

FOR 425: Forest Management and Finance Fall 2023

(3 credits: two hours asynchronous online lectures and one two-hour F2F lab per week)

INSTRUCTOR: Dr. Melinda Vokoun **OFFICE:** TNR 376
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Class Time: Lecture: Asynchronous online (complete prior to the week's lab) via Canvas
Lab 1: Wed 12:00 pm – 1:50 pm TNR 359
Lab 2: Wed 2:00 pm – 3:50 pm TNR 359

Final Exam: Will occur on Canvas during finals week.

Student Hours: Monday 1 – 2 pm and Wednesday 10 am - 11 am in person or via Zoom (link available in Canvas course page). If you have a question and these hours do not work for you, either stop by my office or ask for an appointment by sending me an email with some days/times that you have available.

Prerequisites: FOR 322 (or concurrent registration) and FOR 432 (or concurrent registration), CNR major, or Instructor Consent

Text: Bettinger, P., K. Boston, J.P. Siry, and D. L. Grebner. 2017. Forest Management and Planning. 2nd ed. Academic Press, Massachusetts. 349 p.

Other References:

Klemperer, D.W, Bullard, S.H., Grado, S.C., Measells, M.K, and T. J. Straka. 2022. Forest Resource Economics and Finance, 2nd ed. Stephen F. Austin State University. 617 p.

Davis, L.S., K.N. Johnson, P.S. Bettinger and T. E. Howard. 2001. Forest Management. 4th ed. McGraw-Hill Inc., New York. 804p.

Article list distributed in class.

Course Learning Outcomes: Students in this course will learn the principles of forest finance, forest management decisions, rotation determination and forest regulation. In class examples and assigned problems will be taken from all forestry options (ecosystem restoration and management, forest management, forest recreation, and urban forestry). Upon successful completion of this course, students will be able to:

- 1) Use discounted cash flow analysis techniques (NPV, IRR, etc.) to evaluate forestry-related investments and activities.
- 2) Estimate the monetary value of forestland.
- 3) Evaluate the impact of inflation and taxation on investments and activities.
- 4) Develop and evaluate management plans relative to landowner objectives.
- 5) Prepare written correspondence that is professional and informative.

Forestry professionals use these skills and the information gathered via these techniques to inform or make forest management decisions. Therefore, by gaining confidence in these skills, students will be establishing groundwork for making or informing forest management, investment, and/or stewardship-

based decisions throughout their careers. As a side note, many of the financial concepts are also useful in your personal lives, now and into the future, making this a life-skills style course as well.

Forestry Core: This course is part of the Forestry Core Curriculum. All forestry concentrations include the Forestry Core Curriculum and are accredited by the Society of American Foresters (SAF). Students in this course will fulfill all, or part of, the following SAF curriculum competencies under the Forestry Standard:

C. Forest Resource Policy, Economics and Administration

C4-C.1. Knowledge of the processes by which forest policy is developed and enacted.

C4-C.3. Knowledge of federal, state, and local laws and regulations and how they impact the practice of forest resource management.

C4-C.4. Knowledge of various certification systems that assess sustainable forest management practices and how they impact practices and output availability.

C4-C.5. Knowledge of the structures, management principles and business operations of enterprises in the public and private sectors and how they influence forest management.

C4-C.6. An understanding of the valuation procedures, including market and nonmarket forces, that play a role in forest management decisions.

C4-C.7. An ability to synthesize product utilization and pricing, management costs, financial discounting and land and timber valuation in the context of a management plan or evaluation of competing management alternatives or strategies.

D. Silviculture and Forest Management

C4-D.6. An ability to analyze existing data to predict the economic, environmental, and social consequences of forest resource management strategies and decisions.

C4-D.7. An ability to develop forest management plans with specific multiple objectives and constraints.

C4-D.8. An ability to explain the range of feasible alternatives and defend, orally and in writing, the recommended management actions.

