

**Grand Valley State University**  
**CLAS Academic Advising Center**  
**C-1-140 Mackinac Hall**  
**616-331-8585**  
**Teaching Endorsement Planned Program**  
**Physics Major – Secondary Education<sup>1</sup>**

Student Name:

Date:

Email Address:

G#:

Transfer Institution(s):

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

**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) <sup>3</sup>	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				
		<b>OR</b>					
MTH 401		Mathematics for the Physical Sciences	4				
MTH 304		Analysis of Differential Equations	3				
		<b>OR</b>					
MTH 302		Linear Algebra & Differential Equations	4				
HSC 201 <sup>2</sup>		The Scientific Revolution	3				
		<b>OR</b>					
HSC 202		The Technological Revolution	3				
		<b>OR</b>					
		Similar course with dept. approval	3				
PHY 105		Descriptive Astronomy	3				
BIO 328 <sup>2</sup>		Biomedical Ethics	3				
		<b>OR</b>					
BIO 338		Environmental Ethics	3				
		<b>OR</b>					
		Similar course with dept. approval	3				
BIO 120		General Biology I	4				
Elective <sup>3</sup>		One 3 credit elective chosen with dept.	3				

**Total Credits Needed: 86 – 87**

**Cumulative GPA: \_\_\_\_\_**

**Special Considerations:**

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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:**

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