

# Hydrology

## Guidance Document for ENVS Majors

This document provides guidance in selecting courses to create a concentration in Hydrology. Not all of the courses/programs described here are necessary for a Hydrology focus. Please contact your Advisor to discuss your options.

#### Recommended Choices from ENVS Curriculum

- General Biology sequence (EBIO 1210, 1220\*, 1230\*, 1240\*)
- General Chemistry (CHEM 1113, 1114)
- Geography sequence for Earth Science (GEOG 1001, 1011)
- Hydrology for Intermediate Natural Science (GEOG 3511\*)
- Calculus or Statistics for Earth Science for Math requirement (MATH 1300\*, GEOG 3023)
- Environmental Sampling and Analysis (EVEN 4100) or internship for Application
- Recommended Specialization Courses:
  - CVEN 4404 + 4414\* Water Chemistry and lab (Prereqs. CHEM 1113 + 1114)
  - ❖ GEOL 3030\* Introduction to Hydrogeology (Prereqs. MATH 1300)
  - GEOG 4501 Water Resources & Water Management of Western US
  - GEOG 4241\* Principles of Geomorphology
  - GEOG 4321\* Snow Hydrology
  - ❖ EBIO 4030\* Limnology
  - ENVD 4023 Environmental Impact Assessment
  - ENVS Topics Courses

### Recommended Programs to Combine

- Hydrology Certificate (GEOG minor required)
- Potential courses that overlap between ENVS and Hydrology Certificate: GEOG 1001, GEOG 1011, GEOL 3511\*, GEOG 4501, GEOG 4241\*, GEOG 4321\*

#### Recommended Elective Courses

It is recommended that students interested in Hydrology pursue additional lower division math and science, basic GIS skills and an introduction to water law/ policy.

- General Chemistry 2 (CHEM 1133, 1134)
- General Physics (PHYS 2010 or 1110)
- Intro Geographic Information Systems (GEOG 4103, Prereqs. GEOG 3053, Stats)
- Water Law
- Both Calculus and Statistics are recommended
  \*Course enrollment requires a prerequisite.

#### Possible Career Paths

Possible career paths include Environmental Protection, Water Resources Consulting, Environmental Consulting and Remediation, Federal, State or Local Government, Water Conservation, Water Quality Specialist.

#### Get Involved

Use the Application requirement to explore this field. Try an internship, learn GIS skills, learn field and sampling techniques, environmental impact assessment and seek out ways to apply skills at the E-Center.

#### Graduate School

A double major in Geology or EBIO, or additional lower division science and math coursework is recommended for students considering graduate school in Hydrology or Environmental Science.

#### More Information

American Water Resources Association, National Association of Environmental Professionals, National Fish and Wildlife Foundation, American Institute of Hydrology, Soil and Water Conservation Society

Hydrology Certificate (GEOG minor required)