

Physics (2010-2011)

General

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

-Assumes MTH 110 requirement has been fulfilled-

| Fall Semester – Year One | credits | Winter Semester- Year One | credits |
|--|-----------|--|-----------|
| MTH 122: College Algebra (<i>Gen Ed</i>) | 3 | MTH 201: Calculus I | 5 |
| MTH 123: Trigonometry | 3 | WRT 150: Strategies in Writing | 4 |
| CHM 115: Principles of Chemistry I (<i>Gen Ed</i>) | 5 | Gen Ed. | 3 |
| Gen Ed. | 3 | Gen Ed. | 3 |
| Total | 14 | Total | 15 |
| Fall Semester – Year Two | credits | Winter Semester – Year Two | credits |
| MTH 202: Calculus I | 4 | CIS 261: Structured Programming in C | 3 |
| PHY 230: Principles of Physics I | 5 | MTH 203: Calculus III | 4 |
| Gen Ed. | 3 | PHY 231: Principles of Physics II | 5 |
| Gen Ed. | 3 | Gen. Ed. | 3 |
| Total | 16 | Total | 16 |
| Fall Semester – Year Three | credits | Winter Semester – Year Three | credits |
| MTH 227: Linear Algebra I | 3 | MTH 304: Analysis of Differential Equations* | 3 |
| MTH 401: Math for the Physical Sciences*** | 4 | PHY 302: Introduction to Modern Physics | 4 |
| Gen Ed. or Theme | 3 | WRT 305: Writing in the Disciplines ¹ | 3 |
| Elective | 3 | Gen Ed. or Theme | 3 |
| Science Elective** | 3 | Gen Ed. or Theme | 3 |
| Total | 16 | Total | 16 |
| Fall Semester – Year Four | credits | Winter Semester – Year Four | credits |
| PHY 309: Experimental Methods in Physics | 4 | PHY 311: Advanced Laboratory II | 2 |
| PHY 330: Intermediate Mechanics and Dynamics | 4 | PHY 340: Intermediate Electricity and Magnetism | 4 |
| Gen Ed. or Theme | 3 | Science Elective** | 3 |
| Elective | 3 | Gen Ed. or Theme | 3 |
| Total | 14 | Total | 15 |
| Fall Semester – Year Five | credits | Winter Semester – Year Five | credits |
| PHY 360: Statistical Thermodynamics | 4 | PHY 350: Intermediate Modern Physics | 4 |
| PHY 485: Senior Physics Project I | 1 | PHY 486: Senior Physics Project II | 2 |
| Gen Ed. or Theme | 3 | Gen Ed. or Theme | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | | |
| Total | 14 | Total | 12 |

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

Notes:

* MTH 304 is recommended for students who wish to apply to graduate school. MTH 302: Linear Algebra and Differential Equations 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.

***This course replaces MTH 300 in the major. In Fall 2010, it will be offered for the first time as MTH 480. After that, the course number will change to MTH 401.

¹ Students who pass out of WRT 305 have room to take a GenEd, Theme, or elective course or elective in this semester.

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. Remember to fulfill your 2 SWS requirements; 1 can be taken in the gen ed program and 1 in your major.

D. Some classes are in multiple sections within the gen ed. If you take a course that can be counted in two categories, you can open up 1-2 more spots for physics electives.

E. You must have **120 credits** to graduate from Grand Valley State University.

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 – 4/19/2010