

# Crop and Soil Science Degree Checklist

Name: \_\_\_\_\_  
ID: \_\_\_\_\_  
Entering Status: \_\_\_\_\_

Option: **Soil Science**  
Term Entering: \_\_\_\_\_  
From: \_\_\_\_\_

## University Core Requirements:

(No single course can satisfy more than one core area)

### Writing/Health

\_\_\_\_\_ WR 121 – English Composition (3) (Minimum passing grade of C–)  
\_\_\_\_\_ WR II (3)  
\_\_\_\_\_ COMM (3)  
\_\_\_\_\_ Writing Intensive (SOIL 325) (3)  
\_\_\_\_\_ HHS 231 – Lifetime Fitness for Health (2)  
\_\_\_\_\_ HHS 24\_ – Lifetime Fitness or PAC (1)  
\_\_\_\_\_ Foreign Language (if deficient; waived for pre-1997 HS graduates)

### Perspectives

(No more than 2 courses in one department)

\_\_\_\_\_ Western Culture \_\_\_\_\_  
\_\_\_\_\_ Cultural Diversity \_\_\_\_\_  
\_\_\_\_\_ Literature/Arts \_\_\_\_\_  
\_\_\_\_\_ Social Processes \_\_\_\_\_  
\_\_\_\_\_ Difference, Power, Dis. \_\_\_\_\_  
\_\_\_\_\_ Biological Science (Met by major requirements)  
\_\_\_\_\_ Physical Science (Met by major requirements)  
\_\_\_\_\_ Phys. or Biol. Science (Met by major requirements)

### Math

\_\_\_\_\_ MTH 105, 111, 112, 211, 241, 245 or 251 (4) (Met by major requirements)

### Synthesis/Upper Division (Each course from a different department)

\_\_\_\_\_ Contemp. Global Issues (3) (\*soil science electives meeting requirement)  
\_\_\_\_\_ Science, Tech., Society (3) (\*\*soil science electives meeting requirement)

## Major Core:

### General Science Core

\_\_\_\_\_ MTH 111 – College Algebra (4)  
\_\_\_\_\_ BI 211 – Principles of Biology (4)  
\_\_\_\_\_ BI 212 – Principles of Biology (4)  
\_\_\_\_\_ BI 213 – Principles of Biology (4)  
\_\_\_\_\_ CH 121. General Chemistry (5)  
or CH231.General Chemistry (4) and CH 261.Laboratory for Chemistry 231 (1)  
\_\_\_\_\_ CH 122. General Chemistry (5)  
or CH232.General Chemistry (4) and CH 262.Laboratory for Chemistry 232 (1)  
\_\_\_\_\_ CH 123. General Chemistry (5)  
or CH233.General Chemistry (4) and CH 263.Laboratory for Chemistry 233 (1)

(Students must receive a grade of C-, or higher, to continue on to the next chemistry course in the series)

### Orientation

\_\_\_\_\_ SOIL 101 - Intro. Horticulture, Crop, Soil, & Insect Science (1)

### Agricultural Sciences

\_\_\_\_\_ ENT 311 – Intro. to Insect Pest Management (4)  
\_\_\_\_\_ SOIL 205 – Soil Science (4)

(Select 1 of the following courses)

\_\_\_\_\_ BOT 331 – Plant Physiology (4)  
\_\_\_\_\_ CROP 200 – Crop Ecol. & Morphol. (3)  
\_\_\_\_\_ HORT 301 – Biology of Horticulture (3)

(Select 1 of the following courses)

\_\_\_\_\_ HORT 316 – Plant Nutrit. (4)  
\_\_\_\_\_ SOIL 316 – Nutrient Cycling in Agroeco. (4)

### Experiential Learning

\_\_\_\_\_ SOIL 401, 403 or 410 – Research/Thesis/Internship (3)  
\_\_\_\_\_ SOIL 407 – Senior Seminar (1)

### Ecology (Select 1 of the following courses)

\_\_\_\_\_ BI 370 – Ecology (3)  
\_\_\_\_\_ BOT 341 – Plant Ecology (4)  
\_\_\_\_\_ HORT 318 – Applied Ecology of Managed Ecosystems (3)  
\_\_\_\_\_ RNG 341 – Rangeland Ecology and Mngt. (3)

### Technology

\_\_\_\_\_ SOIL 468 – Soil Landscape Analysis (3) alt. year

### Writing Intensive

\_\_\_\_\_ SOIL 325 – Ag & Envir. Predicaments: A Case Study Approach (WIC) (3)

