

ORAL ROBERTS UNIVERSITY  
 DEGREE: **Bachelor of Science**  
 MAJOR: **Mathematics (MAT)**  
 CONCENTRATION: **Premedicine (PMMC)**

**DEGREE PLAN SHEET 2016-2017**  
**Mathematics - Premedicine**  
**Computing and Mathematics Department**

TOTAL HOURS REQUIRED 128  
 Hours in general education 55  
 Hours in major 30  
 Hours in concentration 39  
 Electives 4

Name \_\_\_\_\_  
 ID \_\_\_\_\_ Date \_\_\_\_\_  
 Telephone \_\_\_\_\_ Email \_\_\_\_\_  
 Advisor \_\_\_\_\_ Minor \_\_\_\_\_

SEMESTER TAKEN	COURSE CODE	COURSE TITLE	CREDIT HOURS	SEMESTER TAKEN	COURSE CODE	COURSE TITLE	CREDIT HOURS
<b>FRESHMAN Semester 1</b>				<b>FRESHMAN Semester 2</b>			
_____	HUM 103	Christian Worldview & Culture	3	_____	HUM _____	Humanities Options <sup>5</sup>	3
_____	MAT 201	Calculus I	4	_____	MAT 202	Calculus II	4
_____	PSY 201	Principles of Psychology	3	_____	PSY _____	Elective	3
_____	GEN 099	Whole Person Assessment	0	_____	BIO 112	Introductory Biology II Lecture	3
_____	PRFH 070	Swimming Proficiency	0	_____	BIO 112	Introductory Biology II Lab	1
_____	PHP 100	Pre-health Professionals Seminar	1	_____	HPE 002	Health Fitness II	1
_____	BIO 111	Introductory Biology I Lecture	3				15
_____	BIO 111	Introductory Biology I Lab	1				
_____	HPE 001	Health Fitness I	1				
			<u>16</u>				

<b>SOPHOMORE Semester 3</b>				<b>SOPHOMORE Semester 4</b>			
_____	HUM _____	Humanities Options <sup>5</sup>	3	_____	PHY 111	Physics I Lecture	3
_____	HIS 101	American History	3	_____	PHY 111	Physics I Lab	1
_____	MAT 207	Discrete Mathematics (Gen Ed)	3	_____	GOV 101	American Government	3
_____	BLIT 110	Survey of Old Testament Literature	3	_____	BIO 300+	Biology Elective Lecture and Lab	4
_____	CHE 111	General Chemistry I Lecture	3	_____	CHE 112	General Chemistry II Lecture	3
_____	CHE 111	General Chemistry I Lab	1	_____	CHE 112	General Chemistry II Lab	1
_____	HPE 026	Beginning Swimming <sup>3</sup> OR HPE Activity	0.5	_____	HPE _____	^ HPE Activity	0.5
			<u>16.5</u>				<u>15.5</u>

<b>JUNIOR Semester 5</b>				<b>JUNIOR Semester 6</b>			
_____	MAT 321	Calculus III	4	_____	COM 101	Oral Communication	3
_____	MAT 332	Biostatistics	3	_____	HUM _____	Humanities Options <sup>5</sup>	3
_____	CHE 211	Organic Chemistry I Lecture	3	_____	CHE 212	Organic Chemistry II Lecture	3
_____	CHE 211	Organic Chemistry I Lab	1	_____	CHE 212	Organic Chemistry II Lab	1
_____	PHY 112	Physics II Lecture	3	_____	MAT _____	Mathematics Elective	3
_____	PHY 112	Physics II Lab	1	_____	MAT 498	Senior Paper/Project Preparation	1
_____	HPE _____	^ HPE Activity	0.5	_____	MAT 211	Differential Equations	3
			<u>15.5</u>	_____	HPE _____	^ HPE Activity	0.5
							<u>17.5</u>

<b>SENIOR Semester 7</b>				<b>SENIOR Semester 8</b>			
_____	MAT 499	Senior Paper/Project	2	_____	MAT _____	Mathematics Elective	3
_____	COMP 102	Composition II	3	_____	MAT 312	Linear and Matrix Algebra	3
_____	CHE 459	Biochemistry Lecture and Lab	4	_____	BLIT 120	Survey of New Testament Literature	3
_____	THE 103	Spirit-Empowered Living	3	_____	COMP 303	Critical Reading & Writing	3
_____	MAT _____	Mathematics Elective	3	_____	_____	General Elective	3
_____	_____	General Elective	1	_____	HPE _____	^ HPE Activity	0.5
_____	HPE _____	^ HPE Activity	0.5				15.5
			<u>16.5</u>				

<sup>3</sup>If swimming proficiency (PRFH 070) NOT yet passed.

