### 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-

#### Perspectives
- 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 reqs.

#### Synthesis/Upper Division (Each course from a different department)
- Contemporary Global Issues (3) *soil sci. electives meeting reqs.
- Science, Technology, Society (3) *soil sci electives meeting reqs.

#### Major Core:

##### General Science Core
- MTH 111 - College Algebra (4)
- BI 211 - Principles of Biology (4) or BI 204 - Intro. Biology I (4)
- BI 212 - Principles of Biology (4) or BI 205 - Intro. Biology II (4)
- BI 213 - Principles of Biology (4) or BI 206 - Intro. Biology III (4)
- CH 121 - General Chemistry (5)
  or CH 231 - General Chemistry (4) and CH 261 - Laboratory for Chem. 231 (1)
- CH 122 - General Chemistry (5)
  or CH 232 - General Chemistry (4) and CH 262 - Laboratory for Chem. 231 (1)
- CH 123 - General Chemistry (5)
  or CH 233 - General Chemistry (4) and CH 263 - Laboratory for Chem. 231 (1)

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

##### Orientation
- SOIL 101 - Intro to Crop, Soil, and Insect Science (1)

##### Agricultural Sciences
- ENT 311 - Intro to Insect Pest Management (4)
- SOIL 205 - Soil Science (4) or CSS 205 (4)

##### Select 1 of the following courses:
- BOT 331 - Plant Physiology (4)
- CROP 200 - Crop Ecology & Morphology (3)
- HORT 301 - Growth and Development of Horticultural Crops (3)

##### Select 1 of the following courses:
- HORT 316 - Plant Nutrition (4)
- SOIL 316 - Nutrient Cycling in Agroecosystems (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 Management (3)

##### Technology
- SOIL 468 - Soil Landscape Analysis (4)

##### Writing Intensive (Select 1 of the following courses)
- SUS 325 - Ag and Environmental Predicaments: A Case Study Approach (3) *WIC*
- SOIL 395 - World Soil Resources (3) *WIC*

##### 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 455 - 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)

#### General Soils Track
- GEO 201 or 202 or 203 (4)
- MTH 251 (4)
- SOIL 455 - 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
- AEC 211 - Agricultural and Food Mgmt. (4)
- AEC 250 - Intro. to Environmental Econ. and Policy (3)**
- BOT 331 - Plant Physiology (4)
- BOT 547 - Nutrient Cycling (3)
- CH 130 - General Chemistry of Living Systems (4)
- CROP 199 - Special Studies: Issues in Sus. Ag. (1)
- FES 365 - Issues in Natural Resource Conservation (3)*
- FES 435/TOX 435 - Genes & Chems. in Ag: Value and Risk (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
- ATS 564 - Interactions of Vegetation and Atmosphere (3)
- BB 314 - Cell and Molecular Biology (4)
- BI 311 - Genetics (4)
- BI 370 - Ecology (3)
- BOT 331 - Plant Physiology (4)
- BOT 332 - Laboratory Techniques in Plant Biology (3)
- BOT 341 - Plant Ecology (4)
- CH 331 - Organic Chemistry (4)
- CH 332 - Organic Chemistry (4)
- FES 341 Forest Ecology (3)
- FES 435/TOX 435 - Genes & Chems. in Ag: Value and Risk (3)**
- MB 302 - General Microbiology (3)
- MB 448 - General Microbiology Laboratory (2)
- 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 487 - Hydrogeology (4)
- GEOG 340 - Introduction to Water Science and Policy (3)**
- GEOG 360 - GISCIENCE I: Geographic Info. Systems and Theory (4)
- GEOG 441 - International Water Resource Management (3)
- MTH 251 - Differential Calculus (4)*
- MTH 252 - Integral Calculus (4)
- PH 202 - General Physics (5)*
### Spatial Analysis/Land Use
- **AEC 250** - Intro. to Environmental Econ. and Policy (3)**
- **FE 434** - Forest Watershed Management (4)
- **FES 365** - Issues in Natural Resource Conservation (3)*
- **GEO 432** - Applied Geomorphology (3)
- **GEOG 201** - Foundations of Geospatial Science and GIS (4)*
- **GEOG 340** - Introduction to Water Science and Policy (3)**
- **GEOG 360** - GISCIENCE I: Geographic Info. Systems and Theory (4)
- **GEOG 450** - Land Use in the America West (3)
- **CROP/HORT 414** - Precision Agriculture (4)
- **PH 201** - General Physics (5)*
- **PH 202** - General Physics (5)*
- **RNG 341** - Rangeland Ecology and Management (3)
- **SOIL 366** - Ecosystems of Wildland Soils (3)

### Sustainable Systems
- **AEC 250** - Intro. to Environmental Econ. and Policy (3)**
- **BI 301** - Human Impacts on Ecosystems (3)*
- **BOT 350** - Introductory Plant Pathology (4)
- **CROP 199** - Special Studies: Issues in Sus. Ag. (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 in Cropping Systems Management (4)
- **GEOG 300** - Sustainability for the Common Good (3)*
- **GEOG 340** - Introduction to Water Science and Policy (3)**
- **PS 475** - Environmental Politics and Policy (4)
- **RNG 355** - Desert Watershed Management (4)
- **RNG 455** - Riparian Ecohdrology and Management (4)
- **SOIL 366** - Ecosystems of Wildland Soils (3)

### Water/Watershed Management
- **AEC 250** - Intro. to Environmental Econ. and Policy (3)**
- **AEC 351** - Natural Resource Economics and Policy (3)*
- **FE 430** - Watershed Processes (4)
- **FE 434** - Forest Watershed Management (4)
- **FES 365** - Issues in Natural Resource Conservation (3)*
- **FW 326** - Integrated Watershed Management (3)
- **GEO 322** - Surface Processes (4)
- **GEOG 340** - Introduction to Water Science and Policy (3)**
- **PS 475** - Environmental Politics and Policy (4)
- **RNG 355** - Desert Watershed Management (4)
- **SOIL 366** - Ecosystems of Wildland Soils (3)

Total Units (need 180) __________

Upper Div. Units (need 60) __________