

FOR 322: Forest Mensuration Spring 2021

(3 credits, two asynchronous 1-hour lectures, one 3-hour lab per week– some F2F, others virtual classroom)

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Class Time: **Lecture:** Canvas: Asynchronous (Two lecture hours' worth of material per week)
Lab: *Section 1:* Thursday's 11:00am to 1:50pm TNR 170 when F2F
Section 2: Friday's 11:00am to 1:50pm TNR 170 when F2F

TNR 170- will safely accommodate our lab COVID modified lab size of 12 students – strict room entering and exiting procedures and assigned/mapped seating locations will need to be implemented and enforced. Kindly note students must attend their lab section only.

Final Exam: Online

Office Hours: Wednesdays 1:00-1:50pm; Thursday's 2-2:50pm

Office hours will be held via my Zoom Personal Meeting Room (PMI) – details available in the course Canvas site as a syllabus is a public document and I do wish to protect my PMI connection information from the non-course student public.

Prerequisites: MATH 109 Math. for the Social and Mgmt. Sciences or MATH 111 Appl. Calculus;
FOR 232 Dendro. and Silv.;
FOR 321 Forest Biometry or MATH 355 Elem. Stat. Methods;
CNR major or written consent of instructor

Text: *Forest Measurements* (2019 6th Edition) by Avery, Burkhart and Bullock
(ISBN 1-4786-3618-1)

Learning Outcomes: Students in this course will learn the principles of describing and measuring stand- and urban forest-based forest resources. Upon completion of this course, students will be able to:

- (1.) Use descriptive statistics to quantitatively summarize rural and urban forests/data via means, standard deviations, and confidence intervals.
- (2.) Use the US Public Land Survey and/or map scales and/or compass and pacing and/or GPS to describe tract locations and determine the areas therein.
- (3.) Quantify attributes of trees or logs (diameter, height, length, volume, weight...) found in rural or urban environments with forestry equipment and by using mathematical formulas.
- (4.) Describe forest stands via stand-level attributes (basal area, trees per acre, quadratic mean diameter, site index, ...) and perform related calculations therein.
- (5.) Apply basic sampling designs (simple random sampling, systematic random sampling) and inventory procedures (fixed radius plot and point sampling) when summarizing natural resource inventories for both timber and non-timber resources.

Forestry professionals use these skills and the information gathered via these techniques to provide the information needed for wise stewardship of rural and urban forests or they interact with other natural resource professionals who do. Therefore,

by gaining confidence in these skills, students will be establishing the groundwork for providing interpreting, and understanding the information needed to make a variety of forest management- and/or stewardship-based decisions.

Grading:

There will be two asynchronous exams (each worth 40 POINTS) and a 75 POINT, comprehensive asynchronous final exam over the course of the semester. Exam material will include material discussed in lectures, labs and any assigned readings.

There will be five lecture-based quizzes/homework assignments valued at 15 POINTS each. There will be four laboratory-based assignments valued at 15 POINTS each and one lab report valued at 30 points.

COURSE TOTAL POINTS: 320 points.

Normally, cumulative-weighted percentages will be rounded to the nearest tenth and course grades will be assigned as follows (instructor reserves the right to curve):

91.6% or higher	A	77.6% to 79.5%	C+
89.6% to 91.5%	A-	71.6% to 77.5%	C
87.6% to 89.5%	B+	69.6% to 71.5%	C-
81.6% to 87.5%	B	67.6% to 69.5%	D+
79.6% to 81.5%	B-	61.6% to 67.5%	D
		59.6% to 61.5%	D-
		Less than 59.6%	F

University (Provost) Statement about student accountability in Spring 2021 relative to COVID – 19

The university conducted several surveys of students, faculty, and staff members to gather information on how people experienced the fall semester. We organized a faculty and student workgroup to review this data and make recommendations for improvements in the spring term. We plan to implement many of these suggestions, including:

- Improving communication through consistent Canvas practices
- Asking instructors to provide more frequent check-ins with students regarding course content and workload
- Ensuring that students have ample lead time in knowing assignments, and flexibility when circumstances related to the pandemic make coursework difficult.

