

Date: March 2006

Course Name: Small Woodlot Management
Course Prefix and Number: CON 228
Credit Hours and Contact Hours: 3 credit hours – 3 contact hours
Catalog Description:

This course will provide a practical guide to the optimum utilization of several acres of privately owned woodlands. Topics covered will include woodland values, tree identification, forest ecology, measurement and evaluation of forest products, forest management alternatives and wood space heating. Field instruction will emphasize chain saw use, preparation of fuel wood including felling, bucking, transportation, splitting and seasoning.

II. Goals, Objectives and Learning Outcomes

Development of an understanding of and appreciation for wood lot values.
Development of an understanding of theory and practice of wood lot management procedures including precommercial and commercial cuts.
Development of specific skills including tree identification, chain saw operation, fuel wood processing, conifer plantation management and maple sugaring operation.

Relationship to Program Goals and Eleven Competencies

The essence of the Small Woodlot Management Course meshes very closely with the broad departmental goals of increasing awareness of environmental issues, appreciation of the natural world and preparing students for employment in environmental conservation fields. Of the eleven competencies, seven are stressed in Small Wood Lot Management: writing, reading, mathematics, computer literacy, problem solving, ethics and values and professional competency. Four: oral communications, information resources, citizenship and global concerns are given moderate emphasis.

III. Methods of Instruction

Types of Course Materials:

Textbooks

Fazio, J. R. 1987. *The Woodland Steward*. The Woodland Press, Moscow, Idaho 211p.

Dodge, M. C. 2003. *Timber Resources Management Recommendations Camp J. Warren Cutler*. Finger Lakes Community College, Canandaigua, NY. 54p.

Handouts

Slide presentations

Methods of Instruction

Lecture/Discussion

Skill Workshops

Field Trips

Assessment measures

Attendance	One free cut; each class will count 25 points	350
Tardy		-10
Participation		+
Midterm Exam		225
Project		200
Final exam		225
Total possible score		1000
A 920-1000, A- 900-919, B+ 880-899 D- 600-620, F < 600		

The midterm and final exam will be based on material presented in the classroom, during field exercises and in assigned readings. Be sure to retain and study all classroom and field handouts!

Small Wood Lot Management Project Requirements

Purpose:

Actual management of a wood lot should be directed by a detailed plan. The objective of this project is for you to develop such a plan for a section of wood lot several acres in size.

Procedure:

Select a wooded area with some commercially valuable timber and draw up a written plan which should include the following information:

Map:

A location map sufficient for your instructor to find your area and a map of approximate boundaries drawn to scale. Physical features mapped should include as a minimum: soil types, topography, water courses, a vegetation cover map indicating forest stands and any man-made features. Maps and all other pages included with the finished project must show a 1" margin on all four sides (exclusive of page numbers).

Valuation:

Provide a subjective evaluation of non-commercial and commercial values present on the property. Determine the board foot volume and pulpwood volume of a minimum of one acre of your selected woodlot. Calculate the value per acre of the commercial species present.

Management Plan:

The body of the paper should present a sequence of management activities for a definite time span. This plan should consider development of access roads, erosion control plans, intermediate cuts, harvest cuts, and provisions for regeneration or planting. These management decisions should be based on land capability, the requirements of the tree species, and any other information collected during the wood lot valuation. Alternative management practices should be considered. Be sure to consult the course text: Timber Resources Management Recommendations Camp J. Warren Cutler.

Evaluation:

The finished paper will be evaluated based on the following categories:

Content:	100 points
Organization:	25 points
Literature cited: (Yes, you need to cite some for credit here.)	25 points
Appearance (Computer Produced; fonts and graphics)	25 points
Writing quality (Take your rough draft to the Write Place!)	25 points

The Standard paper format required by the conservation department should be followed. Be sure to obtain a copy of the sample paper if you do not have one. The completed document must be 8.5" x 11:0 inches in size (including maps), fastened with a single staple in the upper left hand corner and not placed in any sort of binder. Papers will be due at 1:30 PM Wednesday, December 8, 2004; late papers will lose 25 points.

IV. Tentative Schedule and Course Outline

Introduction: course description, assessment of student experience, tree identification field quiz, non-commercial forest values Slide presentation: Forest Values

Forest stand evaluation (Camp Warren Cutler)

VanWoodlot survey, site analysis, basal area determination, tree marking criteria, Assessment of regeneration

Fuelwood plot management (Camp Warren Cutler)

Forest operations. Chain saw safety and use; felling, limbing, bucking

Forest Structure, stand development, intermediate cuts

Selection of Saw Timber for Commercial Sale and Timber Stand Improvement Field; Warren Cutler Boy Scout Reservation

Red Pine Plantation Management; Field, Camp Cutler

Managed Woodlot; Field

Harvest cuts.

Clearcut, seedtree, shelterwood, single tree selection, coppice forestry

Slash disposal, site preparation, herbicides, forest regeneration, seeding, planting

Commercial Timber Harvest (Field)

Forest Products Industry; Commercial Sawmill operation (Field)

Selected topics (Student choice) Christmas tree plantation management, Chainsaw field maintenance workshop, Bandsaw mill workshop, Maple sugar operation, Black Walnut plantation management, Timber hewing shingle making workshop, Crosscut saw and axe maintenance/sharpening workshop