

Bachelor of Science: Environmental Science (878)

Environmental Life Science Track

2021-2022

65 hours

The B.S. Environmental Science major will include two curricular paths for students, one with a life science emphasis and the other with an earth science emphasis. The program will enable students to prepare for a graduate program in the environmental sciences or to directly enter industry in the public or private sector. All students will have a common core of courses providing a foundation in biology and geosciences, and will also be required to take part in a capstone research project.

Required Core:

- ___ BIOL 2051 General Biology: Organismal Diversity, 4 hrs
- ___ BIOL 3100 Evolution, Ecology & the Nature of Science, 3 hrs

Required Chemistry*

- ___ CHEM 1110 General Chemistry I, 4 hrs
- ___ CHEM 1120 General Chemistry II, 4 hrs

Required Earth Science & Geography

- ___ EARTHSCIE 1200 Elements of Weather, 3 hrs
- ___ EARTHSCI1300 Introduction to Geology, 4 hrs
- ___ GEOG 3310 Geographic Info Systems, 3 hrs

Required Math

- ___ MATH 1420 Calculus I, 4 hrs

Required Biology

- ___ BIOL 4157 Biostatistics, 3 hrs
- ___ BIOL 3190 Undergraduate Research, 2 hrs
- ___ BIOL 4168 Ecology, 4 hrs

Major Elective Credits (26 hours)

Pick courses from each of the 3 categories (A, B & C) to accumulate 26 hours

CATEGORY A:

- ___ BIOL 4105 Wildlife Ecology & Management, 4 hrs
- ___ BIOL 4108 Biodiversity Conservation Policy, 3 hrs
- ___ BIOL 4167 Conservation Biology, 3 hrs
- ___ BIOL 4180, Restoration Ecology, 4 hrs

CATEGORY B: (select a minimum of 2 courses)

- ___ BIOL 3112, Invertebrate Zoology, 4 hrs
- ___ BIOL 3120, Plant Diversity & Evolution, 4 hrs
- ___ BIOL 3151, General Microbiology, 4 hrs
- ___ BIOL 3170, Entomology, 3 hrs
- ___ BIOL 4154, Aquatic Ecology, 3 hrs
- ___ BIOL 4164, Mammalogy, 4 hrs
- ___ BIOL 4166, Plant Systematics, 4 hrs

CATEGORY C: (select a minimum of 2 courses)

- ___ CHEM 2040, Applied Organic & Biochemistry, 4 hrs
- ___ **OR** CHEM 2210, Organic Chemistry I, 3 hrs
- ___ EARTHSCI1320 Earth History, 4 hrs
- ___ MATH 142,1 Calculus II, 4 hrs
- ___ EARTHSCIE 3210, Meteorology, 4 hrs
- ___ EARTHSCIE 3230, Air Quality, 4 hrs
- ___ EARTHSCIE 3310, Structural Geology, 4 hrs
- ___ EARTHSCIE 3325, Sedimentary Geology, 4 hrs
- ___ EARTHSCIE 3330, Geomorphology, 4 hrs
- ___ EARTHSCIE 3340, Oceanography, 3 hrs
- ___ EARTHSCIE 3345, Environmental Geology, 3 hrs
- ___ EARTHSCIE 3350, Environmental Hydrology, 3 hrs
- ___ EARTHSCIE 3355, Hydrogeology, 3 hrs
- ___ EARTHSCIE 3360, Field & Lab Methods in Hydrology, 3 hrs
- ___ GEOG 2210, Recent Climate Change, 3 hrs
- ___ GEOG 3220, Environmental Geography, 3 hrs*
- ___ GEOG 4220, Soils & Landscape, 3 hrs
- ___ GEOG 4230, Rivers, 3 hrs
- ___ GEOG 4320, Geographic Info Systems II, 3 hrs
- ___ GEOG 4240, Reconstructing Ice Age Environments, 3 hrs*
- ___ GEOG 4370, Remote Sensing of the Environment, 3 hrs

NOTES:

- Must have a UNI cumulative and a UNI major/Plan GPA of 2.50 or higher, with a grade of C- (1.67) or higher in all courses that are applied to the major.
- A minimum of 7 credits of 4000 biology electives required. BIOL4198 Independent Study and CHEM4510 Biochemistry do not count toward 4000 level biology elective requirement. At least 4 credits of 4000 level biology electives need to be taken at UNI.
- Cannot count more than a **combined 4 credits** to biology electives requirement.
 - BIOL 3185 Readings in Biology
 - BIOL 3190 Undergraduate Research
 - BIOL 4198 Independent Study
- If *CHEM 1130 General Chemistry I-II, 5 hrs, is taken, then 3 additional biology electives (or other electives approved by the Biology Department Head) are required to reach a 68 credit major.
- Courses noted with * indicate additional pre-requisites may be needed before taking the course