### Capstone

\_\_\_\_\_ SOIL 475 – Soil Resource Potentials (4)

## Option Requirements

### Soils Research Track

\_\_\_\_\_ GEO 201 or 202 or 203 (4)  
\_\_\_\_\_ MTH 251 (4)  
\_\_\_\_\_ PH 201, 202 – General Physics (10)  
\_\_\_\_\_ SOIL 435 - Environmental Soil Physics (3)  
\_\_\_\_\_ SOIL 445 – Environmental Soil Chemistry (3)  
\_\_\_\_\_ SOIL 455 – Biology of Soil Ecosystems (4)  
\_\_\_\_\_ SOIL 466 – Soil Morphology & Classification (4)  
\_\_\_\_\_ ST 351 – Intro. to Statistical Methods (4)

### OR

### General Soils Track

\_\_\_\_\_ GEO 201 or 202 or 203 (4)  
\_\_\_\_\_ MTH 112 (4) or MTH 241 (4) or MTH 251 (4)  
\_\_\_\_\_ SOIL 466 – Soil Morphology & Classification (4)  
\_\_\_\_\_ ST 351 – Intro. to Statistical Methods (4)

Select 1 of the following courses:

\_\_\_\_\_ SOIL 435 - Environmental Soil Physics (3) alt. year  
\_\_\_\_\_ SOIL 445 – Environmental Soil Chemistry (3) alt. year  
\_\_\_\_\_ SOIL 455 – Biology of Soil Ecosystems (4)  
\_\_\_\_\_ SOIL 366 – Ecosystems of Wildland Soils (3) alt. year

## Soil Science Electives (Select a minimum of 12 credits)

### Nutrient Cycling

\_\_\_\_\_ AREC 211 – Management in Agriculture (4)  
\_\_\_\_\_ AREC 250 – Intro to Environmental Econ & Policy (3)  
\_\_\_\_\_ BI/FES/TOX 435 – Genes & Chemicals in Agriculture: Value & Risk (3)\*\*  
\_\_\_\_\_ BOT 331 – Plant Physiology (4)  
\_\_\_\_\_ BOT 547 – Nutrient Cycling (3)  
\_\_\_\_\_ CH 130 – General Chemistry of Living Systems (4)  
\_\_\_\_\_ CROP 199 – Special Topics: Issues in Sustainable Ag (1)  
\_\_\_\_\_ FES 365 – Iss. in Natural Resource Conservation (3)\*  
\_\_\_\_\_ HORT 316 – Plant Nutrition (4)  
\_\_\_\_\_ RNG 341 – Rangeland Ecology & Management (3)  
\_\_\_\_\_ SOIL 395 – World Soil Resources (3)\*\*  
\_\_\_\_\_ SOIL 525 – Mineral-Organic Matter Interactions (3)  
\_\_\_\_\_ TOX 430 – Chemical Behavior in the Environment (3)

### Soil Biology/Ecology

\_\_\_\_\_ BI 311 – Genetics (4)  
\_\_\_\_\_ BI 314 – Cellular & Molecular Biology (4)  
\_\_\_\_\_ BI/EFS/TOX 435 – Biotech: Ag, Food, & Resource Issues (3)\*\*  
\_\_\_\_\_ BI 370 – Ecology (3)  
\_\_\_\_\_ BOT 331 – Plant Physiology (4)  
\_\_\_\_\_ BOT 332 – Lab Techniques in Plant Biology (3)  
\_\_\_\_\_ BOT 341 – Plant Ecology (3)  
\_\_\_\_\_ CH 331 – Organic Chemistry (4)  
\_\_\_\_\_ CH 332 – Organic Chemistry (4)  
\_\_\_\_\_ FES 341 – Forest Ecology (3)  
\_\_\_\_\_ FES 564 – Interactions of Vegetation & Atmosphere (3)  
\_\_\_\_\_ MB 302 – General Microbiology (3)  
\_\_\_\_\_ MB 303 – General Microbiology Lab (2)  
\_\_\_\_\_ MB 448 – Microbial Ecology (3)  
\_\_\_\_\_ SOIL 366 – Ecosystems of Wildland Soils (3) alt. year

