

Requirements for the MINOR in Environmental Science

Five courses required. Total credits = minimum of 15

Important Note: No more than two courses may be double-counted towards the requirements of both your major and this minor (or between this minor and another minor or certificate). Up to six (6) credits of transfer/exchange/advanced placement credits accepted.

Select no more than one (1) of the following three courses

ENVIRSCI 101 Introduction to Environmental Science (BS) or Advanced Placement Credit.

OR NRC 100 Environment and Society (I)

OR GEOGRAPH 110 Intro to Climate Science (PS)

Select two (2) of following courses

ENVIRSCI 213 Introduction to Environmental Policy (*note: restricted enrollment – Fall offering*)

ENVIRSCI 214 Ecosystems, Biodiv.& Global Change (*note: restricted enrollment, Biology prerequisite- Spring*)

ENVIRSCI 315 Principles of Environmental Toxicology & Chemistry (*note: organic chemistry prereq – Spring offering*)

GEOGRAPH 342 – Environmental Geography and Sustainability (Fall)

GEOGRAPHY 490STA - Rethinking US Environmental Policy (spring)

GEOLOGY 285 – Environmental Geology (Fall)

RES-ECON 262 Environmental Economics (*Spring*) **OR** RES-ECON 263 Natural Resources Economics (*Fall*)

Select two (2) courses from approved list of Upper-Level (300+) ENVIRSCI elective course.

Earth Science

ENVIRSCI 364 Environ. Soil Science

ENVIRSCI 565 Soil Form. & Classification

GEOGRAPH 354 Climatology

GEOGRAPH 560 Geomorphology

GEOLOGY 415 Introduction to Geochemistry

GEOLOGY 485 Applied Environ. Geology

GEOLOGY 394LI History of Earth

GEOLOGY 494LI Living on Earth

GEO-SCI 510 Natural Hazards

GEO-SCI 519 Aqueous & Environ. Geochem.

GEO-SCI 557 Coastal Processes

GEO-SCI 563 Glacial Geology

GEO-SCI 587 Hydrogeology

SUSTCOMM 335 Plants in the Landscape

SUSTCOMM 547 Landscape Pattern and Process

Environmental Policy & Land Use

ECON 308 Environmental Economics

SUSTCOMM 553 Resource Policy and Planning

SUSTCOMM 574 City Planning

SUSTCOMM 575 Environ. Law and Resource Mgt

SUSTCOMM 577 Urban Policies

LANDARCH 580 Sustainable Cities

LANDARCH 582 Landscape & Green Urbanism

GEOGRAPH 360 Economic Geography

GEOGRAPH 362 Conservation Geography

GEOGRAPH 370 Urban Geography

GEOGRAPH 372 Urban Issues

GEOGRAPH 440 Political Geography

GEOGRAPH 420 Political Ecology

GEOGRAPH 490STA Geography, Policy & Environ.

GEOGRAPH 492NP National Parks & Protected Areas

NRC 309 Natural Resources Policy & Admin.* *students who have taken ENVSCI 213 should NOT also take NRC 309.*

NRC 576 Water Resources Mgt & Policy

ENVSCI/NRC 562 -Clean Energy & Climate Policy

ENVSCI/NRC 561- AnalytcMethds/Enery&ClimPol

POLISCI 382 Environmental Policy

REGIONPL 558 Issues in Environmental Mgt

RES-ECON 360 –Econ. Development & Environment

RES-ECON 363 Economics of Water Policy

RESECON 471 Benefit-Cost Analysis

RESECON 472 Adv.topics Resource & Env Economics

(next page for more courses)

Ecology and Conservation Science

BIOLOGY 421 Plant Ecology

BIOLOGY 540 Herpetology

BIOLOGY 544 Ornithology

BIOLOGY 548 Mammalogy

BIOLOGY 550 Animal Behavior

ENVIRSCI 515 Microbiology of Soil

NRC 540 Forest Management

NRC 564 Wildlife Habitat Management

NRC 565 Dyn. & Mgt of Wildlife Populations

NRC 566 Restoration Ecology

NRC 568 Wetland Soils

NRC 570 Ecology of Fish

NRC 580 Conservation Genetics

NRC 571 Fisheries Science & Management

NRC 578 Watershed Science & Mgt

STOCKSCH 326 Insect Biology

Environmental Quality, Planning & Assessment

CE-ENGIN 370 Intro Environ.& Water Resources
ENVIRSCI 452 Haz. Waste Operations & Emergency Response
ENVIRSCI 465 Principles of Environ. Site Assessment
ENVIRSCI 575 Environmental Soil Chemistry
ENVIRSCI 585 Inorganic Contaminants in Soil, Water & Sediment
ENVIRSCI 587 Phyto/Bioremediation
GEOLOGY 331 Geological Mapping
GEOGRAPH 352 Computer Mapping
GEOGRAPH 468 GIS & Spatial Analysis
GEO-SCI 591CM Introduction to Climate & Environmental Monitoring
MICROBIO 310 or 311 General Microbiology
MICROBIO 385 Intro Biotechnology Lab
MICROBIO 562 Environ. Biotechnology
NRC 534 Forest Measurements
NRC 575 Case Studies in Land Conserv.
NRC 577 Ecosystem Modeling & Simulation
NRC 585 Introduction to GIS
NRC 581 Wetlands Assessment & Field Techniques
PUBHLTH 562 Air Quality Assessment
REGIONPL 552 Planning Tools & Technique

How to Declare the Minor:

Minors are declared after they are completed. Please email the Program Manager (Prof. Deborah Henson, dhenson@eco.umass.edu) with your SPIRE ID number, and the list of five classes that you are using to fulfill the minor. You can “declare” your intention to complete the minor after the add/drop period in your final semester, or after the courses are completed if this happens sooner than your final semester before graduation.