### Horticulture 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 (BOT 323, CROP/SOIL 325 or HORT 318) (3)
- HHS 231 – Lifetime Fitness for Health (2)
- HHS 244 – 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 *(Met by major requirements)*

**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 *(4)* or MTH 241 *(4)* or MTH 245 *(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**
- CROP/HORT 101 – Intro. to Horticulture, Crop, Soil & Insect Science (1)

**Plant, Soil and Insect Science**
- BOT 331 – Plant Physiology (4)
- BOT 350 – Introductory Plant Pathology (4)
- CROP 440 – Weed Management (4)
- ENT 311 – Intro. to Insect Pest Management (4)
- SOIL 205 – Soil Science (4)

**Experiential Learning**
- PBG 403 or 410 – Thesis/Internship (3-12 cr)
- PBG 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 *(WIC)* (3)

**Technology**
- PBG 441 – Plant Tissue Culture (4)

**Writing Intensive** *(Select 1 of the following courses)*
- BOT 323 – Flowering Plants of the World *(WIC)* (3)
- CROP/SOIL 325 – Ag & Environmental Predicaments *(WIC)* (3)
- HORT 318 – Applied Ecology of Managed Ecosystems *(WIC)* (3)

**Capstone**
- PBG 450 – Plant Breeding (4)

**Option: Plant Breeding & Genetics**

**Term Entering:**

**From:**

### Option Requirements

**Horticultural Science**
- HORT 301 – The Biology of Horticulture (3)
- HORT 311 – Plant Propagation (4)
- HORT 316 – Plant Nutrition (4)
- HORT 411 – Horticulture Book Club (1)
- HORT 412 – Career Exploration (1)

**Plant Materials** *(Select 2 of the following courses)*
- BOT 313 – Plant Structure (4)
- BOT 321 – Plant Systemsatics (4)
- BOT 425 – Flora of the Pacific Northwest (3)
- CROP 200 – Crop Ecology & Morphology (3)
- FOR 141 – Tree & Shrub Identification (3)
- HORT 226 – Landscape Plant Materials I (4)
- HORT 228 – Landscape Plant Materials II (4)
- HORT 251 – Temperate Tree Fruits, Berries, & Nuts *(2 alt. year)*
- HORT 255 – Herbaceous Ornamental Plant Materials (3)
- HORT 433 – Systemsatics & Adaptations of Veg. Crops *(alt. year)*

**Science and Technology**
- HORT 463 – Seed Biology *(3 alt. years)*
- PBG 430 – Plant Genetics *(3)*
- ST 351 – Intro to Statistical Methods (4)

**Production and Technology** *(Select 4 of the following courses, for 12 credits minimum)*
- BOT 332 – Lab Techniques in Plant Bio *(3)*
- CROP 199 – Special Studies: Issues in Sustainable Ag *(1)*
- CROP/HORT 300 – Crop Production in PNW Agroecosystems *(4)*
- CROP 310 – Forage Production *(4)*
- CROP 330 – World Food Crops *(3)*
- CROP 460 – Seed Production *(3)*
- CROP 590 – Experimental Design in Agriculture *(4)*
- CSS 320 – Principles of Oil & Fiber Crop Production *(1)*
- CSS 321 – Principles of Cereal Crop Production *(1)*
- CSS 322 – Principles of Potato Production *(1)*
- HORT 260 – Organic Farming & Gardening *(3)*
- HORT 351 – Floriculture & Greenhouse Systems *(4)*
- HORT 361 – Plant Nursery Systems *(4)*
- HORT 452 – Berry & Grape Physiology & Culture *(alt. year)*
- HORT 453 – Grapevine Growth & Physiology *(alt. year)*
- HORT 454 – Principles & Practices of Vineyard Production *(3 alt. year)*
- MB 302 – General Microbiology *(3)*
- MB 303 – General Microbiology Lab *(2)*
- PBG 513 – Plant Genetic Engineering *(3)*
- SOIL 316 – Nutrient Cycling in Agroecosystems *(3)*

**Plant Synthesis**
- CROP/HORT 480 – Case Studies in Cropping Systems Management *(4)*

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

**Contemporary Global Issues** *(Select 1 of the following courses)*
- AREC 351 – Natural Resource Economics & Policy *(3)*
- AREC 461 – Agricultural & Food Policy Issues *(4)*
- BI 301 – Human Impacts on Ecosystems *(3)*
- BI 306 – Environmental Ecology *(3)*
- BI 349 – Biodiversity: Causes, Consequences & Conservation *(3)*
- CROP 330 – World Food Crops *(3)*
- FOR 365 – Issues in Natural Resources Conservation *(3)*
- FW 325 – Global Crises in Resource Ecology *(3)*
- GEO 300 – Sustainability for the Common Good *(3)*
- GEO 330 – Geography of International Development & Globalization *(3)*
Science, Technology and Society (Select 1 of the following courses)

______ ANS 315 – Contentious Social Issues in Animal Agriculture (3)
______ AREC 352 – Environmental Economics & Policy (3)
______ BI 435 – Genes and Chemicals in Agriculture: Value and Risk (3)
______ CH 374 – Technology, Energy, and Risk (3)
______ CSS 395 – World Soil Resources (3)
______ ENGR 350 – Sustainable Engineering (3)
______ ENSC 479 – Environmental Case Studies (3)
______ FST 421 – Food Law (3)
______ FW 485 – Consensus & Natural Resources (3)
______ GEO 300 – Sustainability for the Common Good (3)
______ GEO 335 – Introduction to Water Science and Policy (3)
______ HST 481 – Environmental History of the United States (4)
______ HSTS 421 – Technology & Change (4)
______ HSTS 470 – Ecology & History: Landscapes Columbia Basin (3)
______ NUTR 312 – Issues in Nutrition & Health (3)
______ PH 313 – Energy Alternatives (3)
______ PS 476 – Science & Politics (4)
______ RNG 477 – Agroforestry (3)
______ Z 348 – Human Ecology (3)

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)
______ BI 370 – Ecology (3)
______ 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 an option in Plant Breeding and Genetics, under the Horticulture Major, and under the Crop & Soil Science Major, are required to receive a grade of C- or better in all BOT, CROP, CSS, FOR, HORT, MB, PBG, SOIL and ST courses required within their major and option.