Name: _______________________________
ID: ____________________________________________
Entering Status: _________________________________

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

**Writing/Health**
- WR 121 – English Composition (3) *(Minimum grade of C– required)*
- WR II (3)
- COMM (3)
- Writing Intensive (HORT 318) (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)
- Cultural Diversity
- Literature/Arts
- Social Processes
- Western Culture
- 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)*

(Students must receive minimum grade of C– to continue to next math course)

**Synthesis/Upper Division – choose from provided list**
(Each course from a different department)
- Contemp. Global Issues (3)
- Science, Technology, Society (3)

**Major Core:**

**General Science**
- MTH 112, MTH 241, MTH 245, MTH 251, or ST 351 (4)

**Plant Materials** *(Select 1 of the following courses)*
- HORT 226 – Landscape Plant Materials I (4)
- HORT 228 – Landscape Plant Materials II (4)

**Technology** *(Select 1 of the following courses)*
- AG 312 – Engine Theory and Operation (3)
- FW 303 – Survey Geographic Information Systems in Natural Resource (3)
- GEOG 360 – GISCIENCE I: Geographic Information Systems and Theory (4)
- HORT 380 – Sustainable Landscape Design (3)
- HORT 414 – Precision Agriculture (4)

**Horticultural Communication**
- HORT 318 – Applied Ecology of Managed Ecosystems (3)
- HORT 407 – Seminar (3)
- HORT 411 – Horticulture Book Club (1)

**Science and Technology of Managed Ecosystems**
- GEOG 340 – Introduction to Water Science & Policy (3)
- HORT 455 – Urban Forest Planning & Management (4)
- GEOG 360 – GISCIENCE I: Geographic Information Systems and Theory (4)
- HORT 380 – Sustainable Landscape Design (3)
- HORT 414 – Precision Agriculture (4)

| From: _______________________________ |
| Option: Ecological Management of Turf, Landscape, and Urban Horticulture |
| Term Entering: ____________________________ |

**Option Requirements**

**Plant Materials** *(Select 1 of the following courses)*
- HORT 226 – Landscape Plant Materials I (4)
- HORT 228 – Landscape Plant Materials II (4)

*(Select 1 additional course from the above or below courses)*
- BOT 313 – Plant Structure (4)
- BOT 321 – Plant Systematics (tenance)
- BOT 323 – Flowering Plants of the World (3)
- BOT 425 – Flora of the Pacific Northwest (3)
- FES 241 – Dendrology (3)
- HORT 251 – Temperate Tree Fruits, Berries, Grapes, and Nuts (2) alt. year
- HORT 255 – Herbaceous Plant Materials (3)
- HORT 433 – Systematics & Adaptations of Vegetable Crops (4)
- RING 353 – Wildland Plant Identification (4)

**Ecology**
- HORT 318 – Applied Ecology of Managed Ecosystems (3)
- HORT 407 – Seminar (3)
- HORT 411 – Horticulture Book Club (1)

**Capstone** *(Select 1 of the following courses)*
- FES 445/FW 445 – Ecological Restoration (4)
- HORT 418 – Golf Course Maintenance (4)
- HORT 455 – Urban Forest Planning & Management (4)
- HORT 481 – Horticulture Production Case Studies (4)

**Science and Technology of Managed Ecosystems**
- GEOG 340 – Introduction to Water Science & Policy (3)
- HORT 314 – Principles of Turfgrass Maintenance (4)
- HORT 315 – Sustainable Landscapes: Maint., Conserv., Restor. (4)
- HORT 358 – Landscape Construction Techniques (4)
- HORT 360 – Irrigation/Drainage (4)

*(Select 2 of the following courses, minimum 6 credits)*
- BI 301 – Human Impacts on Ecosystems (3)
- BOT 488 – Environmental Physiology of Plants (3)
- SUS 325 – Ag and Environmental Remediation (WIC) (3)
- CROP 480 – Case Studies in Cropping Systems Management (4)
- FES 445/FW 445 – Ecological Restoration (4)
- FW 462 – Ecosystem Services (3)
- GEOG 450 – Land Use in the American West (3)
- HORT 285 – Permaculture Design and Theory: Certificate Course (4)
- HORT 319 – Restoration Horticulture (3)
- *HORT 330/ENT 300 – Plagues, Pests, and Politics (3)
- HORT 350 – Urban Forestry (3)
- HORT 351 – Floriculture & Greenhouse Systems (4) alt. year
- HORT 361 – Plant Nursery Systems (4) alt. year
- HORT 405 – Pesticide Applicator Training (4)
- HORT 414 – Precision Agriculture (4)
- HORT 418 – Golf Course Maintenance (4)
- HORT/ENT 444 – Insect Agroecology (3)
- HORT/FES 447 – Arboriculture (4)
- HORT 455 – Urban Forest Planning & Management (4)
- HORT 481 – Horticulture Production Case Studies (4)
- HORT 485 – Advanced Permaculture Design (3)
- HORT 499 – Building Sustainable Landscapes for the 21st Century (1)

