

Major Offered At:

CORVALLIS

ECAMPUS

Lane Community College

Horticulture / Horticultural Research Option

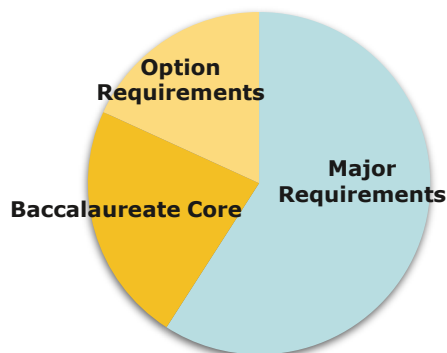
Horticulture involves the production, genetic improvement, and research of fruits, nuts, vegetables, and ornamental plants, along with the design, construction, and management of landscape plantings such as parks, gardens, golf courses, sports fields, and ecological restoration projects. Our program 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:

- Horticultural Research
- Ecological Management of Turf, Landscape, & Urban Horticulture*
- General Horticulture (Ecampus only)*
- Plant Breeding & Genetic*
- Sustainable Horticulture Production*
- Therapeutic Horticulture*
- Viticulture and Enology*

*Please refer to the other Horticulture 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, Horticultural Research Option

This list is not comprehensive. Speak with OSU advisor for more information.

Horticulture Core Requirement	Lane CC Equivalent Course	OSU Course	Notes
Principles of Biology	BI 211 BI 212 Z/BOT 213	BI LD2 BI LD2 BI LD2	BI 204-206 available online to Ecampus students only; may not meet requirements for required courses in this or other programs Only select one full series (either all of 204-206, all of 211-213, or all of 221-223) OSU now only offers BI 221-223. If taking BI 211-213, you must take entire series at Lane CC. Refer to admissions.oregonstate.edu/ld1-and-ld2-explained to learn more about BI LD2 equivalency
General Chemistry	CH 221+227 CH 222+228 CH 223+229	CH 231/261 CH 232/262 CH 233/263	Lecture & lab for 200-level Chemistry have separate course numbers at OSU
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Soil Science	SOIL 205 --	SOIL 205/206 CSS 205	Complete 1(one) CSS 205 = Available online at OSU

Courses Required for Horticulture Major: Hort. Research coursework

This list is not comprehensive. Speak with OSU advisor for more information.

Hort. Option Requirements	Lane CC Equivalent Course	OSU Course	Notes
Plant Materials Landscape I: Deciduous Hardwd	LAT 155	HORT 226	Complete 3(three) courses Other options available post-transfer. Work with OSU advisor for course selection FES 241, HORT 226/228/255= Available online at OSU
Additional Mathematics Integral Calculus	MTH 252	MTH 252	All courses listed = Available online at OSU
Science Foundation Courses Organic Chemistry Organic Chemistry Organic Chemistry General Physics General Physics	CH 241 CH 243 CH 242 PH 201 PH 202	CH 331 CH 332 CH 337 PH 201 PH 202	Complete 3(three) courses. Other options available post-transfer. Work with OSU advisor for course selection CH 331/332, PH 201/202 = Available online at OSU Must pass the ACS organic exam offered as part of Lane course to receive upper division credit: chemistry.oregonstate.edu/content/organic-chemistry-transfer-policies
Additional HORT Courses			Other courses may apply to this option. Work with OSU HORT advisor for appropriate course selection

General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of Lane Community College courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-lane-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness (HHS 231 and 241)	Completed as part of major WR 121. Required to transfer. Can be completed as part of major: see advisor Choose one course from BaccCore link above HPE 295
PERSPECTIVE COURSES	Biological Science Physical Science Additional Biological or Physical Science Cultural Diversity Literature and the Arts Social Processes and Institutions Western Culture	Completed as part of major Completed as part of major Completed as part of major Choose one course from BaccCore link above Choose one course from BaccCore link above Completed as part of major Choose one course from BaccCore link above
DPD COURSE	Difference, Power, & Discrimination	Can be completed as part of major: see advisor
SYNTHESIS COURSES	Contemporary Global Issues Science, Technology, & Society	Upper division course, take through OSU Upper division course, take through OSU

Horticulture option descriptions:

Horticultural Research – this option is designed for students interested in graduate school and/or a career in academic or industrial research. It provides you with an excellent foundation in the natural sciences and horticulture, and accommodates your specific research interests. Your studies will involve you in critical thinking, and allow you to seek out, synthesize, and apply information from many sources to analyze novel situations and solve problems. You will create a research project under the guidance of a faculty mentor, and will write an undergraduate thesis. Recent graduates have gone on to Masters and Ph.D. programs in the US and abroad, and have studied diverse topics such as plant breeding, green roof technology, entomology, and weed science.

Please refer to Horticulture Transfer Guide if interested in any options below:

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. In recent years, the industry has expanded and rapidly become more sophisticated to meet the challenges of today's urban environment.

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.

Important Notes & Resources

- Program Information: see the [Department of Horticulture](https://horticulture.oregonstate.edu/horticulture/students) 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](http://agsci.oregonstate.edu/education/contact-us/advisors) (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.

Lane Community College	lanec.edu/advising/advisors
OSU College of Agricultural Sciences Student Advisors	Campus: Anne Gearhart, 541-737-5448, Anne.gearhart@oregonstate.edu Ecampus: Sarah Finger-McDonald, Sarah.mcdonald@oregonstate.edu

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