

# PHYSICS (PREMEDICAL- PHYSICS CONCENTRATION), BACHELOR OF SCIENCE

The University Core Curriculum is the same across all undergraduate bachelor's programs. Please consult the academic advisor for your designated major before selecting courses in this area.

## Summary

Code	Title	Hours
	General Education Core Curriculum (p. 1)	42
	Major Requirements (p. 1)	40
	Other Requirements (p. 1)	38
	<b>Total Hours</b>	<b>120</b>

## General Education Core Curriculum (Standard)<sup>1</sup>

Code	Title	Hours
<b>Communication</b>		
ENGL 1301	Freshman English I	3
ENGL 1302	Freshman English II	3
<b>Mathematics</b>		
MATH 2312	Precalculus Math	3
<b>Life and Physical Sciences</b>		
CHEM 1311	Chemistry I	3
PHYS 2325	University Physics I	3
<b>Language, Philosophy, and Culture</b>		
ENG 2XX <sup>2</sup>		3
<b>Creative Arts</b>		
MUSI 1306	Music Appreciation	3
<b>American History</b>		
HIST 1301	Soc & Pol Hist US to 1877	3
HIST 1302	Soc & Pol Hist US Since 1877	3
<b>Government/Political Science</b>		
POLS 2305	American Government	3
POLS 2306	Texas Government	3
<b>Social and Behavioral Sciences</b>		
	Select one of the following:	3
PSYC 2301	General Psychology	
ECON 2301	Principles Of Economics I	
SOCI 1301	Introduction To Sociology	
<b>Institutional Options</b>		
COMM 1321	Business & Professional Comm	3
	or COMM 1315 Public Address	
CHEM 1312	Chemistry II	3
	<b>Total Hours</b>	<b>42</b>

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It is recommended that the student consider the following courses to be better prepared for the MCAT exam: SOCI 1301 Introduction To Sociology, BIOL 2301 Human Anat & Phys I, BIOL 231 Cell Biology, BIOL 338 Genetics, MATH 1342 Elementary Statistics. Consult with advisor.

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ENG 2XX – ENGL 2328 African-American Literature or ENGL 2332 World Literature I or ENGL 2333 World Literature II)

## Major (Physics)

Code	Title	Hours
PHYS 152	Pre University Physics	3
PHYS 217	University Physics Laboratory I	1
PHYS 2326	University Physics II	3
PHYS 218	University Physics Laboratory II	1
PHYS 332	Intro to Modern Physics	3
PHYS 333	Elec and Mag I	3
PHYS 336	Thermo & Stat Phys	3
PHYS 338	Math Methods I	3
PHYS 341	Mechanics I	3
"PHYS 360 Adv Undergrad Lab"		3
PHYS 415	Senior Thesis I	1
PHYS 416	Senior Thesis II	1
PHYS 432	Quantum Mechanics I	3
PHYS 437	Nuclear Physics I	3
PHYS 484	Topics in Physics (Course to be taken twice)	6
	<b>Total Hours</b>	<b>40</b>

## Other Requirements

Code	Title	Hours
MATH 2413	Calculus & Analytic Geomtry I	4
MATH 2414	Calculus&Analytic Geometry II	4
MATH 243	Calculus & Analytic Geo III	4
MATH 251	Differential Equations	3
FS 102	Freshman Seminar/ first Year Experience	1
BIOL 1306	Biological Science I	3
BIOL 111	Biological Science Lab I	1
BIOL 1307	Biological Science II	3
BIOL 112	Biological Science Lab II	1
CHEM 111	Chemistry I Lab	1
CHEM 112	Chemistry II Lab	1
CHEM 231	Organic Chem I	3
CHEM 211	Organic Chem I Lab	1
CHEM 232	Organic Chem II	3
CHEM 212	Organic Chem II Lab	1
CHEM 343	Biochemistry	3
CHEM 343L	Biochemistry Lab	1
	<b>Total Hours</b>	<b>38</b>

Course	Title	Hours	Fourth Year
<b>First Year</b>			<b>Seventh Semester</b>
<b>First Semester</b>			PHYS 333 Elec and Mag I 3
ENGL 1301	Freshman English I	3	PHYS 415 Senior Thesis I 1
PHYS 152	Pre University Physics	3	PHYS 432 Quantum Mechanics I 3
FS 102	Freshman Seminar/ first Year Experience	1	PHYS 484 Topics in Physics 3
CHEM 1311	Chemistry I	3	CHEM 343 Biochemistry 3
CHEM 111	Chemistry I Lab	1	CHEM 343L Biochemistry Lab 1
MATH 2312	Precalculus Math	3	<b>Hours</b> <b>14</b>
<b>Hours</b> <b>14</b>			<b>Eighth Semester</b>
<b>Second Semester</b>			PHYS 338 Math Methods I 3
ENGL 1302	Freshman English II	3	PHYS 416 Senior Thesis II 1
PHYS 2325	University Physics I	3	PHYS 437 Nuclear Physics I 3
PHYS 217	University Physics Laboratory I	1	PHYS 484 Topics in Physics 3
CHEM 1312	Chemistry II	3	MUSI 1306 Music Appreciation 3
CHEM 112	Chemistry II Lab	1	or ARTS 1315 or Intro African Art
MATH 2413	Calculus & Analytic Geomtry I	4	<b>Hours</b> <b>13</b>
<b>Hours</b> <b>15</b>			<b>Total Hours</b> <b>120</b>
<b>Second Year</b>			1
<b>Third Semester</b>			ENG 2XX – ENGL 2328 African-American Literature or ENGL 2332 World Literature I or ENGL 2333 World Literature II
HIST 1301	Soc & Pol Hist US to 1877	3	It is strongly recommended that the student consider the following courses to be better prepared for the MCAT exam: SOCI 1301 Introduction To Sociology, BIOL 1306 Biological Science I, BIOL 231 Cell Biology, BIOL 338 Genetics, MATH 1342 Elementary Statistics. Consult with advisor.
PHYS 2326	University Physics II	3	
PHYS 218	University Physics Laboratory II	1	
MATH 2414	Calculus&Analytic Geometry II	4	
BIOL 1306	Biological Science I	3	
BIOL 111	Biological Science Lab I	1	
<b>Hours</b> <b>15</b>			
<b>Fourth Semester</b>			
HIST 1302	Soc & Pol Hist US Since 1877	3	
PHYS 332	Intro to Modern Physics	3	
MATH 243	Calculus & Analytic Geo III	4	
PSYC 2301	General Psychology	3	
BIOL 1307	Biological Science II	3	
BIOL 112	Biological Science Lab II	1	
<b>Hours</b> <b>17</b>			
<b>Third Year</b>			
<b>Fifth Semester</b>			
POLS 2305	American Government	3	
PHYS 336	Thermo & Stat Phys	3	
PHYS 341	Mechanics I	3	
ENG 2XX - Upper Level English <sup>1</sup>		3	
CHEM 231	Organic Chem I	3	
CHEM 211	Organic Chem I Lab <sup>2</sup>	1	
<b>Hours</b> <b>16</b>			
<b>Sixth Semester</b>			
POLS 2306	Texas Government	3	
"PHYS 360 Adv Undergrad Lab"		3	
MATH 251	Differential Equations	3	
COMM 1321	Business & Professional Comm	3	
CHEM 232	Organic Chem II	3	
CHEM 212	Organic Chem II Lab	1	
<b>Hours</b> <b>16</b>			