GRANDE PRAIRIE REGIONAL COLLEGE

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Bachelor of Applied Forest Resources Management

Forest Harvesting and Transportation: FO3350 (Fall 2003) (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 may be some full-day labs and possibly some half-day labs.
Please note that participation in all labs is expected.

Instructor: Albert Sproule
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Lectures:	Monday	13:00 – 14:20	Room: E206
	Friday	11:00 – 12:20	E206
Lab:	Tuesday	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:

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

Other reading material:

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

Course Ouline:

SCHEDULE (Subject to change)

Week 1	**Sep. 5th**	**Introduction, course outline, student evaluation, project, etc.**
Week 2	**Sep. 12th**	**Schematic of harvesting events. Evolution of harvesting systems.**
Week 3	**Sep. 19th**	**Harvesting and silvicultural systems.**
Week 4	**Sep. 26th**	**Harvesting and silvicultural systems. Harvesting method and the environment.**
Week 5	**Oct. 3rd**	**Harvesting systems – falling, bucking, yarding**
Week 6	**Oct. 10th**	**Harvesting methods – ground based, cable, aerial.**
Week 7	**Oct. 17th**	**“**
Week 8	**Oct. 24th**	**“**
Week 9	**Oct. 31st**	**“**
Week 10	**Nov. 7th**	**Harvest scheduling**
Week 11	**Nov. 14th**	**Equipment manufacture/ Equipment purchase**
Week 12	**Nov. 21st**	**Costing and budgeting I**
Week 13	**Nov. 28th**	**Costing and budgeting II**
Week 14	**Dec. 5th**	**Harvest design**

Laboratory (Fall, 2003)

Week 1	**(September 9th):**	**College Harvesting**
Week 2	**(September 16th):**	**College Harvesting**
Week 3	**(September 23rd):**	**Term project**
Week 4	**(September 30th):**	
Week 5	**(October 7th):**	**Ground harvesting**
Week 6	**(October 14th):**	**Cable harvesting**
Week 7	**(October 14th):** **Mid-term**	**NO LAB**
Week 8	**(October 21st):**	
Week 9	**(October 28th):**	**Harvest scheduling**
Week 10	**(November 4th):**	**Equipment manufacture**
Week 11	**(November 11th):** **Remembrance day**	**NO LAB**
Week 11	**(November 11th):**	**Costing**
Week 12	**(November 18th):**	**Harvest design**
Week 13	**(November 25th):**	**Harvest design**
Week 14	**(December 2nd):**	**Harvest design**
Week 15	**(December 9th):** **Last week**	**NO LAB**

Evaluation:

Mid-term	**30%**
Assignments and quizzes	**10%**
Labs	**10%**
Presentation	**15%**
Final	**35%**