SEP 0 6 2000

GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE AND TECHNOLOGY

Bachelor of Applied Forest Resources Management

FOREST ECONOMICS: FO3190 (Fall 1999) 3 units (3-0-0)

Pre-requisites: Introduction to Microeconomics - EC 1010

Calendar description: Examination of economic aspects that influence forest operations, production, marketing, finance and policy. Topics include: forestry factors, theory of interest, economic rent, trade and external influences, and intangible factors. Opportunities in forestry for both timber and other uses (e.g. recreation) are considered.

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Lectures: Monday, Wednesday 8:30 - 9:50 Room: B305

Course objectives: Forestry economics is a very broadly based field including all facets of the production, distribution and consumption of timber and non-timbered products. It is not the intention of this course to provide an overview of the whole field of forestry economics, nor is it intended to educate specialists in forestry economics. Rather the course is aimed at professional foresters and will focus on the practical application of economics in the management of forests and forest policy analysis.

On completion of the course, the student should be able to:

1. Appreciate the management of forests as an economic activity;
2. To apply some of the concepts and tools of economic analysis to the management of forest resources;
3. To analyze and critically appraise important forest policy issues from an economic perspective.

Text:
Pearse, Peter H. (1990). Introduction to forestry economics. UBC Press. Vancouver, BC. 226 pp.

References:
Additional articles on reserve in the library
Other material distributed in class

Evaluation: Evaluation for this course is based on 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/quizzes, project and the mid-term is necessary in order to pass the course. The final exam must be completed in order to be eligible for credit for the course.

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

SCHEDULE OF COURSE MATERIAL

TOPIC 1: Introduction to forestry economics; characteristics of forest resources important for economic analysis

READINGS:

Text-Ch. 1
Ch. 1 - Introduction: Forestry in an economic environment. In Gregory, G.R. (1972). Forest resource economics. The Ronald Press Co.. New York, NY. 548 pp.

TOPIC 2: Efficiency and market failure

READINGS:

Text-Ch. 2
Gorte, J.K. and Gorte, R.W. (1979). Application of economic techniques to fire management-A status review and evaluation. Technical report INT-53. Ogden, UT: USDA Forest Service. Intermountain Forest and Range Experimental Station
Nautiyal, J.C. and Love, D.V. (1986). Some economic implications of methods of charging stumpage. Forestry Chronicle. 47(1): 25-28

TOPIC 3: The timber market

Text: Ch. 3

TOPIC 4: Valuing non-market items

Text: Ch. 4
Knetsch, J.L. and P.K. Davis (1977). Comparisons of methods for recreation evaluation. In N. Dorfman and R. Dorfman. (eds) Economics of the environment, 2nd ed.

TOPIC 5: Multiple use of forest land

Text: Ch. 5
Ch. 18 - Multiple use. In Gregory, G.R. (1972). Forest resource economics, The Ronald Press Co. New York, NY. 548 pp.

TOPIC 6: Time value of money

Text: Ch. 6

Chapter 5: Why net present value leads to better investment decisions than other criteria.
Brealey, Richard and Myers, Stewar (1984). Principles of corporate finance. McGraw-Hill, Toronto, Canada. 847 pp.
Klemperer, W.D. (1976). Economic analysis applied to forestry: Does it short-change future generations?. Journal of Forestry. 74(6):609-611

TOPIC 7: Optimal rotation

Text: Ch. 7
Nautiyal, J.C. (1966). Optimal rate of forest harvesting. Forestry Chronicle, 42(4): 337-345
Pearse, P.H. (1967). The optimal forest rotation. The Forestry Chronicle. 42(2): 178-193

TOPIC 8: Regulating the forest

Text: Ch.8
Chapter 15: Managing timber resources. In Duerr, William A., Teeguaden, Dennis E., Christiansen, Neils B., Guttenberg, Sam (1982). Forest resource management. O.S.U. Book Stores. Corvallis, USA. 612 pp.

TOPIC 9: Property rights and land tenure

Text: Ch. 9
Bromley, Daniel W. (1992). Property rights as authority systems: The role of rules in resource management. Pp. 453-470. In Nemetz, Peter N. (ed). Emerging issues in forest policy. UBCPress. Vancouver, Canada. 753 pp.
Bruce, John W. and Fortmann, Louise (1992). Property and forestry. pp. 471-496. In Nemetz, Peter N. (ed). Emerging issues in forest policy. UBCPress. Vancouver, Canada. 753 pp.

TOPIC 10: Taxation and other distortions

Text: Ch. 10
Chapter 11: Depreciation and income tax considerations. In Riggs, James L., Rentz, William F., Kahl, Alfred L., West, Thomas M. (1983). Essentials of engineering economics. McGraw-Hill. Toronto, Ontario.

TOPIC 11: Review