Horticulture involves the production, genetic improvement, and research of fruits, nuts, vegetables, and ornamental plants, along with the design, construction, and management of landscape plantings such as parks, gardens, golf courses, sports fields, and ecological restoration projects. Our program provides students with the skills, knowledge, and applied experience needed to provide novel and innovative solutions to contemporary environmental issues.

Students must select from one of these options:
- Ecological Management of Turf, Landscape, & Urban Horticulture
- General Horticulture (Ecampus only)
- Plant Breeding & Genetic
- Sustainable Horticulture Production
- Therapeutic Horticulture
- Viticulture and Enology
- Horticulture Research*

* Please refer to the Horticulture Research Transfer Guide for course information

Your Bachelor’s Degree (BS) in Horticulture

- A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
- A maximum of 135 transfer credits may be applied toward a bachelor’s degree at OSU.
- Only courses with letter prefixes and numbers above 100 are accepted.
- Option required for Horticulture major
- More info at: agsci.oregonstate.edu/horticulture-main/degree/horticulture

Courses Required for Horticulture Major
This list is not comprehensive. Speak with OSU advisor for more information.

<table>
<thead>
<tr>
<th>Horticulture Core Requirement</th>
<th>BMCC Equivalent Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introductory Biology</td>
<td></td>
<td>BI 204</td>
<td>BI 204-206 available online to Ecampus students only; may not meet requirements for required courses in this or other programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BI 205</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BI 206</td>
<td></td>
</tr>
<tr>
<td>Principles of Biology</td>
<td>BI 211</td>
<td>BI LD2</td>
<td>Only select one full series (either all of 204-206, all of 211-223, or all of 206-223)</td>
</tr>
<tr>
<td></td>
<td>BI 212</td>
<td>BI LD2</td>
<td>OSU now only offers BI 221-223. If taking BI 211-213, you must take entire series at BMCC</td>
</tr>
<tr>
<td></td>
<td>BI 213</td>
<td>BI LD2</td>
<td></td>
</tr>
<tr>
<td>Principles of Biology</td>
<td></td>
<td>BI 221</td>
<td>Refer to admissions.oregonstate.edu/ld1-and-ld2-explained to learn more about BI LD2 equivalency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BI 222</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BI 223</td>
<td></td>
</tr>
<tr>
<td>General Chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CH 121</td>
<td>CH 231/261</td>
<td>CH 121-123 available online at OSU</td>
</tr>
<tr>
<td></td>
<td>CH 122</td>
<td>CH 232/262</td>
<td>Only select one full series (either all 100-level, or 200-level)</td>
</tr>
<tr>
<td></td>
<td>CH 123</td>
<td>CH 233/262</td>
<td>Lecture &amp; lab for 200-level Chemistry have separate course numbers at OSU</td>
</tr>
<tr>
<td>Mathematics College Algebra</td>
<td>MTH 111</td>
<td>MTH 111</td>
<td>MUST complete MTH 111</td>
</tr>
<tr>
<td>Elementary Functions</td>
<td></td>
<td></td>
<td>Complete 1(one) additional math course from options listed. Work with OSU advisor to discuss best course for preferred option</td>
</tr>
<tr>
<td>Calc for Mgmt &amp; Social Sci</td>
<td>MTH 112</td>
<td>MTH 112</td>
<td></td>
</tr>
<tr>
<td>Math for Mgmt, Life, Social Sci</td>
<td>MTH 241</td>
<td>MTH 241</td>
<td></td>
</tr>
<tr>
<td>Differential Calc</td>
<td></td>
<td>MTH 245</td>
<td></td>
</tr>
<tr>
<td>Intro to Statistical Methods</td>
<td></td>
<td>MTH 251</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST 351</td>
<td>All courses listed = Available online at OSU</td>
</tr>
</tbody>
</table>

Updated September 2022
<table>
<thead>
<tr>
<th>Horticulture Core Requirement</th>
<th>BMCC Equivalent Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Science</td>
<td></td>
<td>SOIL 205/206 CSS 205</td>
<td>Complete 1(one) CSS 205 = Available online at OSU</td>
</tr>
<tr>
<td>Intro to Hort. Systems, Practices and Careers</td>
<td></td>
<td>HORT 112</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Additional HORT Courses</td>
<td></td>
<td></td>
<td>Other courses may apply to this option. Work with OSU HORT advisor for appropriate course selection</td>
</tr>
</tbody>
</table>

