Environmental Science and Management
Requirements for a Minor in Environmental Studies

To obtain a minor in Environmental Studies a student must complete a minimum of 28 credits (at least 12 of which must be taken in residence at PSU). At least 4 credits each in biological science, physical science (physics, chemistry, geology), economics, and Calculus are expected before admission to the minor.

Credits

ESM 222  Applied environmental studies: science and policy ........................................4
ESM 320, 321 Analysis of environmental systems I, II ..............................................8
ESM 322  Environmental risk assessment .................................................................4
Upper division environmental policy/mgmt course .....................................................4
Upper division environmental science courses .........................................................8

Environmental Policy/Management Courses (minimum 4 credits)

EC 432  Environmental Economics .................................................................4
Geog 345  Resource Management .................................................................4
Geog 445  Resource Management Topics .........................................................4
Geog 446  Water Resource Management .........................................................4
ESM 335  Introduction to Environmental Management .........................................4
ESM 428  Urban Ecology ......................................................................................4
ESM 429  Environmental Impact Assessment ......................................................4
ESM 433  Natural Resource Economics ...............................................................4
ESM 434  Business Environmental Management Econ .........................................4
ESM 443  Global Environmental Economics .......................................................4
ESM 478  Aquatic Vascular Plants ........................................................................4
ESM 483  Marine Conservation Science & Management .........................................4

Environmental Science Courses (minimum 8 credits)

ESM 410  Aquatic Chemistry ................................................................................4
ESM 410  Water and Waste Water Treatment .........................................................4
ESM 410  Macroinvertebrates ...............................................................................4
ESM 420  Ecological Toxicology ............................................................................4
ESM 424  Wetland Ecology ....................................................................................4
ESM 425  Watershed Hydrology .............................................................................4
ESM 426  Ecology of Streams and Rivers .............................................................4
ESM 427  Watershed Biogeochemistry .................................................................4
ESM 445  Old Growth Forest Ecology ..................................................................4
ESM 460  Air Quality ............................................................................................4
ESM 471  Atmospheric Physics ..............................................................................4
ESM 473  Phytoplankton Ecology ..........................................................................4
ESM 479  Fate and Transport of Toxics .................................................................4
ESM 499  Landscape Connectivity ..........................................................................4

Courses taken under the undifferentiated grading option (pass, no pass) will not be accepted toward fulfilling minor requirements. Courses with omnibus numbers 401, 404, 405, and 407 are not allowed for minor. Additional courses may be required as prerequisites.