

GRANDE PRAIRIE REGIONAL COLLEGE

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Bachelor of Applied Forest Resource Management

ECOSYSTEM MANAGEMENT: FO3670

Pre-requisite: FO3130 (Silviculture)

Calendar Description:

Defining the concept of ecosystem management. Historical evolution of forest management. The Alberta Conservation Strategy provides the impetus for Ecosystem Management in Alberta; wildlife concerns; watershed management; other values of the forest. Application of Ecosystem Management; variable retention harvesting and restoration silviculture versus traditional silviculture systems. Current state of ecosystem management in Alberta.

We will have presentations from different agencies on their understanding of and approach to ecosystem management.

We will have periodic, student-led, discussion based on selected papers/reports.

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Lectures: Monday 10:00 – 13:00 Portable A

Recommended Textbook:

“Creating a Forest for the 21st Century” 1996. Edited by Kathryn A. Kohm and Jerry F. Franklin. Island Press, Washington, D.C. 475 p.

Textbooks Available in the Library:

“Forest Ecology”. 1996. J.P. Kimmins. Published by Prentice Hall.

“Forest Ecosystems: Concept and Management”. 1985. Waring, R.H. and W.H. Schlesinger. Published by Academic Press.

“Forest Ecosystems”. 1994. D. Terry. University of John Hopkins Press,.

“The Forest Certification Handbook”. 1996. C. Upton and S. Bass. St. Lucie Press, Delray Beach, Florida.

Scientific Journals and Periodicals Available in the Library

Canadian Journal of Forest Research

Forestry Chronicle

Northern Journal of Applied Forestry

Silviculture

Proceedings from a number of ecosystem symposia are also available in the library.

Lecture Schedule

Weeks 1 and 2.

What is an ecosystem?

- structural components
- nature of systems
- landscape and global ecology

Traditional uses of the forest

- Consumptive and non-consumptive uses
- Difficulty of putting a dollar value on traditional uses

Week 3.

Relationship between wildlife and habitat.

Weeks 4 through 9. (includes spring break)

The ecosystem approach to maintaining habitat.

- Possible strategies and techniques
- Practices in Alberta

Week 10.

Issues raised by ecosystem management

- Fire
- Other disturbance

Week 11.

Evidence in favour of ecosystem management

- Studies of ecosystem management

Week 12.

Ecosystem management versus enhanced forest management

Week 13.

The push towards sustainable forest management.

- Various levels of certification initiatives

EXAMINATIONS AND MARK ALLOCATION

Mid-term examination	35%
Presentation	15%
Final examination	40%