GRANDE PRAIRIE REGIONAL COLLEGE

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Bachelor of Applied Forest resources Management

FOREST MANAGEMENT I: FO3300 (Fall 2000)

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
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Lectures: Tuesday, Thursday	10:00 – 11:20	Room: A308
Seminar: One hour per week	TBA	Room: TBA

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, 4th edition. McGraw-Hill, Inc. Toronto, Canada. 790 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

TOPIC 1: *Introduction to forest management*
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. UBCPress. Vancouver, Canada. 305 pp.

TOPIC 2: *Forest and stand dynamics*
D&J: Ch. 2, 3, 4

TOPIC 3: *Forest and stand dynamics (cont'd)*
D&J: Ch. 5

TOPIC 4: *Introduction to decision analysis*
D&J: Ch. 6

TOPIC 5: *Modeling and decision analysis*
D&J: Ch. 7,8

TOPIC 6: *Evaluation of alternatives*
D&J: Ch. 8

TOPIC 7: *Review and Mid-term*

TOPIC 8: *Valuation I (Appraisal and tree stand: land and forest valuation)*
D&J: Ch. 9

TOPIC 9: *Valuation II (Stand, land and forest valuation, non-timber valuation)*
D&J: Ch. 11-12

TOPIC 10: *Forest management planning (Classical forest regulation)*
D&J: Ch 14

TOPIC 11: *Forest management planning*
D&J: Ch. 15

TOPIC 12: *Forest management planning (Scheduling with constraints/analysis of harvest schedules)*
D&J: Ch. 16

TOPIC 13: Forest management in perspective-The big picture

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

Assignments (5)	15%
Project	15%
Mid-term examination (1)	30%
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 and the mid-term is necessary in order to pass the course.