

The Environmental Studies MAJOR

The George Washington University

Effective Fall 2017

To declare as an Environmental Studies Major, please contact the Program Director or Advisers below to discuss your options and fill out the required major declaration form.

Program Director: Prof. David Rain, drain@gwu.edu

Program Advisers: Prof. Melissa Keeley, keeley@gwu.edu

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Environmental Studies majors must complete a minimum of **47-49** credits in associated interdisciplinary coursework. This will include the Core Foundational Courses listed below, three courses each from Groups 2 and 3 below, two additional upper-level courses from Groups 2 and 3, and the senior capstone class which is offered in Spring only.

1. Core Foundational Courses – take all 5

COURSE Number	Course Name	Credits
BISC 1006	Ecology and Evolution of Organisms, OR	3
BISC 1116	Introductory Biology: the Biology of Organisms (including BISC 1126, Introduction to Organisms Laboratory)	4
GEOG 1002	Introduction to Physical Geography, OR	4
GEOL 1005	Environmental Geology	4
GEOG 1003	Society and Environment	3
GEOG 2104	Introduction to Cartography and GIS	3
STAT 1053	Introduction to Statistics for Social Sciences	3

2. Science Courses – take 3 of the following courses listed here (prerequisites listed)

COURSE Number	Course Name	Credits
BISC 2305	Plant Biology (BISC 1115 and 1125; and BISC 1116 and BISC 1126; CHEM 1111 and CHEM 1112; or permission of the instructor)	4
BISC 2454	General Ecology (BISC 1115 and 1125; and BISC 1116 and BISC 1126; or permission of the instructor)	3
BISC 2467	Marine Biology (BISC 1115 and 1125; and BISC 1116 and BISC 1126; or permission of the instructor)	3
BISC 3454	Marine Ecology	3
BISC 3459	Field Biology (BISC 1115 and 1125; and BISC 1116 and BISC 1126. Recommended background: BISC 2454)	4
BISC 3460	Conservation Biology (BISC 1115 and 1125; and BISC 1116 and BISC 1126; and BISC 2454; or permission of the instructor)	3
BISC 3461	Plant-Animal Interactions (BISC 1115 and 1125; and BISC 1116 and BISC 1126; or permission of the instructor. Recommended background: BISC 2450 or BISC 2454)	3
BISC 3464	Ecology and Evolution of Societies (BISC 1115 and 1125; and BISC 1116 and BISC 1126. Recommended background: BISC 2454 or BISC 2454W)	3
CHEM 2085	Environmental Chemistry	3
CHEM 3140	Geochemistry (GEOL 1001 or GEOL 1005; CHEM 1111–CHEM 1112)	3

GEOG 2108	Weather and Climate (GEOG 1002)	3
GEOG 2128	Geomorphology (GEOG 1002)	3
GEOG 2136	Water Resources (GEOG 1002)	3
GEOL 2106	Oceanography (GEOL 1001 or GEOL 1005)	3
GEOL 2151	History of Life (GEOL 1001 or GEOL 1002 or BISC 1115 and 1125; and BISC 1116 and BISC 1126. (Same as BISC 2451))	3
GEOL 3138	Hydrogeology (GEOL 2111 and GEOL 2122; and MATH 1221 or MATH 1231; or permission of the instructor)	3
GEOL 3191	Geology of Energy Resources (GEOL 2122 or permission of the instructor)	3

3. **Society Courses** – take 3 of the following courses listed here (prerequisites listed)

COURSE Number	Course Name	Credits
ANTH 3407	Conservation in a Changing World: Human and Animal Behavior (ANTH 1001)	3
ANTH 3502	Cultural Ecology (ANTH 1002 or ANTH 1002W or ANTH 1004 or ANTH 1004W or permission of the instructor)	3
ECON 2136	Environmental and Natural Resource Economics (ECON 1011 and ECON 1012)	3
GEOG 2127	Population Geography	3
GEOG 2133	People, Land and Food	3
GEOG 2134	Energy Resources (GEOG 1002)	3
GEOG 2137	Environmental Hazards	3
GEOG 3132	Environmental Quality and Management (GEOG 1002)	3
GEOG 3143	Urban Sustainability (GEOG 1001)	3
HIST 3001.16	Special Topics: Environmental History since 1750	3
IAD 3410	Sustainability and LEED for Architecture and Design (Studio 2 IAD 3300)	3
PHIL 2281	Philosophy of the Environment	3
PPPA 2701	Sustainability and Environmental Policy	3
PUBH 2114	Environment, Health, and Development	3
PUBH 3132	Health and Environment	3
PUBH 3150	Sustainable Energy and Environmental Health	3
SUST 2002	The Sustainable City	3

4. **Field Methods Requirement** – GEOG 2196 or equivalent (including GEOG 2128, or the laboratory class for any upper-level Biology course listed above). Students can also satisfy this requirement with a study abroad class (or a class at another accredited institution) as long as significant environmental measurement is involved, and the class is pre-approved by an Environmental Studies adviser.

5. **Senior Capstone Course** – GEOG 4195. This seminar course is offered every spring and is required for the Environmental Studies major.

6. **Electives** – Two additional upper-level courses chosen from the Science and Society course lists.