Among the biggest challenges both students and faculty identified was connecting with one another while shifting between the online, in-person, and hybrid course formats required by the pandemic. Based on this experience, we want to transition back to a more familiar classroom experience. To achieve this, the workgroup recommended that students participate in class sessions as listed in the timetable, which means at their scheduled times and in their scheduled modalities (in-person, scheduled-time virtual classroom, or online). What does this mean in practice?

- Faculty will still provide flexibility for students who need to be absent from scheduled classes due to illness or because they need to quarantine.
- Students who are living far from campus or do not wish to attend in person because of the pandemic **should contact instructors in advance—as soon as possible—to discuss options**. We will encourage instructors to make virtual/online accommodations; however, this may not be possible for all courses.
- Students needing maximum flexibility should register for 100% online sections, when available.

This change will help to foster a more familiar and consistent learning experience and greater opportunities for students and faculty to work together during what we hope is one final semester of pandemic challenges. Be assured that we will work with you to complete necessary degree requirements that may be impacted by this change. Students should contact their advisors if they need to adjust their schedules.

Indigenous Peoples Lands Recognition

The UW-Stevens Point community recognizes that the University of Wisconsin-Stevens Point occupies the lands of the Ho Chunk and Menomonee people. Please take moments throughout this course to acknowledge and honor this ancestral Ho Chunk and Menomonee land, and the sacred lands of all 14 indigenous peoples.

Course Role in Accreditation

If you are a forestry major you know your degree is accredited by the Society of American Foresters. That body requires that accredited educational programs meet a total of 29 educational competencies. This course specifically contributes to the following competencies:

Forestry Standard:

Mathematics

Students must know and be able to use the basic approaches and applications of mathematics and statistics for analysis and problem solving, as appropriate for the program's stated outcomes.

Measurement of Forest Resources

Students must demonstrate the following competencies:

1. an ability to identify and measure land areas and conduct spatial analysis;
2. an ability to design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement; and
3. an ability to analyze inventory data and project future forest, stand, and tree conditions.

Instructor's tips:

- (1.) Come to class willing to learn and have fun, I certainly plan to do so.
- (2.) Keep up with the readings and the homework/lab assignments.

Instructor's rules:

- (1.) Discussion of homework assignments, and laboratory reports & assignments, between students is encouraged, however all work (unless part of any group projects) **must be done** independently.
- (2.) Cheating and/or plagiarism will not be tolerated (see also the Professionalism Statement)
- (3.) Posting instructor-created course material onto course-sharing websites directly violates the instructor's copyright on his academic materials; permission to post instructor-created material on any such site is unequivocally denied.
- (4.) Smoking or other tobacco use is not permitted during class or labs, including those when we are outdoors.
- (5.) If you plan to miss an exam, you have to let me know ahead of time and explain why you will be unable to take the exam during the scheduled time window. Unexcused absences from exams result in zeroes.
- (5.) Homework and lab assignments are due at their respective due dates/times. This is needed to keep the class moving forward as answers are posted shortly thereafter. Late assignments will receive a score of zero. Lab reports are due at the start of lab on the respective due dates. Late lab reports will be accepted up to one week past the due date, but will be penalized 10% of the points available for every day late.
- (6.) All written/word processed work is expected to be grammatically correct, neat, and well organized. Work that is sloppy, hard to read, does not follow prescribed format, and/or contains many spelling and/or grammatical errors will be graded with a 0.

Students with Disabilities:

The university has a legal responsibility to provide accommodations and program access as mandated by Section 504 and the Americans with Disabilities Act (ADA). The university's philosophy is to not only provide what is mandated, but also convey its genuine concern for one's total well-being. If accommodations are needed, please contact the instructor as well as the Disability Services and Adaptive Technologies Center, 609 Library Resources Center, voice (715) 346-3365 or TDD (715) 346-3362

Attendance Policy

Laboratory work is very important (your crew-mates depend on you and you on them) and every effort should be made to attend labs. Absences from laboratories due to illness, family emergency, or University sponsored activities may be excused provided a written explanation is given to and acknowledged by your instructor prior to the intended absence except for emergencies in which case an explanation should be submitted as soon as practical. If unexcused absences occur on days when laboratory reports/assignments are due, then it is your responsibility to see that laboratory reports/assignments are turned in prior to class on the assigned due date in order to receive credit. If this class has more than one lab/discussion section, switching laboratory sections to make up unexcused missed work or material cannot and will not be allowed.

