DEGREE PLAN SHEET 2014-2015 **Biology and Chemistry Department** MAJOR: Biomedical Chemistry (BMC)

TOTAL HOURS REQUIRED 128 Hours in General Education 56 Hours in Major 34 Hours in Cognate 13 Hours in Minor 20 Hours in Electives 5

Name		
Z No.	Date	_
Telephone	Email	-
Advisor		-

COURSE EARNED	RSE COURSE CREDIT NED CODE COURSE TITLE HOURS		CREDIT HOURS	COURSE EARNED	COURSE CODE	COURSE TITLE	CREDIT HOURS	
	CHE 111 CHE 111 MAT 201 BIO 111 BIO 111 PRF 070 GEN 099 COM 102 HPE 001	FRESHMAN Semester 1 General Chemistry I Lecture General Chemistry I Laboratory Calculus I Introductory Biology I Lecture Introductory Biology I Laboratory Swimming Proficiency Whole Person Assessment Reading and Writing in Liberal Arts Health Fitness I	3 1 3 1 0 3 1 16		CHE 112 CHE 112 MAT 202 BIO 112 BIO 112 COM 101 HPE 002 PHP 100	FRESHMAN Semester 2 General Chemistry II Lecture General Chemistry II Lab Calculus II Introductory Biology II Lecture Introductory Biology II Laboratory Oral Communication Health Fitness II Prehealth Seminar	3 1 3 1 3 1 1 17	
	CHE 211 CHE 211 PHY 101 PHY 101 BIO BIO 290 BLIT 110 HPE	SOPHOMORE Semester 3 Organic Chemistry I Lecture Organic Chemistry I Laboratory General Physics I Lecture General Physics I Lab Biology Elective Lecture Biology Elective Laboratory Methods in Biotechnology Survey of Old Testament Literature HPE Activity	3 1 3 1 1 3 0.5 16.5		CHE 212 CHE 212 CHE 300 CHE 300 PHY 102 PHY 102 BLIT 120 HUM 103 HPE	SOPHOMORE Semester 4 Organic Chemistry II Lecture Organic Chemistry II Lab Quantitative Analysis Lecture Quantitative Analysis Lab General Physics II Lecture General Physics II Lab Survey of New Testament Literatur Christian Worldview and Culture HPE Activity	3 1 2 3 1 3 3 0.5 18.5	
	CHE 303 CHE 400 CHE 400 THE 103 CHE HUM HPE	JUNIOR Semester 5 Physical Chemistry I Lecture Chemical Instrumentation Lecture Chemical Instrumentation Lab Spirit-Empowered Living Major Elective Humanities Elective HPE Activity	3 2 3 3 0.5 16.5		CHE 303 CHE 449 CHE BIO BIO 200 COMP 303 HUM HPE Prepare for	JUNIOR Semester 6 Physical Chemistry I Lab Chemistry Research Major Elective Biology Elective Lecture Human Cadaver Disection Critical Reading and Writing Humanities Elective HPE Activity Summer Internship Program	1 3 3 1 3 0.5 0	
	CHE 499 BIO 312 BIO 312 HIS 101 PSY 201 ————— HPE ——— * or a	SENIOR Semester 7 Individual Research and Senior Pap Ecology * Ecology Lab American History Principles of Psychology or Social Sciences Elective*** General Elective*** HPE Activity	0 3 3 1 3 3 0.5 16.5	<u>- DUKING</u>	CHE 452 CHE HUM PSY GOV 101 HPE	SENIOR Semester 8 Seminar Major Elective Humanities Elective 301/305/338 American Government HPE Activity	1 3 3 3 0.5 13.5	

