

ORAL ROBERTS UNIVERSITY
 DEGREE: **Bachelor of Science**
 MAJOR: **Biology**
 CONCENTRATION: **Premedicine (PMD)**
 MINOR: **Biochemistry**

DEGREE PLAN SHEET 2011-2012
Biology and Chemistry Department

TOTAL HOURS REQUIRED 129-131
 Hours in general education 55
 Hours in major 37
 Hours in cognate 3-4
 Hours in Electives 14-15
 Hours in Biochemistry Minor 20

Name _____
 ID _____ Date _____
 Telephone _____ Email _____
 Advisor _____

SEMESTER TAKEN	COURSE CODE	COURSE TITLE	CREDIT HOURS	SEMESTER TAKEN	COURSE CODE	COURSE TITLE	CREDIT HOURS
FRESHMAN Semester 1				FRESHMAN Semester 2			
_____	BIO 111-01	Introductory Biology I Lecture	3	_____	BIO 112-01	Introductory Biology II Lecture	3
_____	BIO 111-61	Introductory Biology I Lab	1	_____	BIO 112-61	Introductory Biology II Lab	1
_____	CHE 111-01	General Chemistry I Lecture	3	_____	CHE 112-01	General Chemistry II Lecture	3
_____	CHE 111-61	General Chemistry I Lab	1	_____	CHE 112-61	General Chemistry II Lab	1
_____	MAT 114	Analysis II	3-4	_____	THE 103	Spirit-Empowered Living	3
_____	or MAT 201	Calculus I		_____	GOV 101	American Government	3
_____	COMP 102	Reading and Writing in Liberal Arts	3	_____	HPE 002	Health Fitness II	1
_____	PRF 070	Swimming Proficiency	0				15
_____	HPE 001	Health Fitness I	1				
_____	GEN 099	Whole Person Assessment	0				
_____	PHP 100	Pre-Health Professions Seminar	1				
		(Semester 1 or 2)	16-17				

SOPHOMORE Semester 3				SOPHOMORE Semester 4			
_____	BIO 310	Microbiology Lecture#	3	_____	BIO _____	Biology Elective—Upper Div. Lecture#	3
_____	BIO 310	Microbiology Lab#	1	_____	BIO _____	Biology Elective—Upper Div. Lab#	1
_____	BIO 370	Methods in Biotechnology	1	_____	CHE 212-01	Organic Chemistry I Lecture	3
_____	CHE 211-01	Organic Chemistry I Lecture	3	_____	CHE 212-61	Organic Chemistry II Lab	1
_____	CHE 211-61	Organic Chemistry I Lab	1	_____	HUM _____	Humanities Elective (see back)	3
_____	HUM 101	Introduction to Humanities	3	_____	COM 101	Oral Communication	3
_____	BIO 200	Human Cadaver Dissection	1	_____	BLIT 120	Survey of New Testament Literature	3
_____	BLIT 110	Survey of Old Testament Literature	3	_____	HPE _____	HPE Activity	0.5
_____	HPE 026	Swimming##	0.5				17.5
			16.5				

May be replaced by HPE Activity if Swimming Proficiency passed

JUNIOR Semester 5				JUNIOR Semester 6			
_____	PHY 101-01	General Physics I Lecture*	3	_____	BIO 372	Introduction to Biological Research	1
_____	PHY 101-61	General Physics I Lab*	1	_____	PHY 102-01	General Physics II Lecture**	3
_____	MAT 332	Biostatistics	3	_____	PHY 102-61	General Physics II Lab**	1
_____	HIS 101	American History	3	_____	HUM _____	Humanities Elective	3
_____	CHE 459	Biochemistry Lecture	3	_____	BIO _____	Biology Elective—Upper Div. Lecture#	3
_____	CHE 459	Biochemistry Lab	1	_____	BIO _____	Biology Elective—Upper Div. Lab#	1
_____	BIO _____	Biology Elective—Upper Div. Lecture#	3	_____	COMP 303	Critical Reading and Writing	3
_____	BIO _____	Biology Elective—Upper Div. Lab#	1	_____	HPE _____	HPE Activity	0.5
_____	HPE _____	HPE Activity	0.5				15.5
			18.5				

**PHY 112 may be substituted.

MCAT should be taken at the end of junior year, April-August.

