Forestry1001
Fall 2011

***"The trees and the forests are the most valuable gifts with which nature has favored mankind; therefore honor and cherish them!"* – Pliny the Elder**

Instructor

Dr. John Kershaw

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Office hours: I maintain an Open–Door policy: If my door is open drop in
Monday and Wednesday evenings I monitor the facebook group page 8 – 9pm
You may also make an appointment

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All homework and other assignments should be sent here. You may also ask questions through this email.

TextBook

Required: Husch, Beers, and Kershaw
Forest Mensuration 4th Edition
(textbook may be used during written tests)

Recommended: Farrar
Trees of Canada

Course Objectives

The main objective of Forestry 1001 is to assist students in developing skills necessary to become professional foresters and resource managers. A successful professional is not only a person who possesses technical knowledge but also someone who is a reflective practitioner. Someone who approaches problems using not only their technical ability, but also studies the problem in detail, considers what needs to be done to solve it, and what is learned in the process of solving the problem.

To facilitate your development, Forestry 1001 offers a series of lectures, laboratories, integrated problems, and testing opportunities. The overall emphasis of the course is on quantifying the forest structure through measurements, a field of forestry known as mensuration, and using these quantifications to solve problems.

By the end of this course, successful students are able to:

1) use common forestry equipment to obtain basic forest measurements;

2) summarize field data into meaningful stand and forest level information;

3) integrate field data, technical knowledge and professional judgment to solve common forestry problems;

and

4) use generic professional skills such as accessing information, working as a team member, time management, independence, critical thinking, and communication.

Grades

Grades in Forestry 1001 are primarily based on demonstrating defined abilities or competencies. The criteria for abilities are described on a link from the webpage. These abilities are the basic skills you need to succeed in your upper years at UNB and to obtain quality summer employment.

There are a total of 69 abilities. Abilities are tracked and tested, but do not directly count toward your total score.

Scores for grades are obtained from lab reports, problems, and tests. The breakdown for the total is as follows:

Item	Total
Labs (9 @ 10pts each) active participation (10pts)	100 pts
Problem Group Design Report 20 Individual Final Report 100	120 pts
Midterms (2 @ 50 points each)	100 pts
Field Quizzes (2 @ 25 points each)	50 pts
Final Field Exam	100 pts
Twig Test	40 pts
Tree ID Test	40 pts
Species Report	10 pts
Final Twig Key	30 pts
Field Notes	50 pts
Final Exam	110 pts
Total	**750 pts**

Final letter grades are assigned according to the following chart:

Grade	Points Required
F	< 375 pts
D	375 – 412 pts
C	413 – 449 pts
C+	450 – 487 pts
B-	488 – 524 pts
B	525 – 562 pts
B+	563 – 599 pts
A-	600 – 637 pts
A	638 – 674 pts
A+	≥ 675 pts

This Fall is going to be busy, but a lot of fun. We are in the woods most weeks. Expect to spend 2 to 3 hours outside of class studying and working for every hour in class. The term goes quickly and there is little opportunity to get caught up if you fall behind.

Lab Grades

Most weeks in lab, there is a short lab write-up. Each lab is graded on a 10-point scale. Labs are graded as follows:

0 – did not attend lab and write up incomplete (or non-existent)
1 – attended lab but no write-up
4 – lab is turned in incomplete (legitimate attempt required)
4 – lab is turned in complete, but did not attend lab
7 – lab is turned in complete, and attended lab
10 – lab is turned in complete and superior work demonstrated, attended lab

Labs are due in the hand-in box at the **BEGINNING** of the following lab period. **Late labs are accepted at half credit up to the time graded labs are returned.**

Lab reports must be typed on a word processor and many require you to use a spreadsheet program. I demonstrate most spreadsheet skills in lecture, but generally do not touch on word processing. **Handwritten labs receive half credit.**

Because of the nature of the field setting of most labs, there are not opportunities to make-up labs, I do allow you to borrow data when you have a legitimate excuse, but you must acknowledge where the data came from and a maximum of 4 points is possible. If you miss lab because of illness, I will waive the lab report requirement with proper documentation and reduce the number of lab assignments required.

There will be 9 lab reports worth 10 points each, you will also be evaluated at random (and unknown to you) during the instruction period of the lab twice. Myself and the TAs will be evaluating your participation – participation is worth 10 pts.

Midterms

There are two midterms in this class. Midterms cover topics in lecture and the mensuration book and are on October 3 and November 1. Students are required to be familiar with the contents of the mensuration book. Midterms are open book, open note exams, except for the scientific names portion on midterm I. Each midterm is worth 50 pts.

Final Exam

The Final Exam is an integrated test. You are given a problem and data and are required to solve this problem in about 3 hours. These exams require you to integrate all of the knowledge and skills you have learned during the course and may require use of computers (these are provided). The final exam is worth 110 points.

