Crop and Soil Science Degree Checklist

Name: __________________________ 
ID: ______________________________ 
Entering Status: _____________________

**University Core Requirements:**  
(No single course can satisfy more than one core area)

**Writing/Health**
- WR 121 – English Composition (3)
- 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 or 221 – General Chemistry (5)
- CH 122 or 222 – General Chemistry (5)
- CH 123 or 223 – General Chemistry (5)

**Orientation**
- SOIL 101 - Intro. Horticulture, Crop, Soil, & Insect Science (1)

**Agricultural Sciences**  
(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 Nutr. (4)
- SOIL 316 – Nutrient Cycling in Agroeco. (3)
- ENT 311 – Intro. to Insect Pest Management (5)
- SOIL 205 – Soil Science (4)

**Experiential Learning**
- SOIL 401, 403 or 410 – Research/Thesis/Internship (3 cr)
- 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)

**Writing Intensive**
- SOIL 325 – Ag & Envir. Predicaments: A Case Study Approach (WIC) (3)

**Capstone**
- SOIL 475 – Soil Resource Potentials (4)

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**Option: Soil Science**

**Term Entering:** __________________________

From: __________________________

**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 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)
- SOIL 445 – Environmental Soil Chemistry (3)
- SOIL 455 – Biology of Soil Ecosystems (4)
- SOIL 366 – Ecosystems of Wildland Soils (3)

**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/FS/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)
- FOR 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/FS/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 351 – Organic Chemistry (4)
- CH 332 – Organic Chemistry (4)
- FOR 341 – Forest Ecology (3)
- FS 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)

**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 335 – Intro to Water Science & Policy (3)**
- GEO 365 – Intro to Geographic Info Systems (4)
- GEO 424 – International Water Resources Management (3)
- GEO 487 – Hydrogeology (4)
- MTH 251 – Differential Calculus (4)
- MTH 252 – Integral Calculus (4)
- PH 202 – General Physics (5)
### Spatial Analysis/Land Use
- AREC 250 – Intro. Environ. Econ. & Policy (3)
- FE 434 – Forest Watershed Management (4)
- FOR 141 – Tree & Shrub Identification (3)
- FOR 365 – Issues in Natural Resources Cons. (3)*
- GEO 301 – Map & Image Interpretation (4)
- GEO 335 – Intro to Water Science & Policy (3)**
- GEO 365 – Intro to Geographic Info. Systems (4)
- GEO 423 – Land Use (3)
- GEO 432 – Applied Geomorphology (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)

### 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)
- GEO 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)
- FOR 365 – Issues Natural Resources Cons. (3)*
- FW 326 – Integrated Watershed Management (3)
- GEO 322 – Surface Processes (4)
- GEO 335 – 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)

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**Total Units (need 180)**

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