**Orientation**
- HORT 112 – Introduction to Horticultural Systems, Practices & Careers (2)

**Experiential Learning**
- HORT 403 or 410 – Thesis/Internship (6-12)
- HORT 412 – Career Exploration: Internships & Research Projects (1)

**Agricultural Science**
- BOT 331 – Plant Physiology (4)
- BOT 350 – Introductory Plant Pathology (4)
- CROP 440 – Weed Management (4)
- ENT 311 – Introduction to Insect Pest Management (4)
- SOIL 205 – Soil Science (3) & SOIL 206 – Lab (1) OR CSS 205 – Soil Sci. (4)

**Orientation**
- HORT 112 – Introduction to Horticultural Systems, Practices & Careers (2)

**Horticultural Science**
- HORT 301 – Growth and Development of Horticultural Crops (3)
- HORT 311 – Plant Propagation (4)
- HORT 316 – Plant Nutrition (4)

**Option: Ecological Management of Turf, Landscape, and Urban Horticulture**

| Term Entering: ____________________________ |
| From: _______________________________ |

**Option Requirements**

**Plant Materials** *(Select 1 of the following courses)*
- HORT 226 – Landscape Plant Materials I (4)
- HORT 228 – Landscape Plant Materials II (4)

*(Select 1 additional course from the above or below courses)*
- BOT 313 – Plant Structure (4)
- BOT 321 – Plant Systematics (tenance)
- BOT 323 – Flowering Plants of the World (3)
- BOT 425 – Flora of the Pacific Northwest (3)
- FES 241 – Dendrology (3)
- HORT 251 – Temperate Tree Fruits, Berries, Grapes, and Nuts (2) alt. year
- HORT 255 – Herbaceous Plant Materials (3)
- HORT 433 – Systematics & Adaptations of Vegetable Crops (4)
- RING 353 – Wildland Plant Identification (4)

**Ecology**
- HORT 318 – Applied Ecology of Managed Ecosystems (3)
- HORT 407 – Seminar (3)
- HORT 411 – Horticulture Book Club (1)

**Capstone** *(Select 1 of the following courses)*
- FES 445/FW 445 – Ecological Restoration (4)
- HORT 418 – Golf Course Maintenance (4)
- HORT 455 – Urban Forest Planning & Management (4)
- HORT 481 – Horticulture Production Case Studies (4)

**Science and Technology of Managed Ecosystems**
- GEOG 340 – Introduction to Water Science & Policy (3)
- HORT 314 – Principles of Turfgrass Maintenance (4)
- HORT 315 – Sustainable Landscapes: Maint., Conserv., Restor. (4)
- HORT 358 – Landscape Construction Techniques (4)
- HORT 360 – Irrigation/Drainage (4)

*(Select 2 of the following courses, minimum 6 credits)*
- BI 301 – Human Impacts on Ecosystems (3)
- BOT 488 – Environmental Physiology of Plants (3)
- SUS 325 – Ag and Environmental Remediation (WIC) (3)
- CROP 480 – Case Studies in Cropping Systems Management (4)
- FES 445/FW 445 – Ecological Restoration (4)
- FW 462 – Ecosystem Services (3)
- GEOG 450 – Land Use in the American West (3)
- HORT 285 – Permaculture Design and Theory: Certificate Course (4)
- HORT 319 – Restoration Horticulture (3)
- *HORT 330/ENT 300 – Plagues, Pests, and Politics (3)
- HORT 350 – Urban Forestry (3)
- HORT 351 – Floriculture & Greenhouse Systems (4) alt. year
- HORT 361 – Plant Nursery Systems (4) alt. year
- HORT 405 – Pesticide Applicator Training (4)
- HORT 414 – Precision Agriculture (4)
- HORT 418 – Golf Course Maintenance (4)
- HORT/ENT 444 – Insect Agroecology (3)
- HORT/FES 447 – Arboriculture (4)
- HORT 455 – Urban Forest Planning & Management (4)
- HORT 481 – Horticulture Production Case Studies (4)
- HORT 485 – Advanced Permaculture Design (3)
- HORT 499 – Building Sustainable Landscapes for the 21st Century (1)

