

**CURRICULUM GUIDE**  
**Physics, B.S. (General Physics Concentration)**  
**2021-2022**

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The schedule below is an **EXAMPLE** of how you can arrange your class schedule.  
 Please consult your advisor for specific changes that may need to be made.

	Fall Semester		Spring Semester		Course Number	Course Name
<b>Freshman Year</b>	SCO 100P	1	CHE 112	3	<b>GENERAL EDUCATION &amp; UNIVERSITY REQUIREMENTS (37)</b>	
	<sup>6</sup> CHE 111 (fulfills Gen. Ed. 4)	3	CHE 112L	1	<b>SCO 100P</b>	Student Success Seminar in Physics (1)
	CHE 111L	1	MAT 244	4	<b>CORE COURSE REQUIREMENTS (21)</b>	
	<sup>6</sup> MAT 234 (fulfills Gen. Ed. 2)	4	PHY 201	5	PHY 201	University Physics I (5)
	Gen. Ed. 1A (ENG 101)		Gen. Ed. 1B (ENG 102)	3	PHY 202	University Physics II (5)
	Gen. Ed. 4 (Nat. Sci.) (AST 335 recommended)	3			PHY 211	Intermediate Physics (4)
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>16</b>	PHY 302 or PHY 302W	Modern Physics (4)	
<b>Sophomore Year</b>	MAT 254	4	CSC 174	3	PHY 302W	Modern Physics (writing intensive) (4)
	MAT 353	3	PHY 211	4	PHY 406 or PHY 406W	Advanced Physics Laboratory (3)
	PHY 202	5	Gen. Ed. 3A (Arts)	3	PHY 406W	Advanced Physics Laboratory (writing intensive) (3)
	Gen. Ed. 1C (Oral Comm.)	3	Gen. Ed. 3B (Humanities)	3	<b>GENERAL PHYSICS CONCENTRATION REQUIREMENTS (22)</b>	
			Gen. Ed. 5B (Soc. & Behav. Sci.)	3	PHY 310	Theoretical Methods in Physics (3)
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>16</b>	PHY 421	Electricity and Magnetism I (3)
<b>Junior Year</b>	PHY 302 or 302W	4	PHY 406 or 406W (ACCT)	3	PHY 422	Electricity and Magnetism II (3)
	PHY 310	3	PHY 460	4	PHY 456	Statistical and Thermal Physics (3)
	† PHY Elective (upper division)	3	Gen. Ed. 6 (Diversity)	3	PHY 460	Classical Mechanics (4)
	Gen. Ed. 5A (History)	3	Free Elective (upper division)	3	PHY 470	Quantum Mechanics (3)
			Free Elective	3	† PLUS THREE (3) HOURS selected from any PHY course numbered 300 or above, except PHY 506.	
	<b>TOTAL</b>	<b>13</b>	<b>TOTAL</b>	<b>16</b>	<b>SUPPORTING COURSE REQUIREMENTS (20)</b>	
<b>Senior Year</b>	PHY 421	3	PHY 422	3	<sup>6</sup> CHE 111	General Chemistry I (3)
	PHY 456	3	PHY 470 (ACCT)	3	CHE 111L	General Chemistry Lab I (1)
	Gen. Ed. 6 (Diversity)	3	Free Elective	4	CHE 112	General Chemistry II (3)
	Free Elective (upper division)	3	Free Elective	4	CHE 112L	General Chemistry Lab II (1)
	Free Elective (upper division)	3			CSC 174	Intro. to Programming for Science and Engineering (3)
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>14</b>	<sup>6</sup> MAT 234	Calculus I (4)
<b>TOTAL HOURS TO DEGREE COMPLETION</b>					<b>120</b>	

<sup>6</sup> Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement. Courses used to fulfill Gen. Ed. 4 must have different prefixes.

\* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division PHY courses. MAT 122, 234, and/or 244; CHE 111/111L. See University catalog for details.  
 § A preparatory course in mathematics may be required before admission to MAT 234.

**Upper division courses:** All students are required to have a minimum of 42 hrs. upper division (300 level or above) courses distributed throughout major/Supporting/Gen Ed/Free Electives categories. If 300 level classes are taken for Gen. Ed., they can be used to fulfill the 42 hours instead of upper division free electives.

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

**Applied Critical & Creative Thinking (ACCT) Requirement:** Physics majors will select one of the following: PHY 349, 349 A-N, 406, 406W, 410, 470, HON 420, a program-approved Leadership Experience, or a program-approved Study Abroad experience. (Credit hours are incorporated into program requirements.)