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 <u>must</u> 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 Systematic 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 BI 478/479 Neotropical Ecology in Ecuador (8 credits, counts as 2 courses) 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 <u>OR</u> 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 Paleobotany ERTH 434 Vertebrate Paleontology ERTH 435 Paleopedology ERTH 438 Geobiology ERTH 441 Hillslope Geomorphology ERTH 451 Hydrogeology 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

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

- _____ ENVS 435 Environmental Justice _____ ENVS 450 Political Ecology
- _____ ENVS 455 Sustainability
- _____ GEOG 341 Population & Environment [>2]{IC}
- _____ 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 330 Urban and Regional Economic Problems [>2]{IP}
- _____ 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
- 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)
- _____ LA 429 Civic Agriculture
- _____ 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