VITICULTURE AND ENOLOGY OPTION

This option is offered within the following major(s):

- Horticulture - College of Agricultural Sciences (http://catalog.oregonstate.edu/college-departments/agricultural-sciences/horticulture/horticulture-bs-hbs)

The Oregon winegrape industry has experienced steady growth since its beginning in 1961. Oregon now ranks third nationally in the number of wineries, and fourth in wine production and vineyard acreage. Vineyards and wineries have also become an integral part of the Oregon tourism industry.

The viticulture and enology curriculum addresses the educational needs of students planning to enter the winegrape industry as viticulturists, vineyard managers, consultants and professionals. The curriculum involves active learning, providing case studies about real-world situations, enhancing critical thinking skills through understanding the art and science of vineyard and winery production. Viticulture and enology students will be active learners in a multi-disciplinary major. Upon graduation, they will possess the skills prized by employers as managers with the ability to think critically and troubleshoot in the vineyard and winery. They will have a thorough knowledge of vine physiology, vineyard production, winery production and related topics. They will understand how their actions in the field affect the quality of the finished wine. They will be skilled in finding resources and using information to analyze novel situations and solve problems in the industry.

In addition to the required Horticulture Major Core courses, students in this proposed option will complete the following courses:

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<th>Code</th>
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<th>Hours</th>
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<tr>
<td>HORT 251</td>
<td>TEMPERATE TREE FRUIT, BERRIES, GRAPES, AND NUTS</td>
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**Ecology**
Select one of the following: 3-4

- BI 370 ECOLOGY
- BOT 341 PLANT ECOLOGY
- HORT 318 *APPLIED ECOLOGY OF MANAGED ECOSYSTEMS

**Technology**

- PBG 430 PLANT GENETICS 3

**Horticultural Communication**

- HORT 407 SEMINAR 1
- HORT 411 HORTICULTURE BOOK CLUB 1
Select one of the following Writing Intensive Courses: 3-4

- HORT 318 *APPLIED ECOLOGY OF MANAGED ECOSYSTEMS

**Capstone**

- HORT 481 HORTICULTURE PRODUCTION CASE STUDIES 4

**Horticultural Science and Technology**

- HORT 360 IRRIGATION AND DRAINAGE 4
Select one of the following: 3-4

- AG 221 METALS AND WELDING
- AG 312 ENGINE THEORY AND OPERATION
- AG 391 FARM IMPLEMENTS

**Viticulture**

- HORT 451 TREE FRUIT PHYSIOLOGY AND CULTURE 4
  or HORT 452 BERRY AND GRAPE PHYSIOLOGY AND CULTURE
- HORT 453 GRAPEVINE GROWTH AND PHYSIOLOGY 3
- HORT 454 PRINCIPLES AND PRACTICES OF VINEYARD PRODUCTION 3

**Fermentation Foundation Sciences**

- BB 314 CELL AND MOLECULAR BIOLOGY 4
  or BB 350 ELEMENTARY BIOCHEMISTRY
- CH 331 ORGANIC CHEMISTRY 4
- CH 332 ORGANIC CHEMISTRY 4
- MB 302 GENERAL MICROBIOLOGY 3

**Fermentation Science**

- FST 466 WINE PRODUCTION PRINCIPLES 3
- FST 467 WINE PRODUCTION, ANALYSIS, AND SENSORY EVALUATION 5

**Business Management**
Select one of the following: 3-4

- AEC 211 AGRICULTURAL AND FOOD MANAGEMENT
- AEC 221 AGRICULTURAL AND FOOD MARKETING
- AEC 250 *INTRODUCTION TO ENVIRONMENTAL ECONOMICS AND POLICY
- AEC 251 *INTRODUCTION TO AGRICULTURAL AND FOOD ECONOMICS
- BA 215 FUNDAMENTALS OF ACCOUNTING
- BA 260 INTRODUCTION TO ENTREPRENEURSHIP
- BA 463 FAMILY ENTERPRISE GOVERNANCE

**Ecology and Sustainability Ecosystems Courses**

Meets Syntesis requirements. Each course must be from a different department.

**Contemporary Global Issues**
Select one of the following: 3-4

- AEC 351 *NATURAL RESOURCE ECONOMICS AND POLICY
- AEC 352/CON 352 *ENVIRONMENTAL ECONOMICS AND POLICY
- BI 301 *HUMAN IMPACTS ON ECOSYSTEMS
- CROP 330 *WORLD FOOD CROPS
- FES 365 *ISSUES IN NATURAL RESOURCES CONSERVATION
- FW 325 *GLOBAL CRISIS IN RESOURCE ECOLOGY
- GEOG 300 *SUSTAINABILITY FOR THE COMMON GOOD
- GEOG 330 **GEOGRAPHY OF INTERNATIONAL DEVELOPMENT AND GLOBALIZATION
### Viticulture and Enology Option

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<td>ENT 331</td>
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<td>SUS 350</td>
<td>*SUSTAINABLE COMMUNITIES</td>
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<td>WSE 470</td>
<td>*FORESTS, WOOD, AND CIVILIZATION</td>
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<td>Z 349</td>
<td>*BIODIVERSITY. CAUSES, CONSEQUENCES, AND CONSERVATION</td>
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#### Science, Technology and Society

Select one of the following:

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<td>ANS 315</td>
<td>*CONTENTIOUS SOCIAL ISSUES IN ANIMAL AGRICULTURE</td>
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<td>BI 348</td>
<td>*HUMAN ECOLOGY</td>
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<td>*FUNGI IN SOCIETY</td>
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<td>CH 374</td>
<td>*TECHNOLOGY, ENERGY, AND RISK</td>
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<td>*SUSTAINABLE ENGINEERING</td>
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<td>*INTRODUCTION TO WATER SCIENCE AND POLICY</td>
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<td>HEST 310</td>
<td>*INTRO TO COMMUNITY ENGAGEMENT AND COMMUNITY-BASED DESIGN</td>
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<td>*PLAUGUES, PESTS, AND POLITICS</td>
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<td>*ENVIRONMENTAL HISTORY OF THE UNITED STATES</td>
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<td>SOIL 395</td>
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<td>SUS 304</td>
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#### Total Hours: 66-71

* Baccalaureate Core Course (BCC)

### Option Code: 613

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<td>SOIL 205 &amp; SOIL 206</td>
<td>SOIL SCIENCE and *SOIL SCIENCE LABORATORY FOR SOIL 205</td>
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#### Perspectives Course: 3-4

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#### Perspectives Course: 3-4

#### Writing II Course | 3

#### Total Hours: 15-16

### Second Year:

#### Fall:

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#### HORT 452 | BERRY AND GRAPE PHYSIOLOGY AND CULTURE | 4

#### Electives | 1-2

#### Total Hours: 15-16

### Winter:

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