Environmental Studies Major Requirements

All courses for the major must be taken for a grade (C- or better).

DO NOT take major courses for P/NP!

Up to 16 upper division credits (usually four courses) may be applied to a 2nd major.

You must meet with a Tykeson adviser at least two terms prior to graduation.

Check pre-requisites for all upper division courses.

AREA 1. Lower Division Environmental Studies Requirements
ENVS 201 (Soc Sci) _______ ENVS 202 (Nat Sci) _______ ENVS 203 (Humanities) _______

AREA 2. Lower Division Math and Science Requirements
Math (2 courses):
_______ MATH 105 or above (Math 111 recommended)
_______ Statistics (MATH 243, 425, ERTH 418 or GEOG 495)

Natural Sciences (4 courses): One sequence of three courses from approved list below, plus an additional course from a different sequence. At least two departments must be represented.
Sequence: ________, ________, ________, additional Nat Sci class _______

- Life Sciences: BI 211-213 or CH 111& BI 211, BI 213
- Chemistry: CH 221-223
- Earth Sciences: ERTH 101-103 or ERTH 201-203
- Physical Sciences: CH 111 & PHYS 161-162 or PHYS 201-203

Additional approved non-sequence lower-division science courses:
- ANTH 270, BI 130, BI 131 (but not in conjunction with the Life Science sequence)
- CH 113
- CH 114
- GEOG 141
- GEOG 181 [-2]
- ERTH 213
- Other approved course listed on tip sheet

AREA 3A. Upper-Division Natural Science (2 courses)
_______ ANTH 341 Food Origins
_______ ANTH 361 Human Evolution
_______ ANTH 362 Human Biological Variation (IP)
_______ ANTH 375 Primates in Ecological Communities
_______ ANTH 463 Primate Behavior
_______ ANTH 466 Primate Feeding and Nutrition
_______ ANTH 472 Primate Conservation Biology
_______ BI 306 Pollination Biology
_______ BI 307 Forest Biology
_______ BI 309 Tropical Diseases of Africa
_______ BI 330/331 Microbiology and Lab
_______ BI 357 Marine Biology
_______ BI 359 Plant Biology
_______ BI 370 Ecology
_______ BI 374 Conservation Biology
_______ BI 380 Evolution
_______ BI 390 Animal Behavior
_______ BI 395 Tropical Ecology
_______ BI 432 Mycology
_______ BI 442 Systemic Botany
_______ BI 448 Field Botany

_______ BI 451 Invertebrate Zoology [OIMB] (If 8 credits, then counts as 2 courses)

_______ BI 452 Insect Biology
_______ BI 454 Estuarine Biology [OIMB] (5 credits)
_______ BI 455 Marine Birds and Mammals [OIMB] (6 credits)
_______ BI 457 Top: Marine Conservation [OIMB] (5 credits)
_______ BI 458 Biological Oceanography [OIMB] (5 credits)
_______ BI 468 Amphibians & Reptiles of Oregon
_______ BI 471 Population Ecology
_______ BI 472 Community Ecology
_______ BI 474 Marine Ecology [OIMB] (8 credits, counts as 2 courses)
_______ BI 476 Terrestrial Ecosystem Ecology
_______ CH 331 Organic Chemistry I
_______ CH 335 Organic Chemistry II
_______ CH 336 Organic Chemistry III
_______ ENVS 350 Ecological Energy Generation
_______ ENVS 465 Wetland Ecology & Management
_______ ENVS 477 Soil Science
_______ GEOG 321 Climatology
_______ GEOG 322 Geomorphology
_______ GEOG 323 Biogeography
_______ GEOG 360 Watershed Science & Policy
_______ GEOG 361 Global Environmental Change
_______ GEOG 425 Hydrology and Water Resources
_______ GEOG 427 Fluvial Geomorphology
_______ GEOG 430 Long-Term Environmental Change
_______ GEOG 433 Fire and Natural Disturbances
_______ GEOG 461 Environmental Alteration
_______ GEOG 481 GIScience I
_______ GEOG 482 GIScience II
_______ GEOG 485 Remote Sensing I
_______ GEOG 486 Remote Sensing II
_______ GEOG 491 Advanced Geographic Information Systems
_______ ERTH 304, 305, 306, 307 OR 308 (no more than one course of ERTH 30X)
_______ ERTH 310 Earth Resources & Environment
_______ ERTH 311 Earth Materials (5 credits)
_______ ERTH 315 Earth Physics
_______ ERTH 316 Introduction to Hydrogeology
_______ ERTH 331 Mineralogy (5 credits)
_______ ERTH 332 Intro Petrology (5 credits)
_______ ERTH 334 Sedimentology and Stratigraphy
_______ ERTH 350 Structural Geology (3 credits)
_______ ERTH 353 Geological Hazards
_______ ERTH 425 Geology of Ore Deposits (5 credits)
_______ ERTH 433 Paleoobotany
_______ ERTH 434 Vertebrate Paleontology
_______ ERTH 438 Geobiology
_______ ERTH 435 Paleopedology
_______ ERTH 441 Hillslope Geomorphology
_______ ERTH 451 HydroERTHogy
_______ ERTH 462 Environmental Geomechanics
_______ ERTH 468 Intro Seismology
_______ ERTH 472 Aqueous-Mineral-Gas Equilibria
_______ ERTH 473 Isotope Geochemistry
_______ Other approved course listed on tip sheet

