

Physics Major (B.S.)
2009-2010 - Option 1

Suggested Sequence of Courses

Bethel University/College of Arts & Sciences

<i>Fall</i>		<i>Interim</i>		<i>Spring</i>		<i>Year</i>	
<u>Freshman</u>							
PHY290D	General Physics I	4	Nature of Persons (N) course	3	PHY295	General Physics II	4
MAT124M	Calculus 1	4			MAT125	Calculus 2	4
GES106	Introduction to the Liberal Arts	1			GES130	Christianity & Western Culture*	4
GES110	College Writing	3			BIB101	Introduction to the Bible	3
GES125	Introduction to the Creative Arts	<u>4</u>					
		16		3			15
							34
<u>Sophomore</u>							
PHY300	Electronics	4	World Cultures (U) course	3	PHY310	Modern Physics	4
MAT223	Multivariable Calculus	3			MAT222	Differential Equations	3
	Second Language (S) course*	4			COS205	Scientific Computing	3
THE201	Christian Theology	3				Contemporary Western Life and Thought (L) course	3
	Physical Well-being (Y) course	1				Leisure and Lifetime Sports (Q) course	<u>1</u>
		15		3			14
							32
<u>Junior</u>							
PHY320	Math Methods in Physics & Eng.	4	Science, Technology, and Society (K) course	3	PHY350	Computer Methods in Physics & Eng. ^a	4
PHY400	Electricity & Magnetism (alt. years)	4			PHY330	Optics (alt. years) or PHY430 Topics in Contemporary Optics (alt. yrs.)	4
	Interpreting Biblical Themes (J) course	3			PHY440	Quantum Mechanics (alt. years)	4
PHY360	Physics Research Seminar I	1			PHY365	Physics Research Seminar II	<u>1</u>
	Comparative Systems (G) course	<u>3</u>		3			13
		15					31
<u>Senior</u>							
PHY340	Mechanics	4			PHY410	Thermodynamics (alt. years)	4
PHY490	Research	3				Electives	8
	Contemporary Christian Issues (P) course	3					
	Elective	<u>3</u>					
		13					12
							25
							122

_____ Artistic Experience (A) _____ Cross-cultural Experience (Z)

* Students must complete through the second semester of a first year language course or equivalent. (Check the Catalog for details of this option.)

▪ This program assumes a student will use MAT124M and PHY290D to meet the general education Mathematics and Laboratory Science requirements.

^a COS344 Numerical Methods (offered in fall) may be substituted for PHY350.

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)

Physics Major (B.S.)
2009-2010 - Option 2 – Humanities Option

Suggested Sequence of Courses

Bethel University/College of Arts & Sciences

<i>Fall</i>		<i>Interim</i>		<i>Spring</i>		<i>Year</i>	
<u>Freshman</u>							
PHY290D	General Physics I	4	Nature of Persons (N) course	3	PHY295	General Physics II	4
MAT124M	Calculus 1	4			MAT125	Calculus 2	4
GES106	Introduction to the Liberal Arts	1			GES146	Western Humanity in Christian Perspective II	4
GES145	Western Humanity in Christian Perspective I	4			BIB101	Introduction to the Bible	3
GES110	College Writing	<u>3</u>					
		16		3			15
							34
<u>Sophomore</u>							
PHY300	Electronics	4	World Cultures (U) course	3	PHY310	Modern Physics	4
MAT223	Multivariable Calculus	3			MAT222	Differential Equations	3
	Second Language (S) course*	4			COS205	Scientific Computing	3
	Contemporary Western Life and Thought (L) course	3			THE201	ChristianTheology	3
		<u>14</u>		3		Physical Well-being (Y) course	<u>1</u>
							14
							31
<u>Junior</u>							
PHY320	Math Methods in Physics & Eng.	4	Science, Technology, and Society (K) course	3	PHY350	Computer Methods in Physics & Eng. ^a	4
PHY400	Electricity & Magnetism (alt. years)	4			PHY330	Optics (alt. years)	4
PHY360	Physics Research Seminar I	1				or PHY430 Topics in Contemporary Optics (alt. yrs.)	4
	Interpreting Biblical Themes (J) course	3			PHY365	Physics Research Seminar II	1
	Elective	3			PHY440	Quantum Mechanics (alt. years)	4
		<u>15</u>		3		Leisure and Lifetime Sports (Q) course	<u>1</u>
							14
							32
<u>Senior</u>							
PHY340	Mechanics	4			PHY410	Thermodynamics (alt. years)	4
PHY490	Research	3				Contemporary Christian Issues (P) course	3
	Comparative Systems (G) course	3				Electives	5
	Elective	<u>3</u>					
		13					12
							<u>25</u>
							122

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