

# FORESTRY MANAGEMENT/ FOREST RESTORATION AND FIRE, ASSOCIATE OF SCIENCE

Forestry provides students with an introduction to the technical and scientific knowledge related to the field of forestry and forest management. This set of classes satisfies the requirements for an AS degree and also meets the lower division requirements at Oregon State University (OSU) for a Bachelor of Science in Forestry.

The forest restoration and fire option focuses on managing for forest disturbance processes including wildfire, landslides, insects and disease. Graduates will have the knowledge and the skillset to incorporate natural processes, including disturbance, into active forest management planning. This option prepares students to prevent or mitigate damage resulting from disturbances or to use disturbance processes purposefully to achieve management objectives. Disturbance processes are important considerations in any actively managed forest, regardless of the specific management objective. These skills will be particularly important for managing forests at the landscape scale and in the face of uncertainty and rapid change including in climate or land use patterns.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details. Check out the Forestry/Natural Resources program website!

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 93 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Integrate technical field skills with analytical skills to identify important forest management challenges and identify potential solutions for these problems.
- Explain and discuss important current issues, and social and political components of forest management in the United States and other countries.

- Demonstrate basic skills in forest surveying, recreation management, soil science, remote sensing, geographic information systems, and spreadsheet applications.
- Identify important tree species in the Pacific Northwest.

## PRE-PROGRAM COURSES

Students are required to take the following courses *prior to* the program courses, depending on students' college placement information. See advisor for details:

| Code  | Title   | Credits |
|-------|---|---------|
| CIS90 | Computer Basics (or demonstrate proficiency)              | 2       |
| MTH95 | Intermediate Algebra (or placement in higher math course) | 4       |
| WR90R | Academic Literacy (or placement in higher writing course) | 4       |

## PROGRAM GUIDE

| Course   | Title  | Credits |
|--|--|---------|
| <b>First Year</b>                                  |  |         |
| <b>Fall</b>  |  |         |
| CHEM221  | General Chemistry I  | 5       |
| ENV235   | Introduction to Soil Science   | 4       |
| F111   | Introduction to Forestry <sup>6</sup>  | 3       |
| MTH111   | College Algebra  | 4       |
|  |  | Credits |
|  |  | 16      |
| <b>Winter</b>                                      |  |         |
| BI202  | Introductory Biology   | 4       |
| F222A  | Elementary Forest Surveying  | 4       |
| GEOG265  | Intro to Geographical Info Systems   | 4       |
| MTH112   | Trigonometry   | 4       |
|  |  | Credits |
|  |  | 16      |
| <b>Spring</b>                                      |  |         |
| F241   | Dendrology   | 5       |
| MTH241<br>or MTH251                                | Calculus for Bus and Soc Science I<br>or Calculus I Differential Calculus  | 4       |
| FS100<br>or FS121<br>or FS131<br>or FS125          | Principles of Emergency Services<br>or Fire Behavior and Combustion<br>or Wildland Firefighter Type 2<br>or Principles of Fire and Emergency S | 3-4     |
| Difference, Power, and Discrimination <sup>1</sup> |  | 3       |
|  |  | Credits |
|  |  | 15-16   |
| <b>Second Year</b>                                 |  |         |
| <b>Fall</b>  |  |         |
| ECON201  | Microeconomics   | 4       |
| PH201  | General Physics I: Mechanics   | 5       |
| WR121  | English Composition  | 4       |
| PE231  | Wellness for Life  | 3       |
|  |  | Credits |
|  |  | 16      |
| <b>Winter</b>                                      |  |         |
| CIS125S  | Spreadsheet Applications   | 3       |
| F250   | Forest Biology   | 4       |
| MTH243   | Intro to Probability and Statistics  | 4       |

|   |       |
|---|-------|
| Literature and the Arts <sup>2</sup>      | 3     |
| Credits                                   | 14    |
| <b>Spring</b>                             |       |
| SP111 Fundamentals of Public Speaking     | 3     |
| WR227 Report Writing                      | 4     |
| F180 Internship: Forestry <sup>5</sup>    | 3     |
| or NR180 or Internship: Natural Resources |       |
| Cultural Diversity <sup>3</sup>           | 3     |
| Western Culture <sup>4</sup>              | 3     |
| Credits                                   | 16    |
| Total Credits                             | 93-94 |

<sup>1</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213

<sup>2</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>3</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206.

<sup>4</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

<sup>5</sup> Schedule an appointment with the Internship Coordinator a month prior to term 541-888-7405.

<sup>6</sup> NR201 may be substituted for F111.

\* All Honors courses may substitute for their equivalent requirements.