FOR 425: Forest Management and Finance Spring 2020 (3 credits, two 1-hour lectures, one 110-minute lab per week)

INSTRUCTOR: Dr. Paul Doruska

OFFICE: TNR 239) **PHONE**: 715-346-3988

EMAIL: pdoruska@uwsp.edu (or through Canvas)

Class Time: Lectures: Monday 5:00–5:50pm & 6-6:50pm TNR 352

Lab: Wednesday 9:00-10:50am TNR 352

Final Exam Slot: Friday May 15, 2020 12:30-2:30pm TNR 352

Office Hours: Tuesdays 2:00-2:50pm; Wednesdays 11:00-11:50am

I am generally available to answer quick questions anytime I am in my office and the door is ajar. Larger, more time-consuming questions require meeting during office hours or an appointment. Questions can be posed via Canvas as well.

Prerequisites: FOR 322 or concurrent registration, FOR 432 or concurrent registration;

CNR major or written consent of instructor

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: Davis, L.S., K.N. Johnson. P.S. Bettinger, and T.E. Howard. 2001. Forest

Management. 4th Ed. McGraw-Hill Inc. New York. 804p.

Klemperer. D.W. 1996. Forest Resource Economics and Finance, McGraw Hill, Inc.

New York. 551 p.

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 investments.
- (2.) Estimate the monetary value of forestland.
- (3.) Evaluate the impact on inflation and taxation on investments.
- (4.) Determine rotation lengths that meet 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 the 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.

Education Competencies are addressed and achieved (in part or in whole) in this course

Forestry Standard:

- C. Management of Forest Resources
- 2. an ability to analyze the economic, environmental, and social consequences of forest resource management strategies and decisions;
- 3. an ability to develop management plans with specific multiple objectives and constraints;
- 4. an understanding of the valuation procedures, market forces, processing systems, transportation and harvesting activities that translate human demands for timber-based and other consumable forest products into the availability of those products;
- 5. an understanding of the valuation procedures, market, and non-market forces that avail humans the opportunities to enjoy non-consumptive products and services of forests; and
- 6. an understanding of the administration, ownership, and organization of forest management enterprises.
- D. Forest Resource Policy, Economics, and Administration
- 1. an understanding of forest policy and the processes by which it is developed;
- 2. knowledge of how federal, state, and local laws and regulations govern the practice of forest resource management;
- 3. an understanding of professional ethics, including the SAF Code, and recognition of the responsibility to adhere to ethical standards in decision making on behalf of clients and the public; and
- 4. an understanding of the technical, financial, human resources, and legal aspects of public and private enterprises.

Urban Forestry Standard

- C. Management of Urban Forests and Trees in an Urban Environment:
- 2. an ability to analyze the economic, environmental, and social consequences of urban forest management strategies and decisions, and
- 3. an ability to develop management plans with specific multiple objectives and constraints.

Grading:

There will be three written exams (each worth 35 POINTS) and a 60 POINT, final exam component (covering key points) over the course of the semester. Exam material will include material discussed in lectures, labs and any assigned readings.

There will be problem/task assignments, business memos and a book chapter oral/written report assigned. These assignments will total 105 POINTS.

There will be a group project/presentation worth 40 POINTS.

Attendance and Professionalism are worth 40 POINTS.

COURSE TOTAL POINTS: 350 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	Α	77.6% to 79.5%	C+
89.6% to 91.5%	A-	71.6% to 77.5%	С
87.6% to 89.5%	B+	69.6% to 71.5%	C-
81.6% to 87.5%	В	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

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 assignments.

Instructor's rules:

- (1.) Discussion of 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.) We are on a tobacco free campus. Smoking or other tobacco use is not permitted during class or labs, including any of those for which we are outdoors.
- (5.) If you know you will miss a scheduled exam for an excusable reason, you have to let me know ahead of time and explain why you will be unable to take the exam at the scheduled time. Unexcused absences from exams result in zeroes.
- (5.) Assignments are due at the start of class/lab on the respective due dates. Late assignments will receive a score of zero.
- (6.) All written 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

Inclusive Environment:

This course (and our university!) is an <u>inclusive environment</u>. This course might foster discussion, with respectful exchange of ideas and opinions. Disrespect and disparagement will not be tolerated. We have a great opportunity to learn from each other, and to appreciate and understand our differences. See also the CNR Principles of Professionalism.

Attendance and Professionalism Policy

Every effort should be made to attend lectures and labs. Attending a lab section other than your registered section will not be allowed unless approved by the instructor. Absences due to illness, family emergency, or University sponsored activities may be excused provided a written explanation from the student 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 assignments are due, then it is your responsibility to see that the assignment is turned in prior to class/lab 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 will not be allowed.

Missing lecture class HABITUALLY almost always results in lower grades! You are expected to attend (unless an absence is excused by the instructor) and act professionally in all scheduled lectures and laboratories. Professionalism includes adhering to the UW-Stevens Point student conduct code and the CNR Principles of Professionalism. Cell phone use during lecture/lab for non-class-related activities is distracting to your fellow classmates and your instructor and is unprofessional. The instructor reserves the right to have a student exit and not return to a given class/lab for non-course related cell phone use.

Please note there are 40 points of the course's total points reserved for attendance and professionalism. That equates to more than one full letter grade. Points will be lost for unprofessional behavior and for non-excused absences. All instances of unprofessional behavior will be reported to the Dean of Students office.

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.

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.
- 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.

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;
- (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
 - (i) 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 an emergency phone located outside Rm 151 or 172 on the TNR first floor; TNR 2nd floor between Rms 252 and 255 or between Rms 219 and 221 (on other side of hall); or TNR 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, stay in TNR Rm 240 if that is where you are when the warning occurs; it is an appropriate shelter. If on the 3^{rd} or 4^{th} floor, proceed to the southern hallways on the 1^{st} or 2^{nd} floors, away from the windows. Those are appropriate shelters.

In the event of a fire alarm, evacuate the building in a calm manner. Meet at the northwest corner of parking lot E if exiting the TNR building. 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/rmgt for details on all emergency response at UW-Stevens Point."

Course Topical Outline

Week of	Topic(s)	Readings
1/21	Introduction/Pre-Course Assessment/Value and Payments	Ch. 1, Ch. 2 Pgs 34-48
1/27	Value and Payment Calculations/Financial Markets	Ch. 2 Pgs 34-48, 51;
2/3	Financial Statements/Exam	
2/10	Capital Budgeting/Inflation	
2/17	TBD	
2/24	Inflation/Taxation/Risk	Ch. 2 Pg 52-53
3/2	Risk/Forest Valuation	Ch 2 Pg 49; Ch. 5 Pg 113-122
3/9	Forest Valuation/ Rotation and Stocking Determination	Ch 4; Ch. 5 Pg. 113- 122
3/16	Spring Break	
3/23	TBD/Exam	
3/30	Rotation and Stocking Determination	Ch. 5 Pg. 113-122
4/6	Forest Regulation and Allowable Cut/Putting it all together	Ch. 10 & 11
4/13	Putting it all together	Ch. 12 & 15
4/20	Exam/Strategic Planning	Ch. 7 & 13
4/27	Strategic Planning/Projects	Ch. 7 &13
5/4	Projects and Course Wrap up	
5/15	Final Exam timeslot at 12:30pm	

Note, exam days are tentative and are subject to change