Skipping, missing or falling behind on lecture materially HABITUALLY almost always results in lower grades! It is imperative you stay on track in this asynchronous online environment.

University of Wisconsin Stevens Point College of Natural Resources-Principles of Professionalism

The College of Natural Resources at the University of Wisconsin – Stevens Point prepares students for success as professionals in many fields. As a professional, there are expectations of attainment of several personal characteristics. These include:

Integrity

Integrity refers to adherence to consistent moral and ethical principles. A person with integrity is honest and treats others fairly.

Collegiality

Collegiality is a cooperative relationship. By being collegial you are respecting our shared commitment to student education through cooperative interaction. This applies to all involved in the process: students, staff, faculty, administration and involved community members. You take collective responsibility for the work performed together, helping the group attain its goals.

Civility

Civility refers to politeness and courtesy in your interactions with others. Being civil requires that you consider the thoughts and conclusions of others and engage in thoughtful, constructive discussion to express your own thoughts and opinions.

Inclusivity

Inclusivity requires you to be aware that perspective and culture will control how communication is understood by others. While many values are shared, some are quite different. These differences in values should be both considered and respected.

Timeliness

Timeliness is the habit of performance of tasks and activities, planned in a way that allows you to meet deadlines. This increases workplace efficiency and demonstrates respect for others' time.

Respect for Property

Respect for property is the appreciation of the economic or personal value an item maintains. Maintaining this respect can both reduce costs (increase the operable life of supplies and equipment) as well as demonstrate respect for others rights.

Communication

Professional norms in communication require that you demonstrate the value of your colleagues, students, professors or others. The use of appropriate tone and vocabulary is expected across all forms of communication, whether that communication takes place face to face, in writing or electronically.

Commitment to Quality

Quality is the ability to meet or exceed expectations. By having a commitment to quality, we intend to provide a learning environment that is conducive to learning. Intrinsic to this commitment to quality is defining expectation (committed to in a syllabus through learning outcomes), implementation (with quality control in place) and assessment (where meeting of learning outcomes is determined).

Commitment to Learning

Learning is a lifelong process. By being committed to learning you are providing a model for all to follow. This model is not only professor to student but involves all combinations of people within our university and broader community

Adherence to this compact is required of the faculty and staff of the College of Natural Resources and of all students enrolled in College of Natural Resources courses.

Forestry Anti-harassment Statement

Introduction

In adopting this statement, the forestry discipline within the College of Natural Resources (CNR), at the University of Wisconsin-Stevens Point (UWSP) has expectations for professional behavior of its students, staff, faculty, and other associated parties. Anyone who has a reasonable belief that they, or another student, staff, faculty or guest, have been the victim of harassment, bullying, or discrimination, or any other violation in the statement herein, are encouraged and expected to report the conduct. See reporting options and guidelines at the end of this document.

The forestry discipline within the College of Natural Resources is committed to creating a safe, inclusive, and professional environment. The forestry discipline operates under the UWSP harassment, discrimination, and retaliation prevention guidelines, copied here:

“The University of Wisconsin-Stevens Point (UWSP) is committed to fostering an environment that is safe, respectful, and inclusive to all and to educate all employees on these important issues. In addition, we are obligated, under Regent policy and federal regulations, to ensure our employees are informed on the issues of unlawful discrimination, harassment, and sexual violence.”

Statement

The forestry discipline, following the lead of the Society of American Foresters which accredits the B.S. forestry degree, believes we all have a responsibility in creating a safe, inclusive, professional environment in all forestry-related activities and events. All forms of discrimination, harassment, and bullying are prohibited. This applies to all participants in all settings (online and in-person) and locations (on- and off-campus) where forestry classes and associated activities are conducted, including student organization events and activities, committee meetings, workshops, conferences, and other work and social functions where employees, volunteers, sponsors, vendors, or guests are present.