Field Tests

There are two field quizzes held during the fall term and a final field exam. The two field quizzes are worth 25 pts each and the final field exam is worth 100 pts.

Field Notes

I want you to develop the habit of taking clear, informative field notes. Each lab period you are required to take adequate field notes. The first few labs I'll give you guidance, after that, I expect you to take notes on your own. **Field notes must be taken in your spiral-bound Rite-In-The-Rain Paper notebook.** I will collect them twice during the term (at random after a lab

session) – they will be graded on the basis of completeness and again after the final field exam. 10 pts each collection, 30 pts final collection (50 pts total).

Tree ID Tests

There are 2 tree id tests: indoor twig test; outdoor tree test. Each test is worth 40 points.

Species Report

Each student will be assigned a species on our tree list. You will develop a short report about your species. The report should include an explanation of the meaning of the scientific name and what family the tree belongs to, a brief biography of the naming authority, the tree's habitat (where it grows), its ecological importance, and historical and current uses of the tree species. The report must be typed and include references. Web URLs are acceptable, however, wikipedi sources are not. The report is worth 10 points.

Final Twig Key

Throughout the term we will be coming back to the tree key, modifying it, and developing it as you learn better characteristics for identifying species. You will develop a final key based only on twig characteristics. The final twig key is worth 30 points.

Problem

The Problem report makes up a large part of this course (approximately 16%). There are 2 problem reports this term (a group design report (20 pts) and an individual final report (100 pts)). When you are given the problem statement you will also be given a list of abilities you should address in the problem write-up. Demonstration of these abilities is used to determine a percentage score for each problem. On the website, there is a detailed guide for preparing reports in Forestry 1001. For late problems, 5 points per day are deducted from the final score up to the time I return all on-time problems, after that, no late problems are accepted. Problem reports are an individual effort; however, you will collect data as a group. **Group members who do not participate in the collection and analysis are not entitled to data access (this is at the group's discretion)**. Groups are assigned on Tuesday September 13.

Please note: All tests, field tests and integrated tests must be completed in PENCIL (ink pen is not accepted). For field exams, students are required to provide pencil, Rite-in-the-Rain paper, compass, diameter tape, angle gauge, and calculator. For indoor exams, students are required to provide pencil, compass, ruler, dot grid (I give each student a dot grid on Tuesday September 13th), and calculator. SHARING EQUIPMENT DURING EXAMS IS NOT ALLOWED.

Class Structure

We are going to spend as much time outside as possible. Tuesday 12:30 – 2:00 pm is lecture time, but we might also do some outside activities on campus. On Thursdays, we generally go into the field at 12:30 and return at 5:30. There is a field lecture, then a short break, and then field exercises.

Many labs require preparation prior to going into the field. Please make sure you read the lab requirements prior to departing on the bus.

During the second week, you are assigned to a study group. This group is the people you will work with during first term. They are your lab partners and problem solving partners. During lab time, the grad TA and I work with you and help you develop skills. I float around questioning and challenging you. Be prepared for some interesting (and perhaps rewarding) challenges.

Plagiarism and Cheating

You are in a professional degree program, the professional wildlife biologists association, the professional forestry associations and the professional engineering associations have clear codes of ethics. Therefore, the Faculty of Forestry and Environmental Management expects you to behave as professionals. The Faculty of Forestry and Environmental Management has a firm policy on plagiarism and cheating. In cases that we determine to be deliberate, we recommend the harshest University penalty to the Student Standings and Promotions Committee: A grade of 0 on the work in question and a grade of F in the course. Plagiarism is the use of work other than your own as your own without proper acknowledgement of the contribution others have made. This can occur by copying written material from books and journals in the library, cutting and pasting material from the web, using peoples' reports from previous years or simply copying friends' work in this course.

In Forestry 1001, I encourage you to work to together on labs and on problems you design, collect, analyze data, and write reports together. You often have tables, histograms and graphs of the same results, it is silly and counter-productive for me to expect each of you to make these tables, histograms and graphs independently. I do expect you to acknowledge whom you worked with and in cases were you miss a lab and borrow data, were the data came from. For most labs there are questions requiring you to interpret results and to make comments on methodology etc. Again, while it is ok to discuss these questions with others, you must present your own, original, independent work on these answers.

Any copying from a person during an exam (In-Class Tests, Integrated Tests, Tree ID Tests, or Field Tests) is not tolerated. On your first offense you are dismissed from the exam and given a grade of 0, on your second offense, you are reported to the Assoc. Dean of Forestry and dealt with according to University Calendar procedures. Both the Tree ID and Field Exams require substantial pre-examination set-up, there is a temptation for students to "scout out" the sites prior to the exam, anyone caught on the exam sites prior to examination are considered deliberate cheaters and dealt with accordingly.