

Name: _____

Catalog: _____

Curriculum and Recommended Schedule --- B.S. in EARTH & ENVIRONMENTAL SCIENCES

FALL Semester		First Year	SPRING Semester	
_____ ESCI 1101 Earth Sciences-Physical Geography	3	_____ GEOL 1200 Physical Geology	3	
_____ ESCI 1101L Earth Sciences Lab	1	_____ GEOL 1200L Physical Geology Lab	1	
_____ MATH 1241 Calculus I	3	_____ MATH 1242 Calculus II or STAT 1220/1221/1222	3	
_____ ESCI 1501 Global - Social Science (ESCI 1501)	3	_____ BIOL 1110 Principles of Biology I	3	
_____ WRDS 1103 or 1104 Writing and Inquiry	3	_____ 1502 Global - Arts Humanities	3	
_____ 1511 Local - Social Science	3	_____ General Elective	3	
Fall Semester Total		16	Spring Semester Total	
			16	

Second Year				
_____ ESCI 2222 Environmental Science	3	_____ ESCI 2210 Field Methods	3	
_____ ESCI 3101 Global Environmental Change	3	_____ GEOL 3105 Mineral Resources	3	
_____ CHEM 1251 General Chemistry	3	_____ PHYS 1101 Introductory Physics	3	
_____ CHEM 1251L General Chemistry Lab	1	_____ PHYS 1101L Introductory Physics I Lab	1	
_____ FORL 1201 Foreign Language or Proficiency	3	_____ FORL 1202 Foreign Language or Proficiency	3	
		_____ 1512 Local - Arts Humanities	3	
Fall Semester Total		13	Spring Semester Total	
			16	

Third Year				
_____ ESCI 3205 Water Resources	3	_____ Technical Major Elective	3-4	
_____ Earth Systems Major Elective	3-4	_____ Restricted Major Elective	3	
_____ Environment/Human Major Elective	3-4	_____ Environment/Human Major Elective	3-4	
_____ CTCM 2530 Critical Thinking Communication	3	_____ Earth Systems Major Elective	3-4	
_____ General Elective	3	_____ General Elective	3	
Fall Semester Total		15-17	Spring Semester Total	
			15-17	

Fourth Year				
_____ Restricted Major Elective	3-4	_____ Restricted Major Elective	3-4	
_____ Restricted Major Elective	3-4	_____ General Elective	3	
_____ General Elective	3	_____ General Elective	3	
_____ General Elective	3	_____ General Elective	3	
Fall Semester Total		12-14	Spring Semester Total	
			12-14	

B.S. Earth & Environmental Sciences Requirement	Red
General Education Requirement	

BS Earth & Environmental Sciences Degree total hours 70
 UNC Charlotte Required total hours 120

Elective guides are below:

Environment/Human Interactions (Minimum of 6 hours)
ESCI 3010 - National Parks (3)
ESCI 3190 - Biogeography (3)
ESCI 3170 - Environmental Quality Management (3)
ESCI 3220 - Air Quality (3)
ESCI 4146 - Applied Ecosystem Restoration (3)
ESCI 4190 - Contemporary Environmental Issues (3)
GEOG 3102 - Plant Geography (3)
GEOG 3180 - Hazards and Disasters (3)
GEOG 3215 - Environmental Planning (3)
GEOG 3220 - Energy Markets (3)
GEOG 3250 - World Food Problems (3)
GEOG 3260 - Medical Geography (3)
GEOG 4215 - Urban Ecology (3)
GEOG 4250 - Food Migration and Place (3)
GEOL 3190 - Environmental Geology (3)
GEOL 3190L - Environmental Geology Lab (1)
BIOL 4244 - Conservation Biology (3)

Earth Systems (Minimum of 6 hours)
BIOL 3144+Lab - Ecology (4)
BIOL 3244 - Field Ecology (3)
BIOL 4144 - Advanced Ecology (3)
ESCI 3105 - Oceanography
ESCI 4140 - Hydrologic Processes (4)
ESCI 4155 - Fluvial Processes (4)
ESCI 4160 - Contaminant Transport (3)
ESCI 4175 - Geochemistry
ESCI 4201 - Hydroclimatology (3)
ESCI 4210 - Soil Science (4)
ESCI 4222 - Watershed Science (3)
GEOL 3124 - Sedimentology (4)
GEOL 4105 - Geomorphology (4)
GEOL 4140 - Coastal Geology (3)
GEOL 4145 - Hydrogeology (4)
GEOL 4165 - Aqueous Environmental Geochemistry (3)
GEOL 4410 - Applied Soil Science (4)
METR 3140 - Fundamentals of Meteorology (3)
METR 3210 - Atmospheric Thermodynamics (3)
METR 3220 - Physical Meteorology (3)
METR 3245 - Synoptic Meteorology (4)
METR 3250 - Dynamic Meteorology (3)
METR 4205 - Climate Dynamics (3)
METR 4220 - Atmospheric Chemistry (3)
METR 4240 - Boundary Layer Meteorology (3)

Technical (Choose one of the following)
ESCI 4122 - Statistics & Data Analysis in Earth Science (3)
ESCI 4170 - Remote Sensing (4)
ESCI 4180 - Digital Image Processing (4)
GEOG 3120 - Fundamentals of GIS (4)
GEOG 4131 - Environmental Modelling (4)
GEOG 4255 - Applied Population Analysis (3)
GEOL 4115 - Applied Geophysics (4)
METR 4110 - Atmospheric Instrumentation (3)

A total of 12 Additional major elective hours may be chosen from the Environment/Human Interactions and/or Earth Systems and/or ESCI 3000 and ESCI 4000 Special Topics and/or ESCI 4800, ESCI 4400, ESCI 4600

Note: Only 6 credits 3xxx and 4xxx Major electives can be double counted between GEOL, EVSI, EVST, and GEOG degrees

NOTE: This advising sheet is valid for students who declared as a major in the Fall 2023 term or later.