**Courses Required for Horticulture Major: Option specific coursework**

<table>
<thead>
<tr>
<th>Hort. Option Requirements</th>
<th>BMCC Equivalent Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological Management of Turf, Landscape, &amp; Urban Horticulture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape I: Deciduous Hardwood</td>
<td>--</td>
<td>HORT 226</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Landscape II: Spring Flower Trees</td>
<td>--</td>
<td>HORT 228</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Plant Materials Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dendrology</td>
<td>--</td>
<td>FES 241</td>
<td>Complete 1(one) course</td>
</tr>
<tr>
<td>Intro to Environ. Econ &amp; Policy</td>
<td>--</td>
<td>HORT 251</td>
<td>Other options available post-transfer. Work with OSU advisor for course selection</td>
</tr>
<tr>
<td>Intro to Agric. &amp; Food Econ.</td>
<td>--</td>
<td>HORT 255</td>
<td>FES 241 = Available online at OSU</td>
</tr>
<tr>
<td>Business Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture &amp; Food Mgmt.</td>
<td>--</td>
<td>AEC 211</td>
<td>Complete 1(one) course</td>
</tr>
<tr>
<td>Agriculture &amp; Food Marketing</td>
<td>AGR 221</td>
<td>AEC 221</td>
<td>Other options available post-transfer. Work with OSU advisor for course selection</td>
</tr>
<tr>
<td>Intro to Environ. Econ &amp; Policy</td>
<td>--</td>
<td>AEC 250</td>
<td></td>
</tr>
<tr>
<td>Intro to Agric. &amp; Food Econ.</td>
<td>--</td>
<td>AEC 251</td>
<td></td>
</tr>
<tr>
<td>Intro to Entrepreneurship</td>
<td>--</td>
<td>BA 260</td>
<td>AEC 211/250/251, BA 260 = Available online at OSU</td>
</tr>
</tbody>
</table>

| Sustainable Horticulture Production | | | |
| Plant Materials | | | |
| Crop Ecology & Morphology | CSS 201 | CROP 200 | Complete 2(two) courses |
| Dendrology | -- | FES 241 | Other options available post-transfer. Work with OSU advisor for course selection |
| Landscape I: Deciduous Hardwood | -- | HORT 226 | |
| Landscape II: Sp. Flower Trees | -- | HORT 228 | |
| Temperate Tree Fruit, Berries, ... | -- | HORT 251 | |
| Herbaceous Ornamental | -- | HORT 255 | CROP 200, FES 241, HORT 226/228 = Available online at OSU |
| Hort. Production Elective | | | |
| Organic Farm/Gardening | -- | HORT 260 | Complete 1(one) course |
| Other options available post-transfer. Work with OSU advisor for course selection |
| HORT 260 = Available online at OSU |
| Business Management | | | |
| Agriculture & Food Mgmt. | -- | AEC 211 | Complete 1(one) course |
| Agriculture & Food Marketing | AGR 221 | AEC 221 | Other options available post-transfer. Work with OSU advisor for course selection |
| Intro to Environ. Econ & Policy | -- | AEC 250 | |
| Intro to Agric. & Food Econ. | -- | AEC 251 | |
| Intro to Entrepreneurship | -- | BA 260 | AEC 211/250/251, BA 260 = Available online at OSU |
| Government and Policy | | | |
| Global Poverty & Sust. Develop | -- | AEC 243 | Complete 1(one) course |
| Intro to Environ. Econ & Policy | -- | AEC 250 | Other options available post-transfer. Work with OSU advisor for course selection |
| Intro to Agric. & Food Econ. | -- | AEC 251 | |
| Environ. Law, Policy, & Econ. | -- | AEC 253 | |
| Manage Nat. Resource for Future | -- | NR 201 | |
| Nat. Resource Probs & Solutions | -- | NR 202 | AEC 250/251/253, NR 201/202, PS 201/205 = Available online at OSU |
| Intro to US Gov & Politics | -- | PS 201 | |
| Intro to Intl. Relations | -- | PS 205 | |

| Therapeutic Horticulture | | | |
| Plant Materials | | | |
| Landscape I: Deciduous Hardwood | -- | HORT 226 | Complete 2(two) courses |
| Landscape II: Sp. Flower Trees | -- | HORT 228 | Other options available post-transfer. Work with OSU advisor for course selection |
| Temperate Tree Fruit, Berries, ... | -- | HORT 251 | |
| Herbaceous Ornamental | -- | HORT 255 | HORT 226/228 = Available online at OSU |
| Horticulture Science & Technology | | | |
| Organic Farm/Gardening | -- | HORT 260 | Complete 2(two) courses |
| Permaculture Design & Theory | -- | HORT 285 | Other course available to select from post-transfer. Work with OSU advisor for course selection |
| All courses listed = Available online at OSU |

