Natural Resources Measurement and Inventory
NRM 340 – 3 credits
Fall Semester 2005

Course Information
Nqecvkqp: 359 O'Neill
Oggvkpi "Vko g: Lecture - WF 10:30-11:30; Lab - F 2:00-5:00
Rtgtgswkukgu: Junior class standing or permission of the instructor.

Instructor
Dr. Scott Rupp, 368 O'Neill; x7535; ffsr@uaf.edu; office hrs WF 11:30-12:30 or by appointment

Course Materials
Vgzvdqqm There is NO required text for this course. Course material will be provided as handouts in class, links on the web, and/or on reserve in the library.
Ygdukg: http://www.faculty.uaf.edu/ffsr/Classes/nrm340.html

Course Description
This course is intended to familiarize students with terminology, tools, and techniques used in measuring and taking inventory of natural resources including land, timber and vegetation, and wildlife resources. The course has been designed to develop basic inventory field skills and student appreciation for the relationship between field measurements and resource management problem solving.

The lecture component of this course will focus on the theory and application of inventory techniques to assess natural resource availability and condition, and develop an understanding of their use to meet management objectives. The course will focus on the measurement and inventory of timber and associated vegetation, but will also introduce students to other resource inventory methods and techniques.

The lab component of this course will focus on traditional and state-of-the art equipment and methods used for inventory of timber and vegetation. In addition the students will learn how to utilize and synthesize measurement and inventory data to solve natural resource management problems.

Course Goals/Learning Objectives
      Learn how to measure various tree characteristics
      Learn how to use maps
      Learn how to use a compass and GPS
      Learn how to calculate tree volume, biomass and fuel loadings
      Provide introduction/overview of statistical and sampling theory
      Learn how to conduct basic forest inventories
      Provide introduction/overview of wildlife sampling theory
   Learn how to sample vegetation characteristics including diversity measures
      Learn how to use spreadsheets
      Learn how to calculate and project tree growth

Instructional Methods

The lab component of this course is best thought of as a block of time available, as needed, for demonstrations, fieldwork, guest speakers, student activities, problem solving, or lecture. If the lab session is used by the instructor for lecture, no longer than 1.5 hours will be involved.

Most labs and several lecture periods will be conducted outside regardless of weather conditions (within reason). Please be prepared for rain, snow,
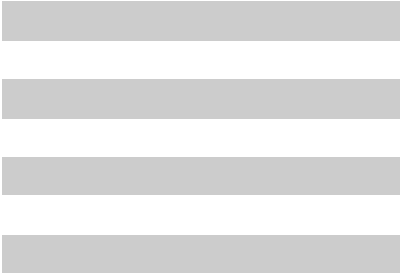
Course Policies

The student is responsible for all material distributed and presented in lectures and laboratory. Lecture attendance is very important. You will not score well on homework assignments or