

FOR 332/532 Forest Ecosystem Ecology

Fall 2022

Note: This syllabus, course assignments, and due dates are subject to change. It is the student's responsibility to check Canvas for updates. Any changes will be clearly noted in a course announcement or through email.

This class has a meeting time of M, W, F 12:00-1:50

On M, W we meet in TNR 120

On F we meet at field site in Schmeckle Reserve

INSTRUCTORS:

Sophie Demchik

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Office hours: TNR 375 by appointment

Michael Tiller

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Office hours: Wednesday's 1:30-3:30, TNR 367

REQUIRED TEXT: Forest Ecology, 4th edit. 1998. by Burton V. Barnes et al.

COURSE LEARNING OBJECTIVES:

The overall objective for the course is to provide a broad ecological understanding of forest structure, function, and dynamics. Upon successful completion of this course, you will be able to:

- 1) explain important interactions among organisms and plants;
- 2) understand the influence of site on forest community structure and composition
- 3) explain how nutrient availability, climate and other factors influence patterns of vegetation
- 4) describe and discuss community structure, diversity, and dynamics;
- 5) explain factors that influence succession and community response to disturbance;
- 6) describe and explain landscape structure, and its relevance to resource management;
- 7) understand the linkages between carbon cycles in forests and global carbon cycles;
- 8) explain the influence of climate change on forest ecosystems as well as strategies for mitigating and adapting to climate change.

The course focus is the temperate zone and on ecological principles that provide the foundation for resource management.

CONDUCT: An environment of respect and cooperation is expected during this class. Comments, questions and discussions are