

# 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:

### Course Requirements

FORS 121	Introduction to Forestry (Lab)	4
GEOL 121	Physical Geology (Lab)	4
FORS/GEOL 332	Oral Presentations	2
FORS/GEOL 432	Senior Field Project (Capstone)	4
Select one of the following:		4
Any lab course in biology (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 natural 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 approved electives from the following: <sup>1</sup>		12
Any course in biology (BIOL) numbered 130 or higher		
Any course in chemistry (CHEM)		
Any course in environmental studies (ENST)		
Any course in environmental science (ESCI)		
Any course in forestry (FORS)		
Any course in geology (GEOL)		
Any course in physics (PHYS)		
ANTH 307	The Archaeology of Southeastern United States	
ANTH 316	Archaeology of the Cumberland Plateau	
ANTH 318	North American Archaeology	
ANTH 350	Environmental Archaeology	
ANTH 357	Field School in Archaeology	
ECON 335	Environmental Economics	
HIST 238	Women in U.S. History, 1870 to the Present	
PHIL 230	Environmental Ethics	
POLS 260	Political Theory of the Environment	
POLS 381	The Political Economy of Sustainable Development	

POLS 382	International Environmental Policy	
RELG 307	Religious Environmentalism	
RELG 341	Religion and Ecology	
RELG 353	Buddhism and the Environment	
<b>Total Semester Hours</b>		<b>46</b>

**Additional Requirements**

A comprehensive examination

- <sup>1</sup> Electives are chosen by the student, in consultation with his/her faculty advisor, to match the student's specific interests. ENST IOI is recommended.

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

Select two lab science courses not in forestry and geology (chemistry recommended)	8
Select two additional courses in mathematics or science	8
<b>Total Semester Hours</b>	<b>16</b>

**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

- successfully completing GEOL 320, or other designated writing-intensive course in the department, or
- by successfully completing four 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 four writing portfolio courses might be fulfilled by FORS 444 or GEOL 444.

**Writing Portfolio Courses in the Department of Earth and Environmental Systems (four required):**

Code	Title	Semester Hours
<b>Forestry Major</b>		
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
<b>Geology Major</b>		
GEOL 320	Igneous and Metamorphic Petrology (Lab) (writing-intensive)	4
<b>Natural Resources and the Environment Major</b>		
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