Discrimination is prejudicial treatment of individuals or groups of people based on their race, color, creed, religion, age, sex, sexual orientation, gender identity or expression, national origin, ethnicity, ancestry, disability, pregnancy, marital or parental status, veteran status, or any other category protected by law.

Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that creates an intimidating, hostile, or offensive environment. Sexual harassment constitutes discrimination and is illegal under federal, state, and local laws.

Bullying is unwelcome, aggressive behavior involving the use of influence, threat, intimidation, ridicule, hazing or coercion to dominate others in the professional environment. Bullying behavior may go beyond characteristics protected by applicable laws, including but not limited to, political views, dress, or other outward physical appearances.

Other types of harassment include any verbal or physical conduct directed at individuals or groups of people because of their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws, that creates an intimidating, hostile, or offensive environment.

The following list, while not exhaustive, includes examples of unacceptable behavior: slurs, jokes, threats, or derogatory comments relating to the characteristics noted above. Examples of inappropriate physical harassment that violate this statement include, but are not limited to: assault, unwanted touching, or impeding or blocking movement. In addition, no individual may be denied admission to, or participation in or the benefits of, any UWSP-associated events. Similarly, the display or circulation of derogatory or demeaning posters, cards, cartoons, emails, texts, videos, and graffiti which relate to characteristics noted above violate this statement.

Reporting

Students, staff, faculty, or guests associated with Forestry-related programming who experience or witness incidents of harassment are strongly encouraged to report the incident. The Forestry discipline strongly urges the prompt reporting of complaints or concerns so that rapid and constructive action can be taken.

Reporting can be done online or in person, to a faculty or staff member, and/or the UWSP Dean of Students. Anonymous reporting is available.

The UWSP Title IX Website is the home for all information related to harassment and discrimination, including reporting options, student and employee resources, and information about what happens after a report is submitted:

<https://www.uwsp.edu/titleix/Pages/default.aspx>

Preamble

Service to society is the cornerstone of any profession. The profession of forestry serves society by fostering stewardship of the world's forests. Because forests provide valuable resources and perform critical ecological functions, they are vital to the wellbeing of both society and the biosphere.

Members of SAF have a deep and enduring love for the land, and are inspired by the profession's historic traditions, such as Gifford Pinchot's utilitarianism and Aldo Leopold's ecological conscience. In their various roles as practitioners, teachers, researchers, advisers, and administrators, foresters seek to sustain and protect a variety of forest uses and attributes, such as aesthetic values, air and water quality, biodiversity, recreation, timber production, and wildlife habitat.

The purpose of this Code of Ethics is to protect and serve society by inspiring, guiding, and governing members in the conduct of their professional lives. Compliance with the code demonstrates members' respect for the land and their commitment to the long-term management of ecosystems, and ensures just and honorable professional and human relationships, mutual confidence and respect, and competent service to society.

On joining the SAF, members assume a special responsibility to the profession and to society by promising to uphold and abide by the following:

Principles and Pledges

- 1. Foresters have a responsibility to manage land for both current and future generations. We pledge to practice and advocate management that will maintain the long-term capacity of the land to provide the variety of materials, uses, and values desired by landowners and society.**
- 2. Society must respect forest landowners' rights and correspondingly, landowners have a land stewardship responsibility to society. We pledge to practice and advocate forest management in accordance with landowner objectives and professional standards, and to advise landowners of the consequences of deviating from such standards.**
- 3. Sound science is the foundation of the forestry profession. We pledge to strive for continuous improvement of our methods and our personal knowledge and skills; to perform only those services for which we are qualified; and in the biological, physical, and social sciences to use the most appropriate data, methods, and technology.**
- 4. Public policy related to forests must be based on both scientific principles and societal values. We pledge to use our knowledge and skills to help formulate sound forest policies and laws; to challenge and correct untrue statements about forestry; and to foster dialogue among foresters, other professionals, landowners, and the public regarding forest policies.**
- 5. Honest and open communication, coupled with respect for information given in confidence, is essential to good service. We pledge to always present, to the best of our ability, accurate and complete information; to indicate on whose behalf any public statements are made; to fully disclose and resolve any existing or potential conflicts of interest; and to keep proprietary information confidential unless the appropriate person authorizes its disclosure.**
- 6. Professional and civic behavior must be based on honesty, fairness, good will, and respect for the law. We pledge to conduct ourselves in a civil and dignified manner; to respect the needs, contributions, and viewpoints of others; and to give due credit to others for their methods, ideas, or assistance.**

