

Grand Valley State University
CLAS Academic Advising Center
C-1-140 Mackinac Hall
616-331-8585

Graduate Teacher Certification Planned Program
Physics Major – Secondary Education¹

Student Name:

Date:

Email Address:

G#:

Transfer Institution(s):

Key: ✓ - Completed or In Progress W - Waived Highlighted - Still Needs to be Completed

This planned program is based on the requirements in place for the current catalog year 2017-2018. You are subject to the requirements in place for the academic year when you begin to take classes, either at GVSU or elsewhere, and have eight years to complete all requirements under that specific catalog. If you do take courses elsewhere, you will need to provide GVSU with an official transcript upon completion of the courses. To confirm the courses required for completion of your academic and teaching plans, please contact the CLAS Academic Advising Center at 616-331-8585 or advstu@gvsu.edu.

Physics Major – Required Courses

Course Number	✓	Course Name	Credits	Completed	Scheduled	Grade	Quality Points
PHY 230		Principles of Physics I	5				
PHY 231		Principles of Physics II	5				
PHY 302		Introduction to Modern Physics	4				
PHY 309		Experimental Methods in Physics	4				
PHY 311		Advanced Laboratory II	2				
PHY 330		Intermediate Mechanics	4				
PHY 340		Electromagnetic Fields	4				
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				
Elective		One upper level elective (300-400 level) ³	varies				
CHM 115		Principles of Chemistry I	4				
CIS 261		Structured Programming in C	3				
MTH 201		Calculus I	4				
MTH 202		Calculus II	4				
MTH 203		Calculus III	4				
MTH 227		Linear Algebra I (if taking MTH 304)	3				
MTH 300		Applied Analysis I	3				
MTH 401		OR Mathematics for the Physical Sciences	4				
MTH 304		Analysis of Differential Equations	3				
MTH 302		OR Linear Algebra & Differential Equations	4				
HSC 201 ²		The Scientific Revolution	3				
HSC 202		OR The Technological Revolution	3				
		OR Similar course with dept. approval	3				
PHY 105		Descriptive Astronomy	3				
BIO 328 ²		Biomedical Ethics	3				
BIO 338		OR Environmental Ethics	3				
		OR Similar course with dept. approval	3				
BIO 120		General Biology I	4				
Elective ³		One 3 credit elective chosen with dept.	3				

Total Credits Needed: 86 – 87

Cumulative GPA: _____

Special Considerations:

¹ All students seeking teacher certification are required to assist for at least 30 clock hours in the department's tutoring program or at least 30 clock hours as a laboratory assistant setting up equipment and demonstrations as well as helping students in a laboratory setting. Required reading and experience in laboratory safety will be part of this laboratory setting.

² HSC 201/202 and BIO 328/338 are the recommended History of Science and Bioethics courses. Students may propose similar courses, if taken elsewhere, to fulfill this requirement.

³ These electives must be chosen from the following: PHY 105 (requirement for secondary certification); any 300 or 400 level physics elective, excluding PHY 303, 306, and 307; CHM 351, 352, 356, or 358.

Notes:

Substitutions, Equivalencies, and Waivers Approved By:**Date:****Prepared By:****Date:****Academic Departmental Approval (Pending Completion of Highlighted Requirements):****Date:**