CURRICULUM GUIDE

Department of Physics, Geosciences, and Astronomy

Environmental and Applied Geology, B.S. (Professional Concentration) 2023-2024

Website: www.geosciences.eku.edu Email Contact: jessica.lair@eku.edu 521 Lancaster Ave. 3140 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	
Freshman	SCO 100P	1	† GLY Restricted Elective #1	3
	† GLY Restricted Elective #1	3	^G MAT 122 (or higher) (fulfills	
Year	Gen. Ed. 1A (<i>ENG 101</i>)	3	Gen. Ed. 2)	5
	Gen. Ed. 3A (Arts)	3	Gen. Ed. 1B (<i>ENG 102</i>)	3
	Gen. Ed. 5B (Soc. & Behav.	3	Gen. Ed. 1C (Oral Comm.)	3
	Sci.)	3	Gen. Ed. 6 (<i>Diversity</i>)	3
	Gen Ed. 6 (<i>Diversity</i>)		_	
	TOTAL	16	TOTAL	17
Sophomore	GCHE 111/111L (fulfills		GEO 353	3
Year	Gen. Ed. 4)	4	GLY 409*	4
Tear	GLY 309*	4	Gen. Ed. 3B (Humanities)	3
	^G PHY 101 <u>or</u> 131 <u>or</u> 201		Free Elective	3
	(fulfills Gen. Ed. 4)	3-5	Free Elective	3
	Gen. Ed. 5A (<i>History</i>)	3		
		1		
	TOTAL	14-16	TOTAL	16
Junior	GLY 410	4	GEO 456	3
Year	GLY 415	4	GLY 420	4
i cai	Free Elective	3	GLY 450	3
	Free Elective	3	Free Elective (upper division)	3
		5	Free Elective	1-3
	TOTAL	14	TOTAL	14-16
Senior	GLY 315	3	GLY 499	3
Year	GLY 498	3	GLY 535	3
I Cai	‡ GEO/GLY Restricted		‡ GEO/GLY Restricted Elective	
	Elective #2	3	#2	3
	Free Elective (upper division)	3	Free Elective	3
	Free Elective	3		
	TOTAL	15	TOTAL	12
TOTAL HOURS TO DEGREE COMPLETION 120				

^{*} PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division GLY and GEO courses. MAT 114 or higher, MAT 234.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division 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	Course Name			
Number				
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)				
SCO 100P	Student Success Seminar (1)			
CORE COURSE REQUIREMENTS (41)				
GLY 309*	Mineralogy (4)			
GEO 353	Geographic Information Systems (3)			
GLY 409*	Igneous & Metamorphic Petrology (4)			
GLY 410*	Structural Geology (4)			
GLY 415	Sedimentary Geology (4)			
GLY 420	Stratigraphy and Paleontology (4)			
GLY 450*	Evolution of the Earth (3) Capstone Project in Geology (3)			
GLY 498 <u>and</u> GLY 499	Senior Thesis (3)			
CGLY 499) Senior Thesis (3)				
GLY 451	Field Camp (6) (summer only)			
GLY 535*	Hydrogeology (3) (spring only)			
†PLUS SIX (6) HOURS selected from the following (restricted				
elective 1):				
GLY 104	The World Ocean (3)			
GLY 107	Gold and Diamonds (3)			
GLY 108	Earthquakes and Volcanoes (3)			
GLY 109	Great Moments in Earth History (3)			
GEO 210	Introduction to Physical Geography (3)			
PROFESSIONAL CONCENTRATION REQUIRED COURSES (12)				
GEO 456	Remote Sensing (3) (fall only)			
*DLUS SIX (6) HOURS	Hydrology (3) (fall only)			
<pre>‡PLUS SIX (6) HOURS selected from the following (restricted elective 2):</pre>				
GEO 302W	Global Environmental Problems (writing			
	intensive) (3)			
GEO 315	Meteorology (3)			
GEO 325	Environmental Land Use Planning (3)			
GEO 343	Geography of Kentucky (3)			
GEO 351	Geographic Techniques (3)			
GEO 453	Advanced GIS (3)			
GEO 455	GIS Cartography (3)			
GEO 458	Advanced Geographic Imagery (3)			
GEO 501 GLY 210*	Advanced Geography (3)			
GLY 303	Geochemistry (3) (fall only) Environmental Geoscience (3)			
GLY 351	Field Methods (3)			
GLY 408	Process Geomorphology (3) (spring only)			
GLY 460*	Aqueous Geochemistry (3) (spring only)			
GLY 480	Petroleum Geology (3) (spring only)			
GLY 482	Paleoclimate (3)			
GLY 580	Selected Topics: (1-2)			
SUPPORTING COURSE REQUIREMENTS (3-5)				
「GCHE 111	General Chemistry I (3)			
CHE 111L	General Chemistry Lab I (1)			
G MAT 122 (or higher)	Precalculus Mathematics (5)			
^G PHY 101 <u>or</u>	Concepts of the Physical World (3)			
^G PHY 131 <u>or</u>	College Physics I (5)			
^G *PHY 201	University Physics (5)			
FREE ELECTIVES (25-27)				
Denotes that 2 credit hours from this course gradean he				

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

These classes are offered on an every other year schedule. Check with your advisor for availability.