

## B.S. in Horticulture at Oregon State University – Curriculum

Name: \_\_\_\_\_

ID: \_\_\_\_\_

Entering Status: \_\_\_\_\_

Option: **Sustainable Horticultural Production**

Term Entering: \_\_\_\_\_

From: \_\_\_\_\_

### **SELECT ONE GEN CORE MODEL BASED ON START TERM**

*(No single course can satisfy more than one core area)*

#### **BACC Core Requirements:**

##### **Writing/Health**

- \_\_\_\_\_ WR 121 – English Composition (3) *(Minimum passing grade of C–)*
- \_\_\_\_\_ WR II (3)
- \_\_\_\_\_ COMM (3)
- \_\_\_\_\_ Writing Intensive (BOT 323, SUS 325, or 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 \_\_\_\_\_ PHIL? \_\_\_\_\_
- \_\_\_\_\_ 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 grade of C-, or higher, to continue on to next math course)**

#### **Synthesis/Upper Division – see curated list for suggestions**

*(Each course from a different department)*

- \_\_\_\_\_ Contemp. Global Issues (3) \_\_\_\_\_
- \_\_\_\_\_ Science, Technology, Society (3) \_\_\_\_\_

#### **CORE ED MODEL (admitted SU25 and after)**

##### **Foundations**

- \_\_\_\_\_ Writing Foundations (4)
- \_\_\_\_\_ Arts and Humanities, General (3-4)
- \_\_\_\_\_ Arts and Humanities, Global (3-4)
- \_\_\_\_\_ Quantitative Literacy and Analysis (4)
- \_\_\_\_\_ Communications, Media and Society (3)
- \_\_\_\_\_ Social Sciences (3-4)
- Scientific Inquiry and Analysis, 1<sup>st</sup> course (4)
- Scientific Inquiry and Analysis, 2<sup>nd</sup> course (4)
- \_\_\_\_\_ Difference, Power and Oppression foundations (3-4)

##### **Signature Core (OSU unique, tied to major)**

- \_\_\_\_\_ Transitions (2) (HORT: CORE 100, CORE 300)
- \_\_\_\_\_ Beyond OSU Career Integration (HORT: +HORT 412)
- \_\_\_\_\_ Difference Power and Oppression, Advanced (3-4)  
(choice of AG 311, FW 340, GEOG/ENSC 333, SUS 331)
- \_\_\_\_\_ Writing Elevation (3) Any in Schedule of classes
- \_\_\_\_\_ Seeking Solutions (3-4) See list, back page
- \_\_\_\_\_ Writing Intensive Curriculum (HORT: ^HORT 318)

##### **CORE ED courses with AG/Plant focus or related**

- AHG: ANTH/FCSJ261
- AHW: ANTH211 AG220 HST280 NUTR216 PHL244
- CO: TRAL227
- DPOF: AG201 FST265 GEOG100 GEOG241 HST248 HSTS213 TRAL242
- SS: AEC343 AEC411 ANS315 ANTH361 CSS3xx\*food security) ENT300/HORT330
- ENT331/HORT331 ES357 FST320 FW350 GEO306 GEO332 GEOG300 GEOG331
- PHL476 RNG470 SOIL3xx\*CDR SUS350 WSE392
- SI: AEC122 AEC250 AEC251 AG221 AG350 GEOG242 GEOG250 HORT217 PS201
- PSY201 PSY202
- WE: WR227 WR362 WR375

#### **Major Core:**

##### **General Science**

- \_\_\_\_\_ MTH 112, MTH 241, MTH 245, MTH 251, or ST 351 (4)
- (Prereq of C- or higher in MTH 111, or in MTH 112 if taking MTH 251)**
- Chemistry may be able to be mixed between level; discuss with Advisor**
- \_\_\_\_\_ +CH 121 – General Chemistry (5) or CH 221 – General Chemistry (4)  
and CH 227 – Laboratory for Chemistry 221 (1)
- \_\_\_\_\_ +CH 122 – General Chemistry (5) or CH 222 – General Chemistry (4)  
and CH 228 – Laboratory for Chemistry 222 (1)
- \_\_\_\_\_ +CH 123 – General Chemistry (5) or CH 223 – General Chemistry (4)  
and CH 229 – Laboratory for Chemistry 223 (1)