*PHY 111 may be substituted

SENIOR Semester 7				SENIOR Semester 8			
_____	BIO 499	Research and Senior Paper	3	_____	BIO 451	Biology Seminar	1
_____	PSY 201	Principles of Psychology or	3	_____	BIO 456	Bioethics	3
_____	_____	Social Sciences elective (see back)		_____	_____	Elective+	3-4
_____	_____	Elective++	3	_____	_____	Elective	3
_____	HUM _____	Humanities Elective	3	_____	_____	Elective	3
_____	BIO 312	Ecology or Field Biology Lecture#	3	_____	HPE _____	HPE Activity	0.5
_____	BIO 312	Ecology or Field Biology Lab#	1				13.5-14.5
_____	HPE _____	HPE Activity	0.5				
			16.5				

++See pre-med advisor and recommendations on back page.

+Take 4 hours if MAT 114 was selected in Semester One.

B.S. in Biology
Concentration: Premedicine

2011-2012

General Education	Credit Hours
Whole Person Assessment (GEN 099)	0
English (COMP 102, COMP 303)	6
Oral Communication (COM 101)	3
Introduction to Humanities (HUM 101)	3
Christian Worldview and Culture (HUM 301)	3
Humanities Electives (Choice of two of the following: HUM 222, 233, 244, 333, or HONR 102)	6
Biblical Literature (BLIT 110, 120)	6
Theology (THE 103)	3
Laboratory Science (PHY 101 and 102 or PHY 111 and 112)	8
Mathematics (MAT 332)	3
American History (HIS 101)	3
American Government (GOV 101)	3
Social Sciences Elective (Choice of one of the following):	3
PSY 201 Introduction to Psychology	
SOC 201 Marriage and the Family	
FIN 244 Personal Financial Planning	
Health, Physical Education, and Recreation (Health Fitness I and II, swimming course or proficiency, and six HPE electives)	5
General Education Total	<hr/> 55
 Major	
Introductory Biology Lecture and Laboratory (BIO 111, 112)	8
Introduction to Biological Research (BIO 372)	1
Methods in Biotechnology (BIO 370)	1
Ecology (BIO 312) or Biology Field Course with Laboratory (BIO 458 or Au Sable course)	4
Bioethics (BIO 456)	3
Biology Seminar (BIO 451)	1
Research/Senior Paper (BIO 499)	3
Biology Electives (Choice of four of the following)	16
BIO 310 Microbiology with Laboratory *	
BIO 311 Genetics with Laboratory *	
BIO 411 Molecular Cell Biology with Laboratory *	
BIO 421 General and Comparative Physiology with Laboratory	
BIO 431 Developmental Biology with Laboratory	
BIO 457 Principles of Immunology with Laboratory	
BIO 454 Special Topics (May be taken only once.) (See catalog.)	
Major Total	<hr/> 37
 *These three courses comprise the premedicine concentration.	
 Cognate	
Mathematics (Choice of the following):	
MAT 114 Math Analysis II	3
MAT 201 Calculus I	4
Cognate Total	<hr/> 3-4
 Minor	
General Chemistry Lecture and Laboratory (CHE 111, 112)	8
Organic Chemistry Lecture and Laboratory (CHE 211, 212)	8
Biochemistry Lecture and Laboratory (CHE 459)	4
Minor Total	<hr/> 20
 Electives	
1. Human Anatomy, Human Physiology, Pre-Health Professions Seminar, Medical Seminar, Scientific Terminology, and Quantitative Analysis are possible choices.	
2. Check individual medical school catalogues to see if there are any unique required or recommended courses, and follow advice of the pre-health professions advisor.	
Degree Total	<hr/> 14-15 <hr/> 129-131