INSTRUCTOR  
Dr. Ajay Sharma  
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tel: 850-983-7129; email: ajay.sharma@ufl.edu

TEACHING ASSISTANT  
Justin McKeithen  
Office: Jay Research Facility  
tel: 850-983-7141; cell: 850-776-7009; email: justmck@ufl.edu

OFFICE HOURS: Open door policy, or with appointment.

MEETING TIMES  
Monday 5-8 pm, Room 4814; 3 Saturday field trips

PREREQUISITES  
FNR 3410 C or equivalent

COURSE DESCRIPTION  
Forest mensuration is a 3 cr hour course with lab. It is concerned with direct tree and forest measurements, sampling, and prediction. Direct measurements require the appropriate knowledge and use of instruments used to collect desired data from tree. Forest areas cover vast areas and measuring every forest element is not feasible, thus proper sampling of forest areas is employed to provide the estimate of forest parameters. With direct measurements and proper sampling, prediction of forest parameters can be determined. Forest measurements will examine appropriate methods of direct measurements, sampling and their use in predicting forest parameters.

COURSE OBJECTIVE  
Train students on aspects of principles of forest mensuration and their applications to estimate forestry resources. Some of the topics covered include: individual and stand level volume estimation, natural resources inventories, sampling design, basic statistical principles, and growth and yield models. The attendance and active participation of the lab exercises is a significant component of this course.

REQUIRED TEXT  

SUPPLEMENTAL READING:  
As assigned.

ELECTRONIC COMMUNICATIONS  
Course materials will be available through the Canvas e-learning site. You will find a link for handouts (syllabus, assignments, and supplemental readings) and for most powerpoint presentations. It is the responsibility of the student to print off powerpoint slides in advance of class. On occasion, we will send email to your UF email address regarding updates to the syllabus, clarifications of assignments, or changes in due dates. If you aren’t doing so already, you should be checking your UF email on a regular basis.
EVALUATION AND PERFORMANCE CRITERIA
All exams are closed book and you will need a calculator.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>% of final grade</th>
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<tbody>
<tr>
<td>Homework Assignments</td>
<td>20</td>
</tr>
<tr>
<td>Full lab reports</td>
<td>30</td>
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<tr>
<td>3 exams</td>
<td>50</td>
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<tr>
<td>Total</td>
<td>100</td>
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Letter grades will be assigned as follows: A (93-100), A- (90-92), B+ (86-89), B (83-85), B- (80-82), C+ (76-79), C (73-75), C-(70-72), D+(66-69), D (63-65), D- (60-62), E (<60)

A complete explanation of the UF Grading policies can be found at: [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

Excuses for late work and absences—Assignments submitted electronically by due date (as noted on assignment) are considered on time. After those specified times, late assignments will lose value at a rate of 10% for each subsequent day that it is late (weekend days count too!). In cases of extended illness, family emergencies or other special circumstances, arrangements to turn in late assignments must be made with the professor at least one day prior to the due date. Saturday labs are mandatory and can’t be made up. In the event that a student does not attend a Saturday lab, a 10 page ‘paper’ researching the lab topic will be submitted in place of the Lab ‘Report’. Requirements for class attendance and make-up exams, assignments and other work in this course are consistent with university policies that can be found at: [https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/](https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/)

DESCRIPTION OF ASSIGNMENTS

Homework Assignments
The homework assignments will generally consist of a set of calculations to reinforce the statistical concepts and class activities/mini labs discussed in class. To earn full credit, you must show your work (i.e. write out the equations). Some homework assignments will need to be completed in an Excel spreadsheet. In those cases, you will be required to upload the Excel file into Canvas to the instructor to receive full credit.