**(Students must receive minimum grade of C- to progress to next chemistry course in the series)**

##### **Biology must all be taken at the same institution and same series**

- \_\_\_\_\_ +BI 211 or 221 – Principles of Biology (5)
- \_\_\_\_\_ +BI 212 or 222 – Principles of Biology (5)
- \_\_\_\_\_ +BI 213 or 223 – Principles of Biology (5)

##### **or the alternative BI 204–206 series:**

- \_\_\_\_\_ +\*BI 204 – Introductory Biology I (5)
- \_\_\_\_\_ +\*BI 205 – Introductory Biology II (5)
- \_\_\_\_\_ +\*BI 206 – Introductory Biology III (5)

**(Students must receive minimum grade of C- to progress in the series)**

##### **Supplemental Instruction Tables / tutoring**

##### **Agricultural Science**

- \_\_\_\_\_ BOT 331 – Plant Physiology (4)
- \_\_\_\_\_ BOT 451 – 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 Science (4)

##### **Orientation**

- \_\_\_\_\_ HORT 112 – Introduction to Horticultural Systems, Practices, & Careers (2)

##### **Horticultural Science**

- \_\_\_\_\_ HORT 301 – Growth and Development of Horticultural Crops (3)
- \_\_\_\_\_ HORT 310 – Princ. Plant Propag. (3)
- \_\_\_\_\_ HORT 316 – Plant Nutrition (4)

##### **Experiential Learning**

- \_\_\_\_\_ HORT 403 or 410 – Thesis/Internship (3-12)
- \_\_\_\_\_ +HORT 412 – Career Exploration: Internships & Research Projects (1)

#### **Option Requirements**

##### **Plant Materials**

*(Select 2 of the following courses)*

- \_\_\_\_\_ BOT 313 – Plant Structure (4)
- \_\_\_\_\_ BOT 321 – Plant Systematics (4)
- \_\_\_\_\_ BOT 323 – Flowering Plants of the World (3)
- \_\_\_\_\_ BOT 425 – Flora of the Pacific Northwest (3)
- \_\_\_\_\_ CROP 200 – Crop Ecology & Morphology (3)
- \_\_\_\_\_ FES 241 – Dendrology (3)
- \_\_\_\_\_ HORT 226 – Landscape Plant Materials I (4)
- \_\_\_\_\_ HORT 228 – Landscape Plant Materials II (4)
- \_\_\_\_\_ HORT 251 – Temperate Tree Fruit, Berries, Grapes, and Nuts (2) *alt. year*
- \_\_\_\_\_ HORT 255 – Herbaceous Ornamental Plant Materials (3)
- \_\_\_\_\_ HORT 433 – Systematics & Adaptation of Vegetable Crops (4)

##### **Ecology**

- \_\_\_\_\_ ^HORT 318 – Applied Ecology of Managed Ecosystems (3)

##### **Technology**

- \_\_\_\_\_ HORT 414 – Precision Agriculture (4)
- \_\_\_\_\_ HORT 312 – Plant Propagation laboratory (1), OPTIONAL

##### **Horticultural Communication**

- \_\_\_\_\_ ^HORT 318 – Applied Ecology of Managed Ecosystems (3) (WIC)
- \_\_\_\_\_ HORT 407 – Seminar (1)
- \_\_\_\_\_ HORT 411 – Horticulture Book Club (1)

## Capstone

\_\_\_\_\_ HORT 480 – Case Studies in Cropping Systems (4)

## Horticultural Production

\_\_\_\_\_ HORT 300 – Crop Production in Pacific Northwest Agroecosystems (4)  
\_\_\_\_\_ HORT 360 – Irrigation/Drainage (4)  
\_\_\_\_\_ PBG 430 – Plant Genetics (3)

*(Select 1 of the following courses)*

\_\_\_\_\_ HORT 260 – Organic Farming/Gardening (3)  
\_\_\_\_\_ HORT 351 – Floriculture & Greenhouse Systems (4) *alt. year*  
\_\_\_\_\_ HORT 361 – Plant Nursery Systems (4) *alt. year*  
\_\_\_\_\_ HORT 453 – Grapevine Growth & Physiology (3)  
\_\_\_\_\_ HORT 454 – Principles & Practices Vineyard Prod. (3)  
\_\_\_\_\_ HORT 456 – Physiology & Production of Berry Crops (4)

