

# CURRICULUM GUIDE

## Physics, B.S. (Teaching Concentration) 2023-2024

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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	
<b>Freshman Year</b>	SCO 100P	1	CHE 112	3
	<sup>6</sup> CHE 111 (fulfills Gen. Ed. 4)	3	CHE 112L	1
	CHE 111L	1	MAT 244	4
	<sup>6</sup> § MAT 234 (fulfills Gen. Ed. 2)	4	<sup>6</sup> SED 104 (fulfills Gen. Ed. 6)	3
	<sup>6</sup> Gen. Ed. 1A (ENG 101)	3	<sup>6</sup> Gen. Ed. 1B (ENG 102)	3
	Gen. Ed. 3A (Arts)	3	Gen. Ed. 5B (Soc. & Behav. Sci.)	3
	<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>17</b>
<b>Sophomore Year</b>	CED 100	0	AST 135	3
	EDF 203	3	<sup>6</sup> BIO 100 <u>or</u> 102 (fulfills Gen. Ed. 4)	3
	PHY 201 <u>or</u> 131	5	CED 200	0
	<sup>6</sup> Gen. Ed. 1C (Oral Comm.)	3	EDF 219	3
	Gen. Ed. 5A (History)	3	PHY 202 <u>or</u> 132	5
	Free Elective	3		
	<sup>6</sup> 30 hrs complete + apply to professional education program			
	<b>TOTAL</b>	<b>17</b>	<b>TOTAL</b>	<b>14</b>
<b>Junior Year</b>	AST 335	3	CED 400	0.5
	CED 300	0.5	EDF 413	3
	EDC 300	3	EMS 490 (spring only)	3
	EDF 204	2	PHY 211 (spring only)	4
	EMS 300	3	PHY 406	3
	PHY 302	4	<sup>†</sup> PHY Elective (300 level or above)	3
	<b>TOTAL</b>	<b>15.5</b>	<b>TOTAL</b>	<b>16.5</b>
<b>Senior Year</b>	CED 450	1	CED 499	9
	ESE 561	3	EMS 474	3
	Gen. Ed. 3B (Humanities)	3		
	Gen. Ed. 6 (Diversity)	3		
	Free Elective	3		
	Free Elective	3		
	<b>APPLY FOR STUDENT TEACHING</b>			
	<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>12</b>
<b>TOTAL HOURS TO DEGREE COMPLETION</b>				<b>120</b>

\* **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.

Course Number	Course Name
<b>GENERAL EDUCATION &amp; UNIVERSITY REQUIREMENTS (37)</b>	
SCO 100P	Student Success Seminar for Physics (1)
<b>CORE COURSE REQUIREMENTS (21)</b>	
PHY 201 <u>or</u>	University Physics I (5)
PHY 131	College Physics I (5)
PHY 202 <u>or</u>	University Physics II (5)
PHY 132	College Physics II (5)
PHY 211	Intermediate Physics (4) (spring only)
PHY 302	Modern Physics (4)
PHY 406	Advanced Physics Lab (3)
<b>PHYSICS TEACHING CONCENTRATION REQUIREMENTS (9)</b>	
AST 135	Introductory Astronomy (3)
AST 335	Stars, Blackholes: The Cosmos (3)
<sup>†</sup> PLUS THREE (3) HOURS of PHY courses numbered 300 and above.	
<b>SUPPORTING COURSE REQUIREMENTS (10)</b>	
* <sup>6</sup> BIO 100 <u>or</u>	Introductory Biology (3)
* <sup>6</sup> BIO 102	Inquiry Biology for Teachers (3)
* <sup>6</sup> CHE 111	General Chemistry I (3)
[ CHE 111L	General Chemistry Lab I (1)
CHE 112	General Chemistry II (3)
[ CHE 112L	General Chemistry Lab II (1)
* MAT 234	Calculus I (4)
MAT 244	Calculus II (4)
Bracketed items must be taken concurrently	
<b>PROFESSIONAL EDUCATION REQUIREMENTS (37)</b>	
EDC 300	Differentiation Inclusive Classrooms (3)
EDF 203	Philosophical & Historical Found. of Ed. (3)
EDF 204	Emerging Instructional Technologies (2)
EDF 219	Human Development and Learning (3)
EDF 413	Assessment in Education (3)
EMS 300W	Curriculum & Instructional Design (3)
EMS 474	Teaching Content Reading (3)
EMS 490	Classroom & Behavior Management in P-12 (3)
ESE 561	Teaching Science in the Secondary Schools (3)
<sup>6</sup> SED 104	Introduction to Special Education (3)
<b>PLUS TWELVE (12) HOURS of Clinical Experiences to include:</b>	
CED 100	Clinical I: Intro to the Education Prof. (0)
CED 200	Clinical II: Understanding the Learner (0)
CED 300	Clinical III: curriculum and Instruct. Des. (.5)
CED 400	Clinical IV: Diagnosis & Perception (.5)
CED 450	Clinical V: Practicing Teaching (1)
CED 499	Supervised Student Teaching P-12 (9)
<b>FREE ELECTIVES (9)</b>	

<sup>6</sup> Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.