**Orientation**
- HORT 112 – Introduction to Horticultural Systems, Practices & Careers (2)

**Experiential Learning**
- HORT 403 or 410 – Thesis/Internship (6-12)
- HORT 412 – Career Exploration: Internships & Research Projects (1)
RNG 355 – Desert Watershed Management (3)
RNG 421 – Wildland Restoration and Ecology (4)
SOIL 316 – Nutrient Cycling in Agroecosystems (4)
SOIL 455 – Biology of Soil Ecosystems (4)
*SUS 304 – Sustainability Assessment (4)
WSE 111 – Renewable Materials for a Green Planet (2)
WSE 475 – Environmental Assessment of Building Materials (4)

Business Management
(Select 1 of the following courses)
AEC 211 – Agricultural and Food Management (4)
AEC 221 – Agricultural and Food Marketing (3)
*AEC 250 – Introduction to Environmental Economics & Policy (3)
*AEC 251 – Introduction to Agricultural & Food Economics (3)
BA 260 – Introduction to Entrepreneurship (4)
BA 365 – Family Business Management (4)
NMC 311 – Introduction to Nonprofit Management (3)

Ecology & Sustainability Ecosystems Courses (Meets Synthesis Requirements)
(Each course must be from a different department)

Contemporary Global Issues
(Select 1 of the following courses)
*AEC 351 – Natural Resource Economics & Policy (3)
*AEC 352 – Environmental Economics and Policy (3)
*BI 301 – Human Impacts on Ecosystems (3)
*CROP 330 – World Food Crops (3)
*FES 365 – Issues in Natural Resources Conservation (3)
*FW 325 – Global Crises in Resource Ecology (3)
*GEOG 330 – Geography International Development & Globalization (3)
*HORT/ENT 331 – Pollinators in Peril (3)
*SUS 350 – Sustainable Communities (4)
*NMC 311 – Introduction to Nonprofit Management (3)

Science, Technology and Society
(Select 1 of the following courses)
*AGRI 411 – Introduction to Food Systems: Local to Global (3)
*ANS 315 – Contentious Social Issues in Animal Agriculture (3)
*ANS/FES/SOC 485 – Consensus and Natural Resources (3)
*BI 348 – Human Ecology (3)
*BOT 324 – Fungi in Society (3)
*CH 374 – Technology, Energy, and Risk (3)
*ENGR 350 – Sustainable Engineering (3)
*ENGR 363 – Energy Matters (3)
*ENSC 479 – Environmental Case Studies (3)
*FES/TOX 435 – Genes and Chemicals in Agriculture: Value and Risk (3)
*FES/NR 477 – Agroforestry (3)
*FST 421 – Food Law (3)
*FVW 470 – Ecology & History: Landscapes Columbia Basin (3)
*GEOG 300 – Sustainability for the Common Good (3)
*GEOG 340 – Introduction to Water Science and Policy (3)
*HEST 310 – Intro to Community Engagement/Comm.-Based Design (3)
*HORT 330/ENT 300 – Plagues, Pests, and Politics (3)
*HST 481 – Environmental History of the United States (4)
*HSTS 421 – Technology & Change (4)
*NUTR 312 – Issues in Nutrition & Health (3)
*PH 313 – Energy Alternatives (3)
*PHL 325 – Scientific Reasoning (4)
*PS 476 – Science & Politics (4)
*SOIL 395 – World Soil Resources (3)
*SUS 304 – Sustainability Assessment (4)

Total Units (need 180) ________
Upper Div. Units (need 60) ________

Research Track (Optional)
*HORT 406 – Projects: Data Presentations (1)
*MTH 251 – Differential Calculus (4)
*MTH 252 – Integral Calculus (4)
ST 351 – Introduction to Statistical Methods (4)

(Select 3 of the following)
*BB 350 – Elementary Biochemistry (4)
*BOT 341 – Plant Ecology (4)
*CH 331 – Organic Chemistry (4)
*CH 332 – Organic Chemistry (4)
*CH 337 – Organic Chemistry Lab (4)
*MB 230 – Introductory Microbiology (4)
*PH 201 – General Physics (5)
*PH 202 – General Physics (5)

Grade Requirements
Students pursuing a major or minor in horticulture are required to receive a grade of C– or better in all HORT (horticulture) and PBG (plant breeding and genetics) courses that are required for completion of their major and option, or minor. If a grade below C– is received in a HORT or PBG course required for their major and option, or minor, a student will need to retake the course and receive a grade of C– or better. If the grade below a C– was received for a course that is part of a group of courses where the student can select which courses to take (i.e., they do not need to take all of the courses, just a specified number of courses or credits) then it would be acceptable for the student to substitute a course for the one that they had received a grade below a C–. For example, in most of our options, a student needs to complete three of four plant identification courses. If a student received a grade lower than a C– in one of the classes, they could either retake the same course or complete the other three courses with a grade of C– or better.

* = Meets bacc core requirement