

SEP. 10 2002

GRANDE PRAIRIE REGIONAL COLLEGE  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
Bachelor of Applied Forest Resources Management

**FOREST MANAGEMENT I: FO3300 (Fall 2002)**

**Pre-requisites OR Concurrent: 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  
Office: J208  
Phone: 539 2846  
e-mail: [backman@gprc.ab.ca](mailto:backman@gprc.ab.ca)

Lectures: Tuesday, Thursday	10:00 – 11:20	Room: M129
Seminar: One hour per week	TBD	Room: TBD

**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.

**Text:**  
Davis, Lawrence S., Johnson, K. Norman, Bettinger, Peter, and Howard, Theodore (2001). Forest Management, 4<sup>th</sup> edition. McGraw-Hill, Inc. Toronto, Canada. 804 pp.

**Useful references:**  
Kimmins, Hamish (1997). Balancing Act-Environmental issues in forestry. UBCPress. 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

**Course schedule**

**WEEK 1:** *Introduction to forest management I*

**WEEK 2:** *Introduction to forest management II*  
D&J&H&B: Ch. 1, 2, 3

WEEK 3: *Forest and stand dynamics*  
D&J&H&B: Ch. 4

WEEK 4: *Forest and stand dynamics (cont'd)*  
D&J&H&B: Ch. 5

WEEK 5: *Problem identification and decision analysis*  
D&J&H&B: Ch. 6

WEEK 6: *Financial analysis in forestry*  
D&J&H&B: Ch. 7

WEEK 7: *Principles and applications in forest valuation*  
D&J&H&B: Ch. 8

WEEK 8: *Review and Mid-term*

WEEK 9: *Principles and applications in forest valuation*  
D&J&H&B: Ch. 8

WEEK 10: *Evaluation of alternatives*  
D&J&H&B: Ch. 9

WEEK 11: *Forest management planning (Classical forest regulation)*  
D&J&H&B: Ch 10

WEEK 12: *Forest management planning (Classical forest regulation)*  
D&J&H&B: Ch 10

WEEK 13: *Forest management planning using FORSIM*

WEEK 14: *Tactical planning*  
D&J&H&B: Ch 14

WEEK 15: *Forest management in perspective-The big picture*

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

Assignments (6)	25%
Project	15%
Mid-term examination (1)	30%
Final exam (1)	30%

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 and the mid-term is necessary in order to pass the course.