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

DEGREE PLAN SHEET 2014-2015

Biology and Chemistry Department Biomedical Chemistry (BMC) Major

Total Hours Required: 128

(S)=Spring Semester	
(S)=Spring S	Semester

GENER								
56 Credit Hours Required 56			d	25 Credit Hours Required				
				Credit		(Credit	
For the	Spirit			Hours		ŀ	Hours	
	BLIT	110	Survey of Old Testament Literature	3	CHE 211 Organic Chemistry I Lecture		3	
	BLIT	120	Survey of New Testament Literature	3	CHE 211 Organic Chemistry I Laboratory		1	
	THE	103	Spirit-Empowered Living	3	CHE 212 Organic Chemistry II Lecture		3	
For the	Mind				CHE 200 Quantitative Analysis Lecture (S)		2	
i oi tile	GEN	099	Whole Person Assessment	0	CHE 300 Quantitative Analysis Lecture (3)		2	
	CHE	111	General Chemistry I Lecture	3	CHE 303 Physical Chemistry I Lecture (F)		3	
	CHE	111	General Chemistry I Laboratory	1	CHE 303 Physical Chemistry I Laboratory (S)		1	
	CHE	112	General Chemistry II Lecture	3	CHE 400 Chemical Instrumentation Lecture (F)		2	
	CHE	112	General Chemistry II Laboratory	1	CHE 400 Chemical Instrumentation Laboratory (F)		2	
	COM	101	Oral Communication	3	CHE 449 Chemistry Research (S)		1	
	COMP	102	Reading/Writing in the Liberal Arts	3	CHE 452 Seminar (S)		1	
	COMP	303	Critical Reading/Writing (S Junior Year)	3	CHE 499 Individual Research and Senior Paper (F)		3	
	GOV	101	American Government	3				
	HIS	101	American History	3	MAJOR ELECTIVES			
	MAT	201	Calculus I	4	9 Credit Hours Required		9	
	HUM	103	Christian Worldview and Culture	3				
			Humanities Electives (3 required)	9	Choose two from the following courses:		~	
				ig list:	CHE 455 Openlogical Chemistry (S)	2	0	
			HUM 250 255 260 270 COMP 101 MA	T 315	CHE 455 Oncological Chemistry (S)	3		
			Social Sciences Elective (1 required)	3	CHE 473 Medicinal Chemistry (E)	3		
			BUS 201' FIN 244' MUS 208' PSY 201'	5		5		
			SOC 101, 201, 323: SWK 202		Choose one from the following courses:			
			000 101, 201, 020, 0111 (202		Analytical/Inorganic/Physical		3	
					CHE 304 Physical Chemistry II (S)	3		
					CHE 456 Inorganic Chemistry (S)	3		
For the	Bodv							
	HPE	001	Health Fitness I	1				
	HPE	002	Health Fitness II	1				
	PRF	070	Swimming Course or Proficiency	0	COGNATE REQUIREMENTS			
	One HF	PE cou	urse per full-time semester at ORU	3	13 Credit Hours Required		13	
					MAT 202 Calculus II		4	
					PHP 100 Prehealth Seminar		1	
					Choose one pair from the following courses:		8	
					PHY 101 General Physics I Lec and Lab (F)	4		
					PHY TOZ General Physics II Lec and Lab (S)	4		
					UI DHV 111 Dhunian Llan and Lab Coloulus Parad (S)	1		
					PHY 111 Physics I Lee and Lab — Calculus Based (5)	4		
					PHY 112 Physics II Lec and Lab—Calculus Based (F)	4		
GENERAL ELECTIVES			/ES	BIOLOGY MINOR REQUIREMENTS				
5 Credit	Hours Re	quired		5.0	21 Credit Hours Required		21	
	BIO	Meth	ods in Biotechnology**		BIO 111 Introductory Biology I Lec and Lab		4	
** highly	recomm	endeo	d if you decide to take BIO311/411/431/457		BIO 312 Ecology or Biology field course Lec and Lab(F)		4	
Seek yo	ur Advise	or's ac	lvice.		BIO 458 or Au Sable Course			
Select c	ourses re	eflect	requirements of your future medical school.		BIO 112 Introductory Biology II Lec and Lab		4	
Biostatis	tics, Bio	ethics	, Human Cadaver Dissection, Human Anato	omy,	BIO 209 Methods in Biotechnology		1	
Human Physiology, or upper division PSY (301, 305, 338) are		Cnoose two from the following courses:	1	8				
recomm		n mea	icai sci 1001.		BIO 311 Cenetics Lec and Leb (S)	4 ∕		
					BIO 411 Molecular Cell Biology Les and Lab/E)	7 1		
					BIO 421 General and Comparative Physiology	4		
					Leo and Leb/S	1		
					DIO 121 Developmental Dialogy Los and Lab (2)	4 1		
					DIO 451 Developmental Diology Lec and Lab(S)	4		
					DIO 454 Special Topics Lec and Lab	4		
					BIO 457 Principles of Immunology Lec and Lab(S)	4		