

# Physics (2012-2013)

*General: Starting with MTH 110*

This is a **general curriculum** guide and is not applicable to every student and is not a replacement for meeting with your advisor.

Fall Semester – Year One	credits	Winter Semester – Year One	credits
MTH 110: Algebra	4	MTH 122: College Algebra ( <i>Gen Ed</i> )	3
WRT 150: Strategies in Writing	4	MTH 123: Trigonometry	3
Gen Ed.	3	CHM 115: Principles of Chemistry I ( <i>Gen Ed</i> )	5
Gen Ed.	3	Gen Ed.	3
<i>Total</i>	<b>14</b>	<i>Total</i>	<b>14</b>
Fall Semester – Year Two	credits	Winter Semester – Year Two	credits
MTH 201: Calculus I	5	MTH 202: Calculus II	4
CIS course (ask your PHY advisor)	3	PHY 230: Principles of Physics I	5
Gen Ed.	3	Gen Ed.	3
Gen Ed.	3	Elective	3
<i>Total</i>	<b>14</b>	<i>Total</i>	<b>15</b>
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
MTH 203: Calculus III	4	MTH 304: Analysis of Differential Equations*	3
PHY 231: Principles of Physics II	5	PHY 302: Introduction to Modern Physics	4
MTH 227: Linear Algebra I	3	Gen Ed.	3
Gen Ed.	3	Gen Ed.	3
		Elective	3
<i>Total</i>	<b>15</b>	<i>Total</i>	<b>15</b>
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
PHY 330: Intermediate Mechanics and Dynamics	4	PHY 311: Advanced Laboratory II (SWS)	2
PHY 309: Experimental Methods in Physics	4	PHY 340: Intermediate Electricity and Magnetism	4
Gen Ed.	3	MTH 401: Math for the Physical Sciences	4
Elective	3	Elective	3
<i>Total</i>	<b>14</b>	<i>Total</i>	<b>13</b>
Fall Semester – Year Five	credits	Winter Semester – Year Five	credits
PHY 350: Intermediate Modern Physics	4	PHY 360: Statistical Thermodynamics	4
PHY 485: Senior Physics Project I	1	PHY 486: Senior Physics Project II	2
Science Elective**	3	Science Elective**	3
Elective	3	Elective	3
Elective	3	Elective	3
<i>Total</i>	<b>14</b>	<i>Total</i>	<b>15</b>

**Due to the heavy prerequisite structure and class availability (most upper level courses are only offered fall or winter) it is difficult to finish this degree in 5 years if you are starting in with a math deficit. Many students also decide to add a math minor\***

**The block tuition rate is for 12-15 credits. You will pay additional tuition for any credits over 15.**

#### Notes:

\* MTH 304 is recommended for students who wish to apply to graduate school. MTH 302 may be chosen if graduate school is not being considered. It is recommended that you speak with your Physics Faculty Advisor before making this decision.

\*\* Students must complete 6 hours of science electives with a minimum grade of C (2.0) in each. Must be chosen from the following: PHY 105; any 300 or 400 level physics elective, excluding PHY 303, 306, and 307; CHM 351, 352, 356, or 358. *Students who plan to apply to graduate school in physics should take PHY 430, 440, and 450, which are offered alternate years; please confer with your physics faculty advisor for a specific degree plan dependent on when you complete PHY 230.*

#### Special Notes:

A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.  
 B. Courses that have (*Gen Ed*) written after them are classes that are required in the major and also fulfill a section of the general education program.

C. Complete a total of two courses with an SWS attribute.

**It is imperative to meet with your faculty advisor or an advisor in the CLAS Academic Advising Center early in your career.**

The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.

Online at: <http://www.gvsu.edu/clasadvising>

Prepared by CLAS Academic Advising Center – 1/25/12