

FSTY 305 / Silviculture I
University of Northern British Columbia
Fall 2005

Instructor: Scott Green
Room: 8-335 (Teaching Lab Building)
Phone: 960-5817
Email: greens@unbc.ca
Office hours: Tuesday 1-2:30 pm and/or by appointment
Lectures: Tuesday and Thursday, 1130-1220, 5-168
Lab: Friday, 1130-1420, 8-325 (Teaching Lab Building)

Course Objectives:

- 1) Establish the biological and ecological basis for stand development and sustainable forest management
- 2) Understand the effects of silvicultural practices on sustainable forest management
- 3) Introduce silvicultural practices and techniques (lecture and field)
- 4) Develop critical-thinking abilities for natural resource issues
- 5) Understand the relationship of silviculture to other forest-land management objectives and the associated trade-offs

Grading:

Exams

Midterm	25%
Final	25%

Labs

Stand-Density Report	10%
Population-Transfer Report	10%
Applied-Silviculture Report	10%
Topical Report & Presentation (see handout)	20%

Recommended Texts: (Available in the Library)

- 1) The Practice of Silviculture: Applied Forest Ecology, 9th ed.
by Smith, Larson, Kelty, & Ashton.
- 2) Regenerating British Columbia's Forests
by Lavender, Parish, Johnson, et al.

Required Readings: (All readings are available in student G drive as PDF files)

- 1) Future Forest Management in B.C. – *Bourgeois*
- 2) Developing Ecosystem Management in B.C. – *Mabee et al.*
- 3) Making Sense of Site Index – *Stearns-Smith*
- 4) Thinning and Growth – *Zeide*
- 5) Even-Aged Management in High-Elevation Forests – *Elman and Peterson*
- 6) Effect of Shelterwood Density on Understory Microenvironment – *Langvall et al.*
- 7) Improving Reforestation Success – *Krasowski and Elder*
- 8) Performance of Lodgepole Pine Under Different Artificial Regeneration Practices – *Campbell et al.*
- 9) Effects of Fire Exclusion in Rocky Mountain Ecosystems – *Keane et al.*
- 10) Risk and Management of Prescribed Burning – *Lepine et al.*
- 11) Genetic Control and Improvement of Planting Stock – *Lester et al.*
- 12) Genetic Consideration in Propogating Diverse Tree Species – *Kitzmilller*
- 13) Site Quality and Soil Compaction During Harvest – *Williamson and Neilsen*
- 14) Hybrid Poplar in the Pacific Northwest – *Stanton et al.*

Note: There may be some additional readings for the Silvicultural Implementation module

Laboratory Schedule:

SEP	09	Lecture Progression Day
	16	Stand Development (<i>Cranbrook Hill Woodlot</i>)
	23	Stand-Density Management (<i>Bobtail FSR</i>) – EXTENDED LAB
	30	No Lab
OCT	07	Population Transfer (<i>Red Rock Tree Improvement Station</i>) – EXTENDED LAB
	14	Midterm Exam – <i>Covering material up through Oct 13</i>
	22	<i>Aleza Lake</i> – SATURDAY FIELD LAB
	28	No Lab
NOV	04	Nursery tour (<i>JD Little Reforestation Centre</i>)
	11	No Lab – Remembrance Day
	18	Applications of Dendrochronology in Forest Management
	25	Class Presentations

Policy for Late Assignments for FSTY 305:

Late assignments will be accepted at a daily grade cost of 10%. No assignments will be received after the 5th day past the original deadline without prior permission from the instructor.