

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

Forest Harvesting and Transportation: FO3350 (Winter 2002) (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 25, and February 8. A half-day lab is scheduled for tentatively January 18. These All - Day labs and half day labs take place on Fridays.

Please note that participation in all labs is expected.

Instructor: Charles A. Backman
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 e-mail: backman@gprc.ab.ca

Lectures: Tuesday, Thursday	08:30 – 09:50	Room: B206
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)

(December 30) Week 1	Introduction, course outline, student evaluation, project, etc.
(January 6) Week 2	Harvesting techniques and concepts Selective harvesting
(January 13) Week 3	Felling, balloon, horse logging systems, helicopter
(January 20) Week 4	Ground harvest methods
(January 27) Week 5	Cable systems
(February 3) Week 6	Chipping, transportation, loading
(February 10) Week 7	Conclusion of harvesting systems
(February 17) Week 8	Mid-term
(February 24) Week 9	Reading week
(March 3) Week 10	Harvest scheduling
(March 10) Week 11	Equipment manufacture/or regulations
(March 17) Week 12	Equipment purchase
(March 24) Week 13	Costing and budgeting I
(March 31) Week 14	Costing and budgeting II
(April 7) Week 15	Review

Laboratory

(December 30) Week 1:		NO LAB
(January 6) Week 2:		Safety Laboratory
(January 13) Week 3:		Selective harvesting
(January 20) Week 4:		Cable based system
(January 27) Week 5:		
(February 3) Week 6:		Ground harvesting
(February 10) Week 7:		
(February 17) Week 8:	Mid-term	NO LAB
(February 24) Week 9:	Reading Week	NO LAB
(March 3) Week 10:		Harvest scheduling
(March 10) Week 11:		Equipment manufacture / or regulations
(March 17) Week 12:		Equipment purchase/ entrepreneur panel
(March 24) Week 13:		
(March 31) Week 14:		Presentation
(April 7) Week 15:	Last week	NO LAB

Evaluation:

Mid-term	25%
Assignments and quizzes	15%
Labs	20%
Presentation	10%
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.