

JAN 18 2001

JAN 18 2001

GRANDE PRAIRIE REGIONAL COLLEGE

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Bachelor of Applied Forest Resources Management

Forest Harvesting and Transportation: FO3350 (Winter 2001) (3-0-3)

Pre-requisites: FO3010-Forest Engineering Principles or permission of the instructor

Course description: Harvesting systems including cable harvesting design, forest operations as an integral component of silvicultural system, harvest scheduling, harvest machinery and purchase, cost estimation

There will be all day laboratories throughout this course. At the present time, these labs are scheduled for January 12, February 2 and tentatively February 16. These All – Day labs take place on Fridays.

Please note that participation in all labs is expected.

Instructor: Charles A. Backman
Office: J208
Phone: 539 2846
e-mail: backman@gprc.ab.ca

Lectures: Tuesday, Thursday	10:00 - 11:20	Room: B305
Lab: Friday	14:30 – 17:20	Room: B305

Course objectives: Upon successful completion of the course, the student will have developed the following:

1. Appreciation for the different types of harvesting systems
2. Ability to estimate harvesting costs and compare harvesting equipment
3. Harvest scheduling concepts and practices
4. Alberta harvesting process

Text:

Conway, Steve (1982). Logging practices – Principles of timber harvesting systems, Revised edition. Miller Freeman Publications, Inc. San Francisco, California. 432 pp.

Other reading material:

BCIT (1996). Introduction to forest harvesting methods, BCIT, Vancouver, Canada
Other material as assigned

Course Outline:

SCHEDULE (Subject to change)

(January 1) Week 1	Introduction, course outline, student evaluation, project, etc.
(January 8) Week 2	Harvesting techniques and concepts Selective harvesting
(January 15) Week 3	Felling, balloon, horse logging systems, helicopter
(January 22) Week 4	Ground harvest methods
(January 29) Week 5	Cable systems
(February 5) Week 6	Chipping, transportation, loading
(February 12) Week 7	Conclusion of harvesting systems
(February 19) Week 8	Mid-term
(February 26) Week 9	Reading week
(March 5) Week 10	Harvest scheduling
(March 12) Week 11	Equipment manufacture
(March 19) Week 12	Equipment purchase
(March 26) Week 13	Costing and budgeting I
(April 2) Week 14	Costing and budgeting II
(April 9) Week 15	Review

Laboratory

(January 1) Week 1:		NO LAB
(January 8) Week 2:		Selective harvesting
(January 15) Week 3:		
(January 22) Week 4:		
(January 29) Week 5:		Ground based system
(February 5) Week 6:		
(February 12) Week 7:		Cable harvesting
(February 19) Week 8:	Mid-term	NO LAB
(February 26) Week 9:	Reading Week	NO LAB
(March 5) Week 10:		Harvest scheduling
(March 12) Week 11:		Equipment manufacture
(March 19) Week 12:		Equipment purchase
(March 26) Week 13:		
(April 2) Week 14:		Presentation
(April 9) Week 15: Last week		NO LAB

Evaluation:

Mid-term	25%
Assignments and quizzes	15%
Labs	15%
Presentation	15%
Final	30%

Assignments are to be handed in on time. Late assignments/labs will be accepted; but will be subjected to an automatic deduction of 10% per school day that the assignment is late. Completion of all assignments/labs 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 this course.