**Updated September 2022**
<table>
<thead>
<tr>
<th>Equivalent Course</th>
<th>Therapeutic Horticulture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro to Therapeutic Hort.</td>
<td>-- HORT 270</td>
</tr>
<tr>
<td>Techniques &amp; Adapt. Strategies</td>
<td>-- HORT 271</td>
</tr>
<tr>
<td>Basic Therapeutic Skills I</td>
<td>-- HORT 272</td>
</tr>
<tr>
<td>Basic Therapeutic Skills II</td>
<td>-- HORT 273</td>
</tr>
<tr>
<td>Therapeutic Hort. Programs</td>
<td>-- HORT 274</td>
</tr>
<tr>
<td>Therapeutic Garden Design</td>
<td>-- HORT 275</td>
</tr>
<tr>
<td>General Psychology</td>
<td>PSY 201, Available online at OSU</td>
</tr>
<tr>
<td>General Psychology</td>
<td>PSY 202, Available online at OSU</td>
</tr>
<tr>
<td>Human Lifespan Development</td>
<td>PSY 237, PSY 350, Available online at OSU</td>
</tr>
<tr>
<td>Abnormal Psychology</td>
<td>PSY 381, Available online at OSU</td>
</tr>
</tbody>
</table>

**Viticulture and Enology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperate Tree Fruit, Berries, ...</td>
<td>HORT 251</td>
</tr>
<tr>
<td>Horticulture Science &amp; Technology</td>
<td>AGM 221</td>
</tr>
<tr>
<td>Metals &amp; Welding</td>
<td>AG 221</td>
</tr>
<tr>
<td>Organic Farm/Gardening</td>
<td>HORT 260</td>
</tr>
<tr>
<td>Permaculture Design &amp; Theory</td>
<td>HORT 285</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>CH 241, CH 243</td>
</tr>
<tr>
<td></td>
<td>CH 331 (LD)</td>
</tr>
<tr>
<td></td>
<td>CH 332 (LD)</td>
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</table>

**Skills Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management</td>
<td></td>
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<tr>
<td>Agriculture &amp; Food Mgmt.</td>
<td></td>
</tr>
<tr>
<td>Agriculture &amp; Food Marketing</td>
<td></td>
</tr>
<tr>
<td>Intro to Environ. Econ &amp; Policy</td>
<td></td>
</tr>
<tr>
<td>Intro to Agric. &amp; Food Econ.</td>
<td></td>
</tr>
<tr>
<td>Intro to Entrepreneurship</td>
<td></td>
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</tbody>
</table>

**Perspective Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Horticulture - Ecampus only</td>
<td></td>
</tr>
<tr>
<td>Plant Materials</td>
<td></td>
</tr>
<tr>
<td>Crop Ecology &amp; Morphology</td>
<td>CROP 200</td>
</tr>
<tr>
<td>Dendrology</td>
<td>FES 241</td>
</tr>
<tr>
<td>Landscape I: Deciduous Hdw</td>
<td>HORT 220</td>
</tr>
<tr>
<td>Landscape II: Sp. Flower Trees</td>
<td>HORT 228</td>
</tr>
<tr>
<td>Temperate Tree Fruit, Berries, ...</td>
<td>HORT 251</td>
</tr>
<tr>
<td>Herbaceous Ornamental</td>
<td>HORT 255</td>
</tr>
</tbody>
</table>

**General Education Courses**

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of Blue Mountain CC courses that fulfill Bacc Core requirements: [admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-blue-mountain-community-college](http://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-blue-mountain-community-college)

**Skills Courses**

- Math: WR 121. Required to transfer.
- Reading I: Can be completed as part of major: see advisor
- Writing II: Choose one course from BaccCore link above
- Speech (Writing III): HPE 295
- Fitness HHS 231 and 241

**Perspective Courses**

- Biological Science: Completed as part of major
- Physical Science: Completed as part of major
- Additional Biological or Physical Science: Completed as part of major

**Horticulture option descriptions**

Updated September 2022
Ecological Management of Turf, Landscape, & Urban Horticulture – The Turf Management program works to develop ecological and sustainable ways to manage large grassed areas, such as golf courses, athletic fields, and parks. In the Landscape and Urban Horticulture program, students will learn about sustainable landscape management, urban forestry, and the ecosystem services provided by the built environment, such as carbon sequestration and climate regulation, temperature modulation, waste decomposition and detoxification, purification of water and air, storm and rainwater management, crop pollination, pest and disease control, nutrient dispersal and cycling, seed dispersal, intellectual and spiritual inspiration, recreational experiences, and scientific discovery. Landscape professionals design, build, and manage aesthetically pleasing, functional, and environmentally responsible natural spaces where we all live, work, and play. Some focus is on ecological restoration of disturbed habitats.

