

**GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE AND TECHNOLOGY**

Bachelor of Applied Forest Resources Management

FOREST MANAGEMENT I: FO3360 (Fall 1999) 3 units [3-1-0]

Pre-requisites OR Corequisite: FOREST ECONOMICS-FO3190

Calender description: The manipulation of the forest to meet the objectives of landowners, society, and/or caretakers in North America with stress on Western Canada. Multiple use forestry and environmental impacts or currently available forest management tools, techniques and strategies. Acquisition of personal, oral, and written communication skills, development of desirable work habits and ethics

Instructor: Charles A. Backman, PhD.
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Lectures Tuesday, Thursday 11:30 - 12:50 Room: B205

Course objectives: Upon completion of the course, the student should be able to

1. develop an overall context for forest management and an appreciation of the complexities that exist when one is developing and designing a management plan for a forest.
2. know how to apply several useful management tools (such as decision analysis, linear programming, simulation) in a forest management context;
3. show an understanding of several planning concepts and techniques and have some knowledge of how they are used, or could be used in Alberta.

Text:

Davis, Lawrence S. and Johnson, K. Norman (1987) *Forest Management*, 3rd edition, McGraw-Hill, Inc Toronto, Canada 790 pp

Useful references:

Kimmins, Hamish (1997) *Balancing Act-Environmental issues in forestry*. UBC Press Vancouver, Canada 305 pp

Oliver, Chadwick and Larson, Bruce (1996) *Forest stand dynamics*. Wiley and Sons, Toronto, Canada 520 pp

Ross, Monique M. (1995) *Forest management in Canada*. Calgary, Canada. Canadian Institute of Resources Law pp 388

Evaluation: Evaluation for this course is based on these four items.

Assignments/quizzes (-5)	20%
Project (oral + written)	15%
Mid-term examination (1)	25%
Final exam (1)	40%

Assignments are to be handed in on time. Late assignments will be accepted, but will be subjected to an automatic deduction of 10% per day that the assignment is late. Completion of all assignments, the mid-term, and the project is necessary in order to pass the course. The final exam must be completed in order to be eligible for credit for this course.

9 - POINT GRADE	PERCENTAGE EQUIVALENT	DESIGNATION
9	90 - 100	EXCELLENT
8	80 - 89	
7	72 - 79	
6	65 - 71	GOOD
5	57 - 64	PASS FAIL
4	50 - 56	
3	45 - 49	
2	26 - 44	
1	0 - 25	

Course Schedule (Subject to change)

TOPIC 1: *Introduction to forest management* [Week 0, 1]

Ch. 2. Conflicting demands on Canadian forests. In Ross, Monique M. (1995) *Forest management in Canada*. Calgary, Canada: Canadian Institute of Resources Law. pp 388

Ch. 2-The Peter Pan principle in renewable resource conflicts. In Kimmins, Hamish (1997) *Balancing Act-Environmental issues in forestry*. UBC Press. Vancouver, Canada. 305 pp

TOPIC 2: *Introduction to decision analysis* [Week 2]

D&J Ch. 6

TOPIC 3: *Modeling and decision analysis* [Week 3]

D&J Ch. 7,8

TOPIC 4: *Forest and stand dynamics* [Week 4]

D&J Ch. 2, 3, 4

TOPIC 5: *Forest and stand dynamics (cont'd)* [Week 5]

D&J Ch. 5

TOPIC 6: *Evaluation of alternatives* [Week 6]

D&J Ch. 8

TOPIC 7: *Mid-term* [Week 6]

TOPIC 8: *Valuation I (Appraisal and tree stand, land and forest valuation)* [Week 7]

D&J Ch. 9, 10

TOPIC 9: *Valuation II (Tree, stand, land and forest valuation, non-timber valuation)* [Week 8]

D&J Ch 11-12

TOPIC 10: *Forest management planning (Economic forest regulation)* [Week 9]

D&J Ch 14

TOPIC 11: *Forest management planning (Tree-stand decisions; stand forest decisions)* [Week 10]

D&J Ch 13

TOPIC 12: *Forest management planning* [Week 11]

D&J Ch 15

TOPIC 13: *Forest management planning (Scheduling with constraints analysis of harvest schedules)* [Week 12]

D&J Ch 16

TOPIC 14: *Forest management in perspective-The big picture* [Week 13]

TOPIC 15: *Presentations* [Week 14]

TOPIC 16: *Review* [Week 14]