

GRANDE PRAIRIE REGIONAL COLLEGE

AUG. 24 2001

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Bachelor of Applied Forest Resource Management

ORIENTATION TO FORESTRY:FO1010

Transfer status: Under discussion

Pre-requisite: None

Calendar Description:

Introduction to the practice of professional forestry. A brief overview of the end-products derived from the forest and evolving views on the use and valuation of the forest resource. A consideration of the chronological stages in the development of a forest. The different skills required by a forester: soil science, ecology, forest health, plant anatomy and physiology, mensuration, fire management, statistics, accounting.

Instructor: Weixing Tan Ph.D.
Office: E310
Phone: 539-2793
Email: tan@gprc.ab.ca

Lectures: Mondays 15.00 - 15.50 J226

Guest Lecturers: Steve Blanton, Manning Diversified - safety issues
Brian Telford, Ainsworth - woodlands operations

Course Description:

The objectives of "Orientation to Forestry" are to provide the student with:

- (a) an appreciation of the many end-products of the forest and
- (b) an understanding of the different types of forest and forest management leading to these end-products.

Visits to local plants gives students a first-hand look at the type of processing used to generate particular fibre-based end-products. The non-fibre-based end-products of the forest such as recreational, aesthetic, spiritual, watershed management, soil conservation are also considered.

The concept of the Annual Allowable Cut (AAC) and its biological and social basis is explained, with its implications for forest companies.

We will look at the different stages of forest management, from site classification through seedling production, silviculture, protection, mensuration and harvesting.

The evolution of forest policy through the ages will be considered.

Finally, since forestry is a business, we will consider forestry as an investment, including the concepts of discounting and compounding.

TEXTS AND REFERENCES

TEXTS AVAILABLE IN THE LIBRARY

Young, R.A. and R.L. Giese. (1990). Introduction to Forest Science. John Wiley & Sons, Toronto. 586 pp.

Compendium of Canadian Forestry Statistics, (1996). Canadian Council of Forest Ministers.

Profiles of the Forest Industry in Alberta. Alberta Economic Development and Tourism. 46 pp.

Field Guide to Ecosites of Alberta. (Series of four publications).

Forest Site Interpretation and Silvicultural Guideline for Alberta. (1996). Alberta Environmental Protection.

SCIENTIFIC JOURNALS AND PERIODICALS AVAILABLE IN THE LIBRARY

Canadian Journal of Forest Research

Forestry Chronicle

Northern Journal of Applied Forestry

Silviculture

WEBSITE

www.canadian-forests.com

www.fs.fed.us

EXAMINATIONS AND MARK ALLOCATION

Mid-term examination	40%
Final examination	60%

LECTURE SCHEDULE

Forestry - background	2 lectures
- the world scene	
- Europe, a special case	
- Canada	
- Alberta	
The expanding forest industry in Alberta	1 lecture
- the role of improving technology	
Forestry - developmental stages of a forest	6 lectures
- dendrology, the basic need	
- forestation/reforestation, site classification	
- stand tending	
- tree improvement	
- harvesting	
- surveys	
- purpose of	
- how to set up	
- timber cruising	
- legally required surveys	
- mensuration	
- assessing growth and yield, and volume	
- permanent vs temporary sample plots	
- protection	
- fire management/control	
- forest health	
- forest policy	
Visits to local forest companies	4 lectures
- three companies with different end-products	

NOTE: Some lectures will be replaced by, or supplemented by, field visits.