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 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. 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 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) *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)
_____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)
_____FES 365 – Issues Natural Resources Conservation (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) *alt. year*

Total Units (need 180) _____

Upper Div. Units (need 60) _____