Grading: This class consists of 250 total points. There will be:

Ten-point assignments: Note: one's lowest 10-point assignment score will be dropped when determining final grades if it does not lower your course percentage.

- Lecture-based quizzes/activities: 4 assignments
- Lab problems/tasks/assignments: 8 assignments
- Forest management article review: 2 assignments

Other assignments/graded items:

- Business memo: 15 points
- Project: 30 points
- Attendance and professionalism: 25 points
- Final exam: 50 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): 100-91.6 = A, 91.5-89.6 = A-, 89.5-87.6 = B+, 87.5-81.6 = B, 81.5-79.6 = B-, 79.5-77.6 = C+, 77.5-71.6 = C, 71.5-69.6 = C-, 69.5-67.6 = D+, 67.5-59.6 = D, <59.6 = F

Instructor's tips:

- (1) Come to class willing to learn and have fun. Yes, forest management and finance can be fun!
- (2) Keep up with the readings and the assignments.

Instructor's rules:

- (1) Discussion of course material and assignments between students is encouraged, however all work **must be done independently**, unless part of any group projects.
- (2) Cheating and/or plagiarism will not be tolerated, see Professionalism Statement and <https://www.uwsp.edu/dos/Documents/UWSP14-Final2019.pdf>
- (3) Posting instructor-created course material onto course-sharing websites and providing or selling personal notes to anyone else or being paid for notetaking by any person or firm directly violates the instructor's copyright on their academic materials. Permission to post instructor-created material is unequivocally denied.
- (4) UWSP is a tobacco free campus. If we are meeting on campus, smoking or other tobacco use is not permitted during labs, including any of those for which we are outdoors.
- (5) If you know you will miss a scheduled lab or exam for an excusable reason, you must let me know ahead of time and explain why you will be unable to complete the lab work or take the exam at the scheduled time. Unexcused absences from labs or exams without prior notification will result in a zero.
- (6) Assignments are due at the stated times on the respective due dates. Late assignments will receive a score of zero.
- (7) All written or word-processed work is expected to be grammatically correct, neat, and well organized. Lab assignments should be completed on something other than the handout sheets. Work that is sloppy, hard to read, does not follow prescribed format, and/or contains many spelling and/or grammatical errors will receive a zero.

Attendance Policy: Lectures will be asynchronous online – you are expected to view them as outlined and complete any associated tasks in a timely manner and by any deadlines provided. Laboratory sessions are very important. You will learn concepts in lectures and put them into practice in labs where you will also learn, review and gain practice with applications of course material. Absences from lab, inability to view lectures and/or complete tasks due to illness, family emergency, or University sponsored activities will be excused provided a written explanation, provided by the students, is given to and acknowledged by the instructor prior to the intended absence, except for emergencies, in which case explanation should be submitted as soon as practical. If you are feeling ill, please do stay away from our F2F meetings out of respect to others, just let your instructor know in advance, if possible. If any absence of any kind occurs on days when assignments are due, it is your responsibility to see that the assignment is turned in by assigned due date/time to receive credit. Habitually missing classes and not viewing/studying online materials almost always results in lower grades! You are strongly encouraged to attend all class meetings, view, and study all class material.

Accessibility Statement: Any student who needs an academic accommodation due to the impact of a disabling condition (including ADHD, learning disabilities, psychological and/or medical conditions, or temporary injury) should contact the Disability Resource Center (DRC) at 715-346-3365, drc@uwsp.edu, or www.uwsp.edu/drc to determine reasonable accommodations. The DRC supports students and faculty in the notification and implementation of those accommodations, in accordance with the University's obligations under federal law and Board of Regents policy (see <https://www.uwsp.edu/darc/Pages/law-regent-policy.aspx>). Students can seek accommodation in a course at any time but are advised to do so early in the semester to ensure sufficient time to establish.

Know/remember that this course takes place on and at the University of Wisconsin-Stevens Point, which occupies lands of the Ho-Chunk and Menominee people. Please take a moment to acknowledge and honor the ancestral Ho-Chunk and Menominee land and the sacred land of all indigenous peoples.

