

## Bachelor of Science Degree in Physics – Pre-Health Care Concentration (BIC)

*A Suggested Sequence of Required Courses (2017-2018 Catalog)*

F r e s h m a n Y e a r					
	Fall			Spring	
_____	0	Chapel (CHA 1088)	_____	0	Chapel (CHA 1088)
_____	2	BIC 1212 Examined Life I	_____	3	CHE 1301/1101
_____	3	BIC 1314 World Cultures I	_____	3	BIC 1324 World Cultures II
_____	4	BIC 1413 Rhetoric I	_____	3	BIC 1323 Rhetoric II
_____	3	MTH 1321 (if eligible) Calculus I	_____	3	MTH 1322 Calculus II
_____	4	<b>PHY 1420 Physics I (Cal. Based)</b>	_____	4	<b>PHY 1430 Physics II (Cal. Based)</b>
<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>16</b>	
S u m m e r					
	First			Second	
_____	4	BIO 1305/1105 Biology I w/ Lab	_____	4	BIO 1306/1106 Biology II w/ Lab
_____	3	CHE (1302/1102) Chemistry I w/ Lab			
<b>Total:</b>	<b>7</b>		<b>Total:</b>	<b>4</b>	
S o p h o m o r e Y e a r					
	Fall			Spring	
_____	3	BIC 2334 World Cultures III	_____	3	BIC 2344 World Cultures IV
_____	3	CHE 3331 Organic Chemistry I	_____	3	CHE 3332 Organic Chemistry II
_____	3	MTH 2321 Calculus II	_____	2	CHE 3238 Organic Chemistry Lab
_____	1	<b>PHY 2135 Basic Electronics Lab</b>	_____	1	<b>PHY 2190 Intr. To Research</b>
_____	3	<b>PHY 2350 Modern Physics</b>	_____	3	<b>PHY 2360 Math. And Comp. Physics</b>
_____	3	MTH 2311 Linear Algebra	_____	3	MTH 3325 Ordinary Diff. Equations
<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>15</b>	
J u n i o r Y e a r					
	Fall			Spring	
_____	3	BIC 2330 Social World I	_____	3	BIC 2340 Social World II
_____	3	BIO 2306 Genetics	_____	4	BIO (3000-4000 level; BIO 3422 recommended)
_____	3	MTH 3326 Partial Diff. Equations	_____	3	<b>PHY 3330 Int. Electricity and Mag.</b>
_____	1	<b>PHY 3175 Int. Physics Lab I</b>	_____	3	<b>PHY 3373 Intr Quantum Mechanics II</b>
_____	3	<b>PHY 3320 Int. Classical Mechanics</b>	_____	3-4	Foreign Language - 1402/2310 (see reverse)
_____	3	<b>PHY 3372 Intro. Quantum Mech. I</b>	_____	1	Lifetime Fitness
_____	3-4	Foreign Language 1401/12 (see reverse)			
<b>Total:</b>	<b>16-17</b>		<b>Total:</b>	<b>16-17</b>	
S e n i o r Y e a r					
	Fall			Spring	
_____	1	<b>PHY 4190 Dissemination of Research</b>	_____	4	CSI (1430 recommended)
_____	3	<b>PHY 4340 Stat. and Thermal Physics</b>	_____	1	Lifetime Fitness
_____	0	<b>PHY 4001 Exit Exam</b>	_____	4	BIO (3000-4000 level)
_____	3	Foreign Language 2310	_____	3	Foreign Language 2320
_____	3	BIO (3000-4000 level; see below)	_____	3	BIC 3358 Biblical Heritage/Ethics
_____	3	PSY 1305 Intro to Psychology (for MCAT prep)			
<b>Total:</b>	<b>13</b>		<b>Total:</b>	<b>15</b>	

*36 of which must be at the 3000/4000 level.*

### Notes about major requirements:

- This concentration is designed for students with an interest in medicine, dentistry, or other health related professions, and it satisfies the medical/dental preprofessional program requirements.
- Prior to taking PHY 4190, students are expected to make substantial progress on a research project. Research typically begins when PHY 2190 is taken in the sophomore year. Students involved in research during their junior year should enroll in PHY 3V95 (Undergraduate Research). In addition, students are strongly encouraged to participate in summer research opportunities.
- BIO 3000-4000 level electives: Pre-Med/Pre-Dent admissions require that two additional biology courses be completed beyond the basic 1305-1105 and 1306-1106. Given the advanced-level requirement under your major, you will need to take BIO 3422 (Human Physiology) and CHE 4341 (Biochemistry - recommended).
- Many required courses are offered only one time each year in either the fall semester or spring semester.
- Check your degree audit often through Bearweb to ensure that you are making timely progress toward your degree.
- For more information, see the undergraduate catalog.