General Horticulture (on-line option) – provides students with a strong foundation in horticultural science. Recommended for students already working in the horticultural industry, whose careers will benefit from post-secondary education in the horticultural sciences.

Plant Breeding & Genetics - Students in the Plant Breeding and Genetics Option will learn an interdisciplinary approach to applied plant breeding by taking courses across a broad spectrum of disciplines. The option may be tailored to meet students' career goals including graduate school, as well as directly entering public or private sector breeding programs. After completing the degree, students will have gained fundamental knowledge in plant breeding that may be applied in a range of crops including annual and perennial horticultural crops, agronomic food and feed crops, and forestry products. See note on last page.

Sustainable Horticultural Production – Students will gain skills & knowledge necessary to manage integrated & organic fruit, nut, and vegetable farms, fields and orchards, along with nursery and greenhouse production systems. You will gain knowledge & experience in integrated pest management, plant propagation, plant nutrition, soil science, ecology, agricultural policies & business.

Therapeutic Horticulture – prepares students with the skills and knowledge needed to design healing and adapted gardens and to provide therapy programs used to improve the quality of people’s lives. The curriculum stresses effectively treating many types of clients, including senior citizens with physical or cognitive issues, individuals with developmental disabilities, and at-risk youth with the restorative powers of gardens, landscapes, and greenscapes. Graduates of this option may become Registered Horticultural Therapists, Community Garden Coordinators, and Rehabilitation Program Coordinators.

Viticulture and Enology – this option is designed to support student learning about sustainable grape production practices that consider vine and vineyard health. Recent graduates of the Viticulture and Enology option have become vineyard managers, viticulturists, consultants, and winemakers.

Refer to Horticulture: Horticulture Research Transfer Guide if interested in option below:

Horticultural Research – This option is designed for students interested in graduate school and/or a career in academic or industrial research. It provides an excellent foundation in the natural sciences and horticulture, and accommodates specific research interests. Studies will involve critical thinking, and allow students to seek out, synthesize, and apply information from many sources to analyze novel situations and solve problems. Option requires a research project under the guidance or a faculty mentor, and an undergraduate thesis.

Important Notes & Resources

- Program Information: see the Department of Horticulture for more information (https://horticulture.oregonstate.edu/horticulture/students)
- See a sample degree plan by searching "Horticulture" located in the OSU catalog catalog.oregonstate.edu. Or find a sample degree plan on the Horticulture Degree Fact Sheet agsci.oregonstate.edu/degree-fact-sheet/horticulture
- Horticulture offers 7 options which allow students to specialize. The options are Ecological Management of Turf, Landscape and Urban Horticulture, General Horticulture, Horticulture Research, Plant Breeding and Genetics, Sustainable Horticultural Production, Therapeutic Horticulture, Viticulture and Enology. More details can be found by searching "Horticulture" in the OSU Catalog at http://catalog.oregonstate.edu
- Other similar majors to explore: Botany, Crop and Soil Science, and Agricultural Sciences. Check out the OSU catalog to explore these majors at http://catalog.oregonstate.edu
- Level 100/200 and lower division Baccalaureate Core are priority courses to complete before transferring to OSU.
For Horticulture students, the best time to transfer is fall term. Talk with an OSU advisor about your specific timeline.

It is important to speak with a Horticulture advisor early on, and often, to ensure correct course selection and sequencing. Advisors contact info can be found here (agsci.oregonstate.edu/education/contact-us/advisors).

**Resources and OSU Information:**

- Students do not have to complete a transfer degree in order to transfer to OSU.
  - If you've completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See transfer student admissions info: transfer.oregonstate.edu
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: partnerships.oregonstate.edu/students

### Advising Contacts

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. **See your community college advisor first and use this Transfer Guide to help you plan.** It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

<table>
<thead>
<tr>
<th>Advising Contact</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Mountain Community College</td>
<td>bluecc.edu/enrollment-services/advising</td>
</tr>
<tr>
<td>OSU College of Agricultural Sciences</td>
<td>Campus: Anne Gearhart, 541-737-5448, <a href="mailto:Anne.gearhart@oregonstate.edu">Anne.gearhart@oregonstate.edu</a></td>
</tr>
<tr>
<td>Student Advisor</td>
<td>Ecampus: Sarah Finger-McDonald, <a href="mailto:Sarah.mcdonald@oregonstate.edu">Sarah.mcdonald@oregonstate.edu</a></td>
</tr>
</tbody>
</table>

OSU College of Agricultural Sciences prohibits discrimination in all its programs, services, activities, and materials.