Environmental Science and Management
Minor in Sustainability

Description of Minor in Sustainability
The goal of the Minor in Sustainability is to offer Portland State undergraduate students an understanding of the multidisciplinary concepts and practices integral to sustainable living. The Minor has two primary components. The first is to educate the students in a balanced and rigorous manner about the various concepts, theories and methods related to sustainability. The second is to have the students work with a community partner on a project applying sustainability concepts and measures.

The Minor offers an integrated series of lower and upper division courses that comprise a multidisciplinary study of the environmental, social and economic dimensions of sustainability. Students receiving the minor will complete 7 linked classes:
1. Environmental sustainability
2. Regulations/Policy and Sustainability
3. One course dealing with Economic and Business Issues
4. One course dealing with Social and Management Issues
5. One course dealing with Environmental and Ecological Issues
6. Focus elective
7. A service-learning course focused on sustainability

Curriculum
To obtain a minor in sustainability a student must complete at least 30 credits (at least 15 of which must be taken in residence at PSU), to including the following:

ESM 150 Orientation to Environmental Science and Management 1
UNST 224 Environmental Sustainability 4
ESM 222 Applied Environmental Studies: Policy Considerations 4

Upper-division credits to include at least a total of four courses from the following three categories. Students must choose at least one course from each category.

Economics and Business Issues
EC 332 Economics of Environmental Issues 4
EC 430 Resources and Environmental Economics 4
EC/ESM 433 Advanced Natural Resource Economics 4
EC/ESM 434 Business Environmental Management Economics 4
EC/ESM 443 Global Environmental Economics 4
EC 444 Economics of Green Power 4
USP 490 Green Economics and Sustainable Development 3
ESM/BA357 Business Approaches to Environmental Problems 4

Social and Management Issues
ARCH 367 Fundamental of Environmental Design 4
GEOG 340 Global Water Issues and Sustainability 4
GEOG 345 Resource Management 4
GEOG 346  World Population and Food Supply 4
GEOG 347  Environmental Issues and Action 4
GEOG 442  Sustainable Cities 4
GEOG 465  Tuscany: Sustainability in City and Country 4
HST 339  The Environment and History 4
PHL 310  Environmental Ethics 4
PS 319  Politics of the Environment 4
SCI 321  Energy and Society I 4
SCI 322  Energy and Society II 4
SOC 341  Population Trends and Policy 4
SOC 465  Environmental Sociology 4
USP 313  Urban Planning: Environmental Issues 4
USP 419  Population and Society 4
/SOC 441
USP 325  Community and the Built Environment 4
SYSC 334  Modeling Social-Ecological Systems 4

Environmental and Ecological Issues
ESM 355  Understanding the Environment 4
ESM 356  Understanding Environmental Conservation 4
ESM 420  Ecological Toxicology 4
ESM 424  Wetland Ecology and Regulations 4
ESM 426  Ecology of Stream and Rivers 4
ESM 428  Urban Ecology 4
ESM 445  Old-Growth Forest Ecology 4
ESM 460  Air Quality 4
/CE 488
SCI 335  Water and the Environment I 4
SCI 336  Water and the Environment II 4
SCI 352  Science and Policy of Climate Change 4

In addition, students must choose an appropriate capstone or internship*:
UNST 421  Capstone 6
ESM 450  Case Studies in Environmental Problem Solving 6
ESM 404  Internship 6

Total credits 30-31
* A list of acceptable capstone and internship courses will be prepared for each year

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, 406, and 407 are not allowed for the minor. Additional courses may be required as prerequisites. Only grades of C- or above count toward satisfying the minor requirement.

Note: Students earning the Minor in Sustainability may NOT also earn the Sustainable Urban Development Minor offered by the Nohad Toulan School of Urban Studies and Planning unless the courses presented for the minors differ by at least 12 credits.