

**Physics Major (B.A.)**  
**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              |                               |               |        | Physical Well-being (Y) course                     | 1         |
| BIB101           | Introduction to the Bible               | <u>3</u>       |                               |               |        |  |           |
|                  |   | 15             |                               | 3             |        |  | 13        |
|                  |   |                |                               |               |        |  | 31        |
| <u>Sophomore</u> |   |                |                               |               |        |  |           |
| PHY300           | Electronics                             | 4              | Contemporary Western Life and | 3             | PHY310 | Modern Physics                                     | 4         |
| MAT223           | Multivariable Calculus                  | 3              | Thought (L) course            |               | MAT222 | Differential Equations                             | 3         |
| GES125           | Introduction to the Creative Arts       | 4              |                               |               |        | World Cultures (U) course                          | 3         |
|                  | Second Language (S) course*             | <u>4</u>       |                               |               | THE201 | Christian Theology                                 | <u>3</u>  |
|                  |   | 15             |                               | 3             |        |  | 13        |
|                  |   |                |                               |               |        |  | 31        |
| <u>Junior</u>    |   |                |                               |               |        |  |           |
| PHY320           | Math Methods in Physics & Engineering   | 4              | Science, Technology, and      | 3             | PHY330 | Optics (alt. yrs)                                  | 4         |
|                  | Comparative Systems (G) course          | 3              | Society (K) course            |               |        | or PHY430 Topics in Contemporary Optics (alt. yrs) |           |
|                  | Electives                               | 7              |                               |               |        | Leisure and Lifetime Sports (Q) course             | 1         |
|                  |   |                |                               |               |        | Elective (Physics course recommended)              | 4         |
|                  |   | <u>14</u>      |                               | 3             |        | Electives  | <u>6</u>  |
|                  |   |                |                               |               |        |  | 15        |
|                  |   |                |                               |               |        |  | 32        |
| <u>Senior</u>    |   |                |                               |               |        |  |           |
|                  | Physics elective (300-400 level)        | 4              |                               |               |        | Physics elective (300-400 level)                   | 4         |
|                  | Interpreting Biblical Themes (J) course | 3              |                               |               |        | Contemporary Christian Issues (P) course           | 3         |
|                  | Elective (Physics course recommended)   | 4              |                               |               |        | Elective (Science course recommended)              | 4         |
|                  | Elective                                | <u>3</u>       |                               |               |        | Elective   | <u>3</u>  |
|                  |   | 14             |                               |               |        |  | 14        |
|                  |   |                |                               |               |        |  | <u>28</u> |
|                  |   |                |                               |               |        |  | 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.

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.A.)**  
**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              |   |               | GES110 | College Writing                                    | 3         |
| BIB101           | Introduction to the Bible                   | <u>3</u>       |   |               |        |  |           |
|                  |   | 16             |   | 3             |        |  | 15        |
|                  |   |                |   |               |        |  | 34        |
| <u>Sophomore</u> |   |                |   |               |        |  |           |
| PHY300           | Electronics                                 | 4              | Elective                                    | 3             | PHY310 | Modern Physics                                     | 4         |
| MAT223           | Multivariable Calculus                      | 3              |   |               | MAT222 | Differential Equations                             | 3         |
| THE201           | Christian Theology                          | 3              |   |               |        | World Cultures (U) course                          | 3         |
|                  | Second Language (S) course*                 | 4              |   |               |        | Contemporary Western Life and Thought (L) course   | 3         |
|                  |   | <u>14</u>      |   | 3             |        | Physical Well-being (Y) course                     | <u>1</u>  |
|                  |   |                |   |               |        |  | 14        |
|                  |   |                |   |               |        |  | 31        |
| <u>Junior</u>    |   |                |   |               |        |  |           |
| PHY320           | Math Methods in Physics & Engineering       | 4              | Science, Technology, and Society (K) course | 3             | PHY330 | Optics (alt. yrs)                                  | 4         |
|                  | Comparative Systems (G) course              | 3              |   |               |        | or PHY430 Topics in Contemporary Optics (alt. yrs) |           |
|                  | Electives                                   | 6              |   |               |        | Leisure and Lifetime Sports (O) course             | 1         |
|                  |   | <u>13</u>      |   | 3             |        | Elective (Physics course recommended)              | 4         |
|                  |   |                |   |               |        | Elective   | <u>4</u>  |
|                  |   |                |   |               |        |  | 13        |
|                  |   |                |   |               |        |  | 29        |
| <u>Senior</u>    |   |                |   |               |        |  |           |
|                  | Physics elective (300-400 level)            | 4              |   |               |        | Physics elective (300-400 level)                   | 4         |
|                  | Interpreting Biblical Themes (J) course     | 3              |   |               |        | Contemporary Christian Issues (P) course           | 3         |
|                  | Elective (Physics course recommended)       | 4              |   |               |        | Elective (Science course recommended)              | 4         |
|                  | Elective                                    | <u>3</u>       |   |               |        | Elective   | <u>3</u>  |
|                  |   | 14             |   |               |        |  | 14        |
|                  |   |                |   |               |        |  | <u>28</u> |
|                  |   |                |   |               |        |  | 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.

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.)