Emergency procedures:

In the event of a medical emergency, call 911 or use the red emergency phone located by room 358. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure at second floor interior hallway near stairs.

In the event of a fire alarm, evacuate the building in a calm manner (going west). Meet on the west lawn near the Pointer dog sculpture. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escapes, 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 for details on all emergency response at UW-Stevens Point at <https://www3.uwsp.edu/emergency/Pages/emergency-procedures.aspx>

Inclusivity Statement

Your instructor, as a member of 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 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>

Professionalism Statement: Students in the College of Natural Resources are pursuing courses of study that prepare them for careers as natural resources professionals. Thus, CNR students and faculty/staff are expected to exhibit conduct and attitudes appropriate to professionals. Conduct and attitudes appropriate for professionals include, but are not restricted to:

1. The UWSP Conduct Policies and Process available via: <https://www3.uwsp.edu/dos/Pages/handbook.aspx>
2. Attitudes appropriate for resource professionals of the 21st Century:
 - a. Respect for others and for their ideas;
 - b. Appreciation for ethnic and gender diversity in the workplace;
 - c. Sensitivity to environmental quality;
 - d. Adherence to professional ethics, e.g. the Society of American Foresters Code of Ethics and other professional organization's codes of ethics.

Therefore, academic misconduct will not be tolerated.

Note the following as per the appropriate University Conduct Policies and Processes:

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.

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.

Society of American Foresters (SAF) Code of Ethics

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.**

Adopted by SAF by Member Referendum, November 3, 2000, replacing the code adopted June 23, 1976, as amended November 4, 1986, and November 2, 1992. The 1976 code replaced the code adopted November 12, 1948, as amended December 4, 1971.

Course Topical Outline

Lab day (Week)	Topic(s)	Readings
Sept 6 (1)	Course Introduction/Value and Payments (L)	Ch. 1, Ch. 2 Pgs. 34-48
Sept 13 (2)	Value and Payment Calculations (L)	Ch. 2 Pgs. 34-48, 51
Sept 20 (3)	Financial Markets/Investing (*)	
Sept 27 (4)	Capital Budgeting/Inflation (L)	
Oct 4 (5)	Inflation/Taxation (L)	Ch. 2 Pg 52-53
Oct 11 (6) ^a	Taxation/Risk (*)	Ch. 2 Pg 52-53
Oct 18 (7)	Risk/Forest Valuation (L)	Ch. 2 Pg 49; Ch. 5 Pgs. 113-122
Oct 25 (8) ^a	Forest Valuation/Rotation and Stock Determination (*)	Ch. 4; Ch. 5 Pgs. 113-122
Nov 1 (9)	Rotation and Stock Determination/Forest Growth and Yield Models (L)	Ch. 4; Ch. 5 Pgs. 113-122
Nov 8 (10)	Project Time! (P)	
Nov 15 (11)	Project Time!	
Nov 22 (12)	Dynamic Programming/Certification Systems/Projects (*)	Ch. 5 Pgs. 124-137; Ch. 15
Nov 29 (13)	Linear Programming (L) (M)	Ch. 7 & 12
Dec 6 (14)	Class Projects/Topical Spillover	
Dec 13 (15)	Forest Policy/Ethics (L)	Appendix C
Dec 18 (16)	Final – online via Canvas	

^a Dr. V will be gone on SAF related business these Wednesdays, expect a recorded lab and/or alternative assignment along with lecture-based quiz. We will not meet in person on Oct 11 and Oct 25.

Topics marked with an (*) will have a lecture based (aka Canvas) quiz or Canvas submitted task to complete that week.

Topics marked with an (L) for a given week will have a lab assignment that will be distributed in lab that week.

Topics marked with an (M) will have a memo assignment that will go out that week, and those with a (P) will have directions for the class project distributed that week.