

CURRICULUM GUIDE
Physics, B.S. (Teaching Concentration)
2019-2020

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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
Freshman Year	SCO 100P	CHE 112
	° CHE 111 (fulfills Gen. Ed. 4)	CHE 112L
	CHE 111L	MAT 244
	⊕ § MAT 234 (fulfills Gen. Ed. 2)	° SED 104 (fulfills Gen. Ed. 6)
	⊕ Gen. Ed. 1A (ENG 101)	⊕ Gen. Ed. 1B (ENG 102)
	Gen. Ed. 3A (Arts)	Gen. Ed. 5B (Soc. & Behav. Sci.)
	TOTAL	TOTAL
Sophomore Year	CED 100	AST 135
	EDF 203	° BIO 100 or 102 (fulfills Gen. Ed. 4)
	PHY 201 or 131	CED 200
	⊕ Gen. Ed. 1C (Oral Comm.)	EDF 219
	Gen. Ed. 5A (History)	PHY 202 or 132
	Free Elective	
	TOTAL	TOTAL
Junior Year	AST 335	CED 400
	CED 300	EDF 413
	EDC 300	EMS 490 (spring only)
	EDF 204	PHY 211 (spring only)
	EMS 300W	PHY 406 or 406W
	PHY 302 or 302W	† PHY Elective (300 level or above)
	TOTAL	TOTAL
Senior Year	CED 450	CED 499 (ACCT)
	ESE 561	EMS 474
	Gen. Ed. 3B (Humanities)	
	Gen. Ed. 6 (Diversity)	
	Free Elective	
	Free Elective	
	TOTAL	TOTAL
TOTAL HOURS TO DEGREE COMPLETION		120

* **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 Teaching majors will select one of the following: CED 499, PHY 349, 349A-N, 406, 406W, 410, 470, HON 420 with a program approved leadership experience, or a program-approved Study Abroad experience. (Credit hours are incorporated into program requirements.)

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100P	Student Success Seminar for Physics (1)
CORE COURSE REQUIREMENTS (21)	
PHY 201 or PHY 131	University Physics I (5)
PHY 202 or PHY 132	College Physics I (5)
PHY 211	University Physics II (5)
PHY 302 or PHY 302W	College Physics II (5)
PHY 406 or PHY 406W	Intermediate Physics (4) (spring only)
	Modern Physics (4)
	Modern Physics (writing intensive) (4)
	Advanced Physics Lab (3)
	Advanced Physics Lab (writing intensive) (3)
PHYSICS TEACHING CONCENTRATION REQUIREMENTS (6)	
AST 135	Introductory Astronomy (3)
AST 335	Stars, Blackholes: the Cosmos (3)
† PLUS THREE (3) HOURS of PHY courses numbered 300 and above.	
SUPPORTING COURSE REQUIREMENTS (10)	
* ° BIO 100 or * ° BIO 102	Introductory Biology (3)
[* ° CHE 111	Inquiry Biology for Teachers (3)
CHE 111L	General Chemistry I (3)
CHE 112	General Chemistry Lab I (1)
CHE 112L	General Chemistry II (3)
° MAT 234	General Chemistry Lab II (1)
MAT 244	Calculus I (4)
	Calculus II (4)
Bracketed items must be taken concurrently	
PROFESSIONAL EDUCATION REQUIREMENTS (37)	
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)
° SED 104	Introduction to Special Education (3)
PLUS TWELVE (12) HOURS of Clinical Experiences to include:	
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)
FREE ELECTIVES (9)	

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