Important information about online course materials and online course endeavors

Instructor Recording and sharing class lectures

If a lecture recording only includes the instructor, the recording is not a student record and not considered protected by FERPA. If a recording includes student interactions (questions, presentations, etc.) and those students are identifiable, the recording would be a protected educational record. The recording could only be made available to the students in that specific class and/or to university officials with legitimate educational interest in that information – a genuine need for access to perform their duties. If the instructor wishes to further share the recording outside of the class, either identifiable students would have to provide written consent to release their participation or portions of the recording would have to be changed or omitted to avoid identifying students. But again, if no students are identifiable in any way (seen, heard or named), the recording would not be FERPA protected. Additionally, recordings that include student interactions are appropriate for posting within Canvas.

Student Recording and Sharing Class Lecture

Sometimes students record lectures or copy lecture materials (including instructor's recordings) and post them outside of class on internet sites or provide them to note sharing companies. These acts can violate intellectual property rights held by the instructor and the university. UW System Board of Regent policy authorizes instructors to limit or restrict students from copying, recording or using instructional materials or lectures unless necessary to reasonably accommodate a student's disability. [[Regent Policy Document 4-1](#)] If an instructor wishes to impose restrictions, the instructor should inform students of the limitations and the potential consequences of being subject to charges of student misconduct. Notification can be made through a syllabus, a lecture, or by other means to ensure awareness

Given the above please note that Lecture/Lab materials and recordings for FOR 425/625 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture/lab is not already recorded, you are not authorized to record lectures/labs without instructor permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Academic misconduct will not be tolerated.

Note the following as per the Univ. of Wisc.-Stevens Point Community Bill of Rights and Responsibilities:

UWSP 14.03 ACADEMIC MISCONDUCT SUBJECT TO DISCIPLINARY ACTION.

(1.) Academic misconduct is an act in which a student:

- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance;

or

(f) Assists other students in any of these acts.

(g) Violates electronic communication policies or standards as agreed upon when logging on initially (See uwsp.edu/it/policy).

(2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

UWSP 14.04 DISCIPLINARY SANCTIONS.

(1) The following are the disciplinary sanctions that may be imposed for academic misconduct in accordance with the procedures of s. UWSP 14.05, 14.06 or 14.07:

- (a) An oral reprimand;
- (b) A written reprimand presented only to the student;
- (c) An assignment to repeat the work, to be graded on its merits;
- (d) A lower or failing grade on the particular assignment or test;
- (e) A lower grade in the course;
- (f) A failing grade in the course;
- (g) Removal of the student from the course in progress;
- (h) A written reprimand to be included in the student's disciplinary file;
- (i) Disciplinary probation; or
- (j) Suspension or expulsion from the university.

(2) One or more of the disciplinary sanctions listed in sub. (1) may be imposed for an incident of academic misconduct.

Required Statement on Emergency Preparedness:

In the event of a medical emergency, call 911 or use red emergency phone located outside Rm151 or 172 on the first floor; 2nd floor between Rms 252 and 255 or between Rms 219 and 221 (on other side of hall); 3rd floor by Rms 320 or 358. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning and on the 3rd floor proceed to the southern hallways on the 1st or 2nd floors, away from the windows. Those are appropriate shelters. TNR 170 is a safe room in the event of a tornado.

In the event of a fire alarm, evacuate the building in a calm manner. Meet at the northwest corner of parking lot E. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Management Plan at www.uwsp.edu/rmgf for details on all emergency response at UW-Stevens Point.

