

CURRICULUM GUIDE

Physics, B.S. (General Physics Concentration)

2023-2024

Website: www.physics.eku.edu

Email Contact: jessica.lair@eku.edu

Department of Physics, Geosciences & Astronomy

521 Lancaster Ave.

3140 New Science Bldg.

Richmond, KY 40475

859-622-1521

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
Freshman Year	SCO 100P	1	CHE 112	3	GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
	⁶ CHE 111 (fulfills Gen. Ed. 4)	3	CHE 112L	1	SCO 100P Student Success Seminar in Physics (1)	
	CHE 111L	1	MAT 244	4	CORE COURSE REQUIREMENTS (21)	
	⁶ 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)
		3			PHY 302	Modern Physics (4)
	TOTAL	15	TOTAL	16	PHY 406	Advanced Physics Laboratory (3)
Sophomore Year	MAT 254	4	CSC 174	3	GENERAL PHYSICS CONCENTRATION REQUIREMENTS (22)	
	MAT 353	3	PHY 211	4	PHY 310	Theoretical Methods in Physics (3)
	PHY 202	5	Gen. Ed. 3A (Arts)	3	PHY 421	Electricity and Magnetism I (3)
	Gen. Ed. 1C (Oral Comm.)	3	Gen. Ed. 3B (Humanities)	3	PHY 422	Electricity and Magnetism II (3)
			Gen. Ed. 5B (Soc. & Behav. Sci.)	3	PHY 456	Statistical and Thermal Physics (3)
	TOTAL	15	TOTAL	16	PHY 460	Classical Mechanics (4)
Junior Year	PHY 302	4	PHY 406	3	PHY 470	Quantum Mechanics (3)
	PHY 310	3	PHY 460	4	† PLUS THREE (3) HOURS selected from any PHY course numbered 300 or above, except PHY 506.	
	† PHY Elective (upper division)	3	Gen. Ed. 6 (Diversity)	3	SUPPORTING COURSE REQUIREMENTS (20)	
	Gen. Ed. 5A (History)	3	Free Elective (upper division)	3	⁶ CHE 111	General Chemistry I (3)
			Free Elective	3	CHE 111L	General Chemistry Lab I (1)
	TOTAL	13	TOTAL	16	CHE 112	General Chemistry II (3)
Senior Year	PHY 421	3	PHY 422	3	CHE 112L	General Chemistry Lab II (1)
	PHY 456	3	PHY 470	3	† CSC 174	Intro. to Programming for Science and Engineering (3)
	Gen. Ed. 6 (Diversity)	3	Free Elective	4	⁶ MAT 234	Calculus I (4)
	Free Elective (upper division)	3	Free Elective	4	MAT 244	Calculus II (4)
	Free Elective (upper division)	3			MAT 254	Calculus III (4)
	TOTAL	15	TOTAL	14	MAT 353	Differential Equations (3)
TOTAL HOURS TO DEGREE COMPLETION				120	Bracketed items must be taken concurrently.	

* **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.

⁶ 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.