# Earth and Environmental Systems

Natural resources and the environment is an interdisciplinary environmental major that integrates coursework in forest ecosystems and geology with the broad range of potential environmental coursework offered at Sewanee.

## Requirements for the Major in Natural Resources and the Environment

The major requires successful completion of the following:

Code	Title	Semester Hours
Course Requirements		
FORS 121	Introduction to Forestry (Lab)	4
GEOL 121	Physical Geology (Lab)	4
FORS/GEOL 332	Oral Presentations	2
Select one of the following:		4
Any lab course in biology (l	BIOL)	
BIOL 130	Field Investigations in Biology	
BIOL 200	Entomology	
CHEM 100	Foundations of Chemistry	
CHEM 120	General Chemistry (Lab)	
PHYS 105	Energy and the Environment	
PHYS 106	Foundations of Global Warming	
Select four core courses in na	tural resources from the following:	16
FORS 211	Dendrology (Lab)	
FORS 262	Forest and Watershed Restoration (Lab)	
FORS/GEOL 303	Soils (Lab)	
FORS 305	Forest Ecology (Lab)	
FORS 312	Silviculture (Lab)	
FORS 319	Natural Resource Management and Decisions	
GEOL 221	Mineralogy (Lab)	
GEOL 222	Historical Geology (Lab)	
GEOL 225	Sedimentology (Lab)	
GEOL 305	Economic Geological Resources (Lab)	
GEOL 314	Hydrology (Lab)	
GEOL 325	Field and Structural Geology (Lab)	
Select three additional approv	red electives from the following: <sup>I</sup>	12
Any course in biology (BIO	L) numbered 130 or higher	
Any course in chemistry (C	HEM)	
Any course in environment	tal studies (ENST)	
Any course in environment	tal science (ESCI)	
Any course in forestry (FO	RS)	
Any course in geology (GEO	OL)	
Any course in physics (PHY	YS)	
ANTH 316	Archaeology of the Cumberland Plateau	
ANTH 318	North American Archaeology	
ANTH 357	Field School in Archaeology	
ARCH 332	Archaeological Resource Management and Policy	
ECON 335	Environmental Economics	
HIST 283	Environmental History	
INGS 104	Oil: The Fuel of Globalization	
PHIL 230	Environmental Ethics	
POLS 260	Political Theory of the Environment	

POLS 382	International Environmental Policy	
RELG 307	Religious Environmentalism	
RELG 341	Religion and Ecology	
RELG 353	Buddhism and the Environment	
Total Semester Hours		42

Total Semester Hours 42

Code Title Semester
Hours

#### Additional Requirements

A comprehensive examination

Department capstone requirement, which may be satisfied by:

- a. Receiving a grade of C or higher on the Elberton Project undertaken in GEOL 320 Petrology;
- b. Completing no earlier than the second semester of their junior year an independent study project that culminates in a technical paper or a presentation at Scholarship Sewanee; or,
- c. Completing ESCI 450 during the spring semester of their senior year.
- Electives are chosen by the student, in consultation with his/her faculty advisor, to match the student's specific interests. ENST 101 is recommended.

## Required for B.S. (but not for B.A.) in Natural Resources and the Environment

Code	Title	Semester Hours
Course Requirem	nents	
Select two lab scien	nce courses not in forestry and geology (chemistry recommended)	8
Select two addition	nal courses in mathematics or science	8
Total Semester Ho	ours	16

### Writing-Intensive Course in the Major Requirement

Students majoring in forestry, geology, or natural resources and the environment can satisfy their writing-in-the-major requirement by:

- I. Successfully completing a designated writing-intensive course in the department, or
- Successfully completing three forestry and/or geology designated "writing portfolio" courses. Written and edited scientific papers
  from each writing portfolio course are to be compiled into a scientific writing portfolio by each student, and maintained by his/her
  advisor.

The following courses are designated as writing portfolio or writing-intensive courses in the Department of Earth and Environmental Systems. Other courses may be approved as such during some years. In exceptional cases and by faculty permission, one of the three writing portfolio courses might be fulfilled by FORS 444 or GEOL 444.

#### Writing Portfolio Courses in the Department of Earth and Environmental Systems (three required):

Code	Title	Semester Hours	
Forestry Major			
FORS 204	Forest Wildlife Management (project report)	4	
FORS 262	Forest and Watershed Restoration (Lab) (class paper)	4	
FORS 305	Forest Ecology (Lab) (lab report or paper)	4	
FORS 312	Silviculture (Lab) (lab report or paper)	4	
FORS 319	Natural Resource Management and Decisions (project report)	4	
Geology Major			
GEOL 320	Igneous and Metamorphic Petrology (Lab) (writing-intensive)	4	
Natural Resources and the Environment Major			
FORS 204	Forest Wildlife Management (project report)	4	
FORS 262	Forest and Watershed Restoration (Lab) (class paper)	4	
FORS 305	Forest Ecology (Lab) (lab report or paper)	4	
FORS 312	Silviculture (Lab) (lab report or paper)	4	

FORS 319	Natural Resource Management and Decisions (project report)	4
GEOL 222	Historical Geology (Lab) (term paper)	4
GEOL 305	Economic Geological Resources (Lab) (field trip report)	4
GEOL 314	Hydrology (Lab) (lab report)	4