

# FOR 271 : APPLIED FOREST ECOLOGY

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## Transcript title

Applied Forest Ecology

## Credits

3

## Grading mode

Standard letter grades

## Total contact hours

50

## Lecture hours

20

## Lab hours

30

## Recommended preparation

FOR 240A and FOR 241A.

## Course Description

Applies principles of forest ecology to develop a basic understanding of forest stand dynamics and silvicultural principles. Emphasis is placed on stand development, regeneration and stand analysis. Students will develop a practical understanding of stand establishment, maintenance and stand data collection. First course in sequence of FOR 271, FOR 272, and FOR 273.

## Course learning outcomes

1. Identify major forest pests, including insects, diseases, and parasitic plants, in the Pacific Northwest.
2. Explain the ecological role of insects and diseases in ecosystem functioning.
3. Understand and explain silvicultural, biological, chemical, and mechanical means available for control and management of forest pathogens.
4. Explain the process of integrated pest management and its role in ecosystem management.

## Content outline

• Terminology • Plant interactions and limitations of growth • Stand dynamics • Individual tree growth • Ecology of regeneration • Silvicultural systems • Even-aged silviculture • Agroforestry • Uneven-aged silviculture • Site preparation • Artificial regeneration

## Required materials

Requires textbook, see syllabus for details.