Last updated 2/18/2020
**AREA 3B. Upper-Division Social Science, Policy, Humanities and Sustainable Design and Practice Courses (10 courses)**

All ENVS majors must complete 1 foundation course from each of the following 4 categories. Then select 2 categories and complete an additional 3 courses (foundation or elective) in each.

*Course is repeatable if titles are different
An Honors Thesis can substitute for one elective course.

### Social Science

Foundation Courses:
- ENVS 435 Environmental Justice
- ENVS 450 Political Ecology
- ENVS 455 Sustainability
- SOC 416 Issues in Sociology of the Environment (contact instructor for approval)*

Elective Courses:
- ANTH 320 Native North Americans [>2] (IP)
- ANTH 431 Plants and People
- ES 350 Native American and the Environment (IP)
- GEOG 342 Geography of Globalization
- GEOG 442 Urban Geography
- GEOG 465 Environment and Development (IC)
- GEOG 471 North American Historical Landscapes (AC)
- INTL 420 International Community Development
- INTL 421 Gender and International Development (IP)
- INTL 432 Indigenous Cultural Survival (IC)
- SOC 304 Community, Environment, Society [>2]
- WGS 331 Science, Technology & Gender (IP)
- Other approved course listed on tip sheet

### Policy

Foundation Courses:
- ENVS 335 Allocating Scarce Environmental Resources [>2]
- PPPM 443 Natural Resource Policy
- PPPM 444 Environmental Policy
- PS 367 Science and Politics of Climate Change [>2]
- PS 477 International Environmental Politics

Elective Courses:
- EC 333 Resource & Environmental Economic Issues [>2]
- EC 434 Environmental Economics
- EC 435 Natural Resource Economics
- GEOG 463 Geography, Law, and the Environment
- GEOG 467 International Water Policy
- PPPM 327 Global Leadership and Change
- PPPM 331 Environmental Management
- PPPM 340 Climate Change Policy [>2]
- PPPM 418 Introduction to Public Law
- PPPM 438 Issues in Planning
- PPPM 446 Socioeconomic Development Planning
- PPPM 480 Nonprofit Management I
- Other approved course listed on tip sheet

### Humanities

Foundation Courses:
- ENG 469 Literature and the Environment*
- ENVS 345 Environmental Ethics [>1]
- HIST 378 American Environmental History to 1890 [>2] (AC)
- HIST 379 American Environmental History, 1890-Present [>2] (AC)
- HIST 473 American Environmental History: Topic
- PHIL 340 Environmental Philosophy [>1]

Elective Courses:
- ENG 325 Literature of the Northwest
- PHIL 309 Global Justice [>2]
- PHIL 339 Intro Philosophy of Science
- PHIL 345 Place in the Cosmos [>1]
- Other approved course listed on tip sheet

### Sustainable Design and Practice

Foundation Courses:
- ARCH 431 Community Design
- ARCH 435 Principles of Urban Design
- ENVS 467 Sustainable Agriculture
- LA 440 Introduction to Landscape Planning Analysis
- LA 441 Principles of Applied Ecology (contact instructor for approval) *
- PPPM 442 Sustainable Urban Development
- PPPM 445 Green Cities

Elective Courses:
- LA 326 Plants: Fall
- LA 337 Spring Plants
- LA 337 Landscape Field Work*
- LA 390 Urban Farm (this course may be taken only once for the major)
- Other approved course listed on tip sheet

### AREA 4. Environmental Issues (1 course)

- ENVS 411, 425, 427, or other approved course listed on tip sheet

### AREA 5. Practical Learning Experience (4 credits)

All ENVS majors must complete 4 upper division credits of practical learning (eg, 404, 429 or other approved course) which can be satisfied in any of the following ways:

- Environmental Leadership Program (ENVS 429 – application required)
- Internship (ENVS 404 – approval by Internship Coordinator required)
- Honors Thesis (ENVS 403 – w/advisor approval)
- Other experiential learning opportunity as approved by advisor