

FOR 273 : SILVICULTURE AND HARVESTING SYSTEMS

Transcript title

Silviculture/Harvest Systems

Credits

5

Grading mode

Standard letter grades

Total contact hours

90

Lecture hours

30

Lab hours

60

Recommended preparation

FOR 271, FOR 272, and FOR 235.

Course Description

Emphasizes interrelated systems of silviculture and harvesting. Discussions provide an understanding of the various treatments and harvesting systems applied to forest stands to meet various management objectives for forest ecosystems. Topics include forest regeneration processes and intermediate operations (thinning, pruning, etc.) and different methods of timber harvest. Observation and data collection will be performed in lab sections. Written reports interpreting prescriptions and harvest systems will be required. Last course in a sequence of FOR 271, FOR 272, and FOR 273.

Course learning outcomes

1. Demonstrate an understanding of the vocabulary of harvesting systems including ground-based, cable-based, and aerial-based harvesting systems.
2. Demonstrate an understanding of silvicultural terms and concepts.
3. Explain the function of mechanical, traditional ground-based, cable and aerial yarding systems as part of a harvesting system.
4. Explain the Forest Practice Rules of Oregon.
5. Identify different silvicultural treatment types.
6. Write summaries and reports that demonstrate an understanding of silvicultural constraints as they relate to harvesting.
7. Be able to identify safety concerns and constraints associated with timber harvest and treatments.
8. Explain forest road layout, design, and construction.
9. Demonstrate an understanding of different silviculture and harvesting related software packages.
10. Identify the legal, environmental, economic and social constraints involved with timber harvesting and forest management.
11. Explain the basics of federal forest contracting.

Content outline

- Thinned and Unthinned Stands
- Cable and Aerial Harvests
- Landings and Culverts
- Secondary Transport
- Road Building
- Silvicultural Basics
- Silvicultural Regeneration Systems
- Silviculture Intermediate Operations Even-aged Thinning
- Quantitative Silviculture QMD SDI
- Quantitative Silviculture and Modeling
- Oregon and Other State's Forest Practice Rules

Required materials

Requires textbook, see syllabus for details.