## Horticultural Electives

*(Select a minimum of 9 credits from the above list or from the following list)*

\_\_\_\_\_ CROP 280 – Introduction to Complexity of Oregon Cropping Systems (4)  
\_\_\_\_\_ SUS 325 – Ag. & Envir. Predicaments: Case Study Approach (3)  
\_\_\_\_\_ ENT 322 – Honey Bee Biology & Beekeeping (3)  
\_\_\_\_\_ HORT 199, 299, 399, 499 – Special Topics (1-16)  
\_\_\_\_\_ HORT 285 – Permaculture Design & Theory: Certificate Course (4)  
\_\_\_\_\_ HORT 314 – Principles of Turfgrass Maintenance (4)  
\_\_\_\_\_ HORT 444 – Insect Agroecology (3)  
\_\_\_\_\_ HORT 421 – Herbs, Spices & Medicinal Plants (3)  
\_\_\_\_\_ HORT 463 – Seed Biology (3) *alt. year*  
\_\_\_\_\_ HORT 485 – Adv. Permaculture Design Tools for Climate Resilience (3)  
\_\_\_\_\_ HORT 499 – Intro. to Organic Certification (3)  
\_\_\_\_\_ PBG 440 – Principles of Plant Tissue Culture (3)  
\_\_\_\_\_ PBG 442 – Laboratory for Plant Tissue Culture (3)  
\_\_\_\_\_ PBG 450 – Plant Breeding (4)  
\_\_\_\_\_ SOIL 316 – Nutrient Cycling in Agroecosystems (4)  
\_\_\_\_\_ SOIL 360 – Soil Management for Organic Production (3)  
\_\_\_\_\_ SOIL 455 – Biology of Soil Ecosystems (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 215 – Fundamentals of Accounting (BA 315 – Account. Dec. Mknng.) (4)  
\_\_\_\_\_ BA 260 – Introduction to Entrepreneurship (4)  
\_\_\_\_\_ BA 365 – Family Business Management (4)  
\_\_\_\_\_ NMC 311 – Introduction to Nonprofit Management (3)

## Government and Policy

*(Select 1 of the following courses)*

\_\_\_\_\_ \*AEC 243 – Global Poverty and Sustainable Development (3)  
\_\_\_\_\_ \*AEC 250 – Introduction to Environmental Economics and Policy (3)  
\_\_\_\_\_ \*AEC 251 – Introduction to Agricultural & Food Economics (3)  
\_\_\_\_\_ \*AEC 253 – Environmental Law, Policy & Economics (4)  
\_\_\_\_\_ \*AEC 351 – Natural Resource Economics and Policy (3)  
\_\_\_\_\_ \*AGRI 411 – Introduction to Food Systems: Local to Global (3)  
\_\_\_\_\_ + NR 201 – Managing Natural Resources for the Future (3)  
\_\_\_\_\_ NR 202 – Natural Resource Problems and Solutions (3)  
\_\_\_\_\_ NR 312 – Critical Thinking for Natural Resource Challenges (3)  
\_\_\_\_\_ NR 325 – Scientific Methods for Analyzing Natural Resource Problems (3)  
\_\_\_\_\_ +\*PS 201 – Introduction to US Government and Politics (4)  
\_\_\_\_\_ \*PS 205 – Introduction to International Relations (4)  
\_\_\_\_\_ \*PS 331 – State and Local Politics (4)  
\_\_\_\_\_ \*PS 458 – International Political Economy (4)  
\_\_\_\_\_ PS 461 – Environmental Political Theory (4)  
\_\_\_\_\_ PS 470 – Global Food Politics and Policy (4)  
\_\_\_\_\_ PS 473 – U.S. Energy Policy (4)  
\_\_\_\_\_ PS 475 – Environmental Politics and Policy (4)  
\_\_\_\_\_ \*PS 476 – Science and Politics (4)  
\_\_\_\_\_ PS 477 – International Environmental Politics and Policy (4)  
\_\_\_\_\_ PS 478 – Renewable Energy Policy (4)  
\_\_\_\_\_ \*SUS 304 – Sustainability Assessment (4)  
\_\_\_\_\_ \*SUS 350 – Sustainable Communities (4)

**Total Units (need 180)** \_\_\_\_\_

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

\* = Meets bacc core requirement

+ = Meets Core Ed requirement

^ = Meets WIC

## 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 courses)*

\_\_\_\_\_ 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 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.