### Soil Hydrology

\_\_\_\_\_ CE 412 – Hydrology (4)  
\_\_\_\_\_ CE 413 – GIS in Water Resources (3)  
\_\_\_\_\_ FE 430 – Watershed Processes (4)  
\_\_\_\_\_ FE 434 – Forest Watershed Management (4)  
\_\_\_\_\_ GEO 487 – Hydrogeology (4)  
\_\_\_\_\_ GEOG 340 – Intro to Water Science & Policy (3)\*\*  
\_\_\_\_\_ GEOG 360 – Intro to Geographic Info Systems (4)  
\_\_\_\_\_ GEOG 440 – International Water Resources Management (3)  
\_\_\_\_\_ MTH 251 – Differential Calculus (4)  
\_\_\_\_\_ MTH 252 – Integral Calculus (4)  
\_\_\_\_\_ PH 202 – General Physics (5)

**Spatial Analysis/Land Use**

- \_\_\_\_\_ AREC 250 – Intro. Enviro. Econ. & Policy (3)
- \_\_\_\_\_ FE 434– Forest Watershed Management (4)
- \_\_\_\_\_ FES 141 – Tree & Shrub Identification (3)
- \_\_\_\_\_ FES 365 – Issues in Natural Resources Con. (3)\*
- \_\_\_\_\_ GEO 432 – Applied Geomorphology (3)
- \_\_\_\_\_ GEOG 201 – Foundations of Geospatial Science and GIS (4)
- \_\_\_\_\_ GEOG 340 – Intro to Water Science & Policy (3)\*\*
- \_\_\_\_\_ GEOG 360 – Intro to Geographic Info. Systems (4)
- \_\_\_\_\_ GEOG 450 – Land Use (3)
- \_\_\_\_\_ HORT 414 – Information Systems in Agriculture (4)
- \_\_\_\_\_ PH 201– General Physics (5)
- \_\_\_\_\_ PH 202 – General Physics (5)
- \_\_\_\_\_ RNG 341 – Rangeland Ecology & Management (3)
- \_\_\_\_\_ SOIL 366 – Ecosystems of Wildland Soils (3) *alt. year*

**Sustainable Systems**

- \_\_\_\_\_ AREC 250 – Intro Environ. Economics & Policy (3)
- \_\_\_\_\_ BI 301 – Human Impacts on Ecosystems (3)\*
- \_\_\_\_\_ BI/Z 349 – Biodiv: Causes, Conseqs., & Conserv. (3)\*
- \_\_\_\_\_ BOT 350– Introductory Plant Pathology (4)
- \_\_\_\_\_ CROP 199 – Special Topics: Issues in Sust. Agriculture (1)
- \_\_\_\_\_ CROP 300 – Crop Production in Pacific Northwest Agroecosystems (4)
- \_\_\_\_\_ CROP 330 – World Food Crops (3)\*
- \_\_\_\_\_ CROP 440 – Weed Management (4)
- \_\_\_\_\_ CROP 460 – Seed Production (3)
- \_\_\_\_\_ CROP 480 – Case Studies Cropping Syst. Manage. (4)
- \_\_\_\_\_ GEOG 300 – Sustainability for the Common Good (3)\*\*
- \_\_\_\_\_ HORT 260 – Organic Farming & Gardening (3)
- \_\_\_\_\_ SOIL 499 – Special Topics (1)

**Water/Watershed Management**

- \_\_\_\_\_ AREC 250 – Intro to Environ. Econ. & Policy (3)
- \_\_\_\_\_ AREC 351 – Natural Resource Economics & Policy (3)
- \_\_\_\_\_ FE 430 – Watershed Processes (4)
- \_\_\_\_\_ FE 434 – Forest Watershed Management (4)
- \_\_\_\_\_ FES 365 – Issues Natural Resources Conservation (3)\*
- \_\_\_\_\_ FW 326 – Integrated Watershed Management (3)
- \_\_\_\_\_ GEO 322 – Surface Processes (4)
- \_\_\_\_\_ GEOG 340 – Introduction to Water Science & Policy (3)\*\*
- \_\_\_\_\_ PS 475 – Environmental Politics & Policy (4)
- \_\_\_\_\_ RNG 355 – Desert Watershed Management (3)
- \_\_\_\_\_ RNG 455 – Riparian Ecology & Management (3)
- \_\_\_\_\_ SOIL 366 – Ecosystems of Wildland Soils (3) *alt. year*

**Total Units (need 180)** \_\_\_\_\_

**Upper Div. Units (need 60)** \_\_\_\_\_