Lecture Outline

Week of	Topic(s)	Readings	Assignment
1/25	Introduction/Units of Measure	Chapters 1, 3	
2/1	Measuring Standing Trees	Chapter 6	
2/8	Measuring Standing Trees/Volume Terminology	Chapters 4, 6	Quiz/Problems
2/15	Log Rules/Scaling Practices	Chapter 4, 5	
2/22	Weight Scaling/Standing Volume and Weight Estimation	Chapter 4, 5, 7	Quiz/Problems
3/1	PAUSE/Sample Size Determination	Chapters 2, 8	Quiz/Problems
3/8	Urban Forest Meas. and Inventory/Test 1		
3/15	Intro. to Forest Inventory	Chapter 9	
3/22	Spring Break		
3/29	Fixed Radius Plot Sampling	Chapter 11	Quiz/Problems
4/5	Variable Radius Plot (VRP) Sampling	Chapter 12	
4/12	Proportions/Stand and Stock Tables/PAUSE	Chapter 14	
4/19	Site Index/Test 2	Chapter 14	
4/26	Growth and Yield/Other Measures	Chapters 15, 16	
5/3	Other Measures	Chapter 17	Quiz/Problems
5/10	Other Measures/Assessment/Course Wrap-up		

Laboratory Outline

Lab of	Topic(s)	Task/Assignment ¹
1/28-29	Course introduction/Canvas walkthrough (Virtual)	
2/4-5	Measuring Diameters and Heights* (F2F) (hh)	
2/11-12	Statistical Review (Virtual)	
2/18-19	Volume/Weight Estimation I* (F2F) (hh)	
2/25-26	Volume/Weight Estimation II* (F2F) (hh)	Worksheet
3/4-5	GPS/GIS* (F2F)	
3/11-12	GPS/GIS* (F2F) (hh)	
3/18-19	PAUSE/Catchup/Review if needed (F2F)	
3/25-26	Spring Break	
3/27	Fixed Radius Plot (FRP) Sampling I* (F2F) (hh)	
4/1-2	Fixed Radius Plot (FRP) Sampling II* (F2F) (hh)	Worksheet
4/8-9	Variable Radius Plot (VRP) Sampling* (F2F) (hh)	Lab Report
4/15-16	Stratified Sampling (Virtual)	
4/22-23	Growth Measures* (F2F) (hh)	Worksheet
4/29-30	PAUSE/Catchup/Review if needed (Virtual)	
5/6-7	Growth and Yield Modeling (Virtual)	Worksheet
5/13-14	Left open for spillover topics or inclement weather makeups	

Note: Labs marked with asterisks indicate some, or all, of that lab will be outdoors. For such labs, you are expected to dress appropriately for the weather/conditions so that you will be comfortable while working in the field. Be prepared for mosquito activity in late Spring. Watch the weather forecast and be prepared for cold, rain, and snow. A warm hat, gloves, and layered clothing are important for cold weather. Rain gear is important for rainy weather. You are *strongly encouraged* to wear field shoes/boots of some kind for all outdoor labs. As forestry professionals, safety should always be on our minds. Therefore, hardhats (hh) should be worn for the labs as noted...

¹Any task/assignment is listed in the week it will be assigned. Due dates will be provided at the time the task/assignment is handed out or announced.

Forestry Basic Skills Exam Topical Areas

FOR 322 is one of the classes that compose the knowledge base tested as part of the Forestry Basic Skills exam (the junior-level exam and the FOR 449 course). Therefore, many students enrolled in this class take these exams. Basic skills from FOR 322 covered on these exams focus on one's ability to correctly:

- (1.) apply both fixed radius plot sampling and variable radius plot sampling (point sampling) concepts, respectively, and analyze inventory data therein,
- (2.) identify/use/define terminology commonly used in forest measurements,
- (3.) identify/describe/employ measures of site index.
- (4.) apply 1-inch and 2-inch DBH classes and 10-foot height classes,
- (5.) describe proper use of common forestry equipment (diameter tape, prism, hypsometers, Biltmore stick)
- (6.) determine cubic foot volume of logs,
- (7.) describe, use and convert measures of volume, weight, length, and area,
- (8.) describe or compare stem form/taper via Girard form class, and
- (9.) identify merchantability standards for hardwood and softwood sawtimber and pulpwood.

Additionally skills utilized in FOR 322 and also covered in the Basic Skills exam include correctly: using map scales to determine distances or areas, identifying features as found on air photos and/or topographic maps, converting between azimuths and bearings, and determining foresights from backsights (or vice versa).