BIO 310	Microbiology Lecture and Laboratory** (F)
BIO 311	Medical Genetics Lecture and Laboratory** (S)
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)
BIO	Biology elective (300-level or above)

Minor Total

21

Degree Total

129

**Students majoring in Biomedical Chemistry must choose from courses marked with asterisks.