Full Lab Reports
The purpose of the extended Saturday lab is to gain experience with the techniques used in resource sampling and to reinforce the methods for analyzing environmental data. For the full lab reports, you will present the results of the lab exercises using standard scientific reporting, including the following sections: Abstract, brief Introduction and Objectives, Methods, Results, and Conclusions. You will receive and should refer to the Report Writing Guidelines and the “Grading rubric” sheet to review the specific criteria needed in each section. Your grade will be based on accuracy of calculations, clarity of text, grammar, and formatting/presentation.
Exams
The exams are intended to evaluate your understanding of the conceptual material, and to demonstrate your critical thinking and problem-solving skills in applying these concepts and techniques under a variety of sampling scenarios. The format of the exam will be a combination of calculations, matching, multiple choice, true/false questions, and short answer (3-4 sentences).

ONLINE COURSE EVALUATION PROCESS
Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

ACADEMIC HONESTY:
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

In addition, plagiarism is taken very seriously at this institution, and can result in a reduced grade, failure of the course, and possible dismissal from the college. Plagiarism includes: 1) the direct use of any written material (including internet sites!!) without proper quotations and citation or 2) the submission of a document, in part or wholly authored by someone other than the student. Please note that we have specific software to determine if your work is plagiarized. It is up to the professor to evaluate the severity of any infraction and to determine the disciplinary action to be taken. The student should also be aware of his/her legal rights as defined in the Student Honor Code.

SPECIAL ACCOMMODATION:
"Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation."

SOFTWARE USE:
All faculty, staff and students of the University of Florida are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal
penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

SERVICES FOR STUDENTS WITH DISABILITIES
The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

CAMPUS HELPING RESOURCES
Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
- Counseling Services
- Groups and Workshops
- Outreach and Consultation
- Self-Help Library
- Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/
- Student Mental Heath, Student Health Care Center, http://shcc.ufl.edu/smhs/, 352-392-1171
- Sexual Assault Recovery Services, Student Health Care Center, http://shcc.ufl.edu/care/, 352-392-1161

STUDENT COMPLAINTS:
- Online Course: http://www.distance.ufl.edu/student-complaint-process
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<tr>
<th>Date</th>
<th>Topics and Activities</th>
<th>Assignment Due</th>
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<tr>
<td>Week 1 (8/27)</td>
<td>Introduction to Forest Mensuration and Principles</td>
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<tr>
<td>Week 2 (9/3)</td>
<td>Labor Day- No Class</td>
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<td>Week 3 (9/10)</td>
<td>Statistics Review and Excel activity</td>
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<td>Week 4 (9/17)</td>
<td>Land Area and Survey Measurements</td>
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<td>Week 5 (9/24)</td>
<td>Measurements of cut trees: volume, cord, weight, log scale</td>
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<td>Sat Lab (9/29)</td>
<td>TBA</td>
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<tr>
<td>Week 6 (10/1)</td>
<td>Measurement of standing trees</td>
<td>Homework 2 Due</td>
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<tr>
<td>Week 7 (10/8)</td>
<td>Volume and weight of standing trees</td>
<td>Exam 1</td>
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<td>Week 8 (10/15)</td>
<td>Sampling design</td>
<td>Lab 1 Report Due</td>
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<td>Sat Lab (10/20)</td>
<td>TBA</td>
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<tr>
<td>Week 9 (10/22)</td>
<td>Forest Inventory</td>
<td>Homework 3 Due</td>
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<td>Week 10 (10/29)</td>
<td>Fixed area sampling</td>
<td>Lab 2 Report Due</td>
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<td>Week 11 (11/5)</td>
<td>Point Sampling</td>
<td>Exam 2</td>
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<td>Sat Lab (11/10)</td>
<td>TBA</td>
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<tr>
<td>Week 12 (11/12)</td>
<td>Veterans Day- No Class</td>
<td>Homework 4 Due</td>
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<tr>
<td>Week 13 (11/19)</td>
<td>Site Stocking and Stand Density</td>
<td>Lab 3 Report Due</td>
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<tr>
<td>Week 14 (11/26)</td>
<td>Tree growth projection and growth and yield models</td>
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<td>Week 15 (12/3)</td>
<td>Review</td>
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<tr>
<td>Week 16 (12/11)</td>
<td>Final Exam</td>
<td>Final Exam (Exam 3)</td>
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