<sup>5</sup>See list of Humanities (HUM) options on the back.

Courses above calculus are offered according to the following schedule (S - Spring, F - Fall, \* Even years only, \*\* Odd years only):

Differential Equations (MAT 211) <sup>S</sup>	Discrete Mathematics (MAT 207) <sup>F</sup>
Linear and Matrix Algebra (MAT 312) <sup>S</sup>	Senior Paper/Project Prep. (MAT 498) <sup>S</sup>
College Geometry (MAT 313) <sup>F**</sup>	Higher Algebra (MAT 401) <sup>S*</sup>
Elementary Number Theory (MAT 318) <sup>F*</sup>	Advanced Calculus I (MAT 421) <sup>S**</sup>
Probability and Statistics (MAT 325) <sup>F</sup>	Senior Paper/Project (MAT 499) <sup>F</sup>
Mathematical Methods in Physics (PHY 455) <sup>F**</sup>	

^ Each HPE course is 1 credit hour, but students can petition to take it for .5 credits. Course work remains the same.

**2016-2017  
B.S. in Mathematics (MAT)  
Premedicine Concentration (PMMC)**

<b>General Education</b>	<b>Credit Hours</b>	<b>Semester to be taken</b>
Whole Person Assessment (GEN 099)	0	1
English (COMP 102, 303)	6	7,8
Oral Communication (COM 101)	3	6
<sup>b</sup> Humanities (HUM 103 plus three of the following: HUM 222*, 233*, 244*, 333*, 250, 255, 260, 270, COMP 101^, MAT 315)	12	1, 2, 3, 6
*At least one course must be chosen from courses marked with		
^Can count for humanities for students who have not yet taken COMP 102.		
Discrete Mathematics (MAT 207)	3	3
Bible Literature (BLIT 110, 120)	6	3,4
Theology (THE 103)	3	7
Introductory Biology I, II Lecture and Laboratory (BIO 111, 112)	8	1,2
American History (HIS 101)	3	3
American Government (GOV 101)	3	4
Social Sciences (PSY 201)	3	2
Health, Physical Education and Recreation (one course per full-time semester at ORU, including HPE 001 and 002, swimming course or proficiency, and electives)**	5	Each
<b>General Education Total</b>	<b>55</b>	
<b>Major</b>		
Calculus I (MAT 201)	4	1
Calculus II (MAT 202)	4	2
Differential Equations (MAT 211)	3	6
Linear and Matrix Algebra (MAT 312)	3	8
Calculus III (MAT 321)	4	5
Choice of two of the following four courses:	6	
Probability and Statistics (MAT 325)		6 or 8
Higher Algebra (MAT 401)		6 or 8
Advanced Calculus (MAT 421)		6 or 8
Mathematical Methods in Physics (PHY 455)		5 or 7
Mathematics Elective (MAT 300-400) <sup>4</sup>	3	5, 6, 7, 8
Senior Paper/Project Preparation (MAT 498)	1	6
Senior Paper/Project (MAT 499)	2	7
<sup>4</sup> MAT 332 (Biostatistics) does not count toward a major or minor mathematics.		
<b>Major Total</b>	<b>30</b>	
<b>Concentration</b>		
Psychology (PSY 301, 305, or 338)	3	2
General Chemistry I, II Lecture and Laboratory (CHE 111, 112)	8	3,4
Organic Chemistry I, II Lecture and Laboratory (CHE 211, 212)	8	5,6
Physics I, II Lecture and Laboratory (PHY 111, 112)	8	5,6
Biostatistics (MAT 332)	3	5
Biochemistry Lecture and Laboratory (CHE 459)	4	7
Biology Elective Lecture and Laboratory (BIO 300+)	4	8
Pre-health Professions Seminar (PHP 100)	1	1
<b>Concentration Total</b>	<b>39</b>	
<b>Electives</b> (BIO 200 & CSC 111 or PHS 223 Lec. & Lab)***	<b>4</b>	<b>7, 8</b>
<b>Degree Total</b>	<b>128</b>	

\*\*Each HPE course is 1 credit hour, but students can petition to take it for .5 credits. Course work remains the same.

\*\*\*Recommended: If time permits we recommend taking all these plus PHS 224 Lecture & Lab and CSC 206