

FOR436 Forest Operations Evaluation and Project Planning (3 credits)

Instructors:	Beth Dodson and Tyron Venn
Class Times:	Lecture/Lab Mondays, 3:10-5:00 pm, Fridays 2:10-4:00 pm, JOUR 107
Required Text:	none
Pre-requisite:	FOR 320

Course Description:

The purpose of this course is to provide students with advanced knowledge and skills to analyze various forest operations in terms of their environmental and economic costs and benefits, compare alternatives, and plan forest operations projects.

Course Learning Objectives:

- Demonstrate an ability to implement various economic and multi-criterion decision analysis methods in the analysis of forest operations
- Understand cost factors and learn cost analysis procedures
- Understand principals involved with the planning of complex projects such as scheduling, budgeting, and environmental constraints

Grading:

Lab exercises and homework	80%
Final project	<u>20%</u>
	100%

- All homework will be due in class one week from the date it is assigned, unless otherwise specified.
- Late homework will be assigned a penalty of 10% of the possible grade per day it is late.
- All work must be neat, legible and complete.
- While you are allowed to work with fellow students on individual assignments, all submitted assignments must represent your own individual work.
- *All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.*
- *All students need to be familiar with the Student Conduct Code. The Code is available for review online at <http://www.umt.edu/SA/vpsa/index.cfm/page/2585>.*

Letter grades will be based on the following. Depending upon class performance, the curve may be shifted downward.

A	93% – 100%	C	73% – 77%
A-	90% – 93%	C-	70% – 73%
B+	87% – 90%	D+	67% – 70%
B	83% – 87%	D	63% – 67%
B-	80% – 83%	D-	60% – 63%
C+	77% – 80%	F	0% – 60%

Graduate Increment

In order for students to receive graduate credit for the course, a 10 - 12 page term paper analyzing a forest operation using the tools presented in this class is required. The paper will be of publishable quality, including an introduction, literature review, presentation of the issue, discussion of the significance for management, conclusion, and references to literature cited.

Course Schedule:

Week of:	Monday	Friday
Jan. 26	Introduction Excel Review	Review of NPV, PV, FV, IRR, etc.
Feb. 2	Continued Review HW #1	Continued Review HW #2
Feb. 9	Breakeven Analysis	HW #3
Feb. 16	NO CLASS	Breakeven Analysis Sensitivity Analysis
Feb. 23	Sensitivity Analysis	HW #4
March 2	LP/Goal Programming	HW #5
March 9	Optimization HW #6	Optimization cont.
March 16	Multi-Criterion Decision Analysis	HW #7
March 23	Guest Presentation	Multi-Criterion Decision Analysis
March 30	NO CLASS	NO CLASS
April 6	Project Planning	Project Definition HW #8
April 13	Project Networks	Critical Path Analysis HW #9
April 20	Risk Analysis	Scheduling Resources HW #10
April 27	Final Project assigned Monitoring	Monitoring HW #11
May 4	Project Teams and Partnering	HW #12 (in class)
May 11	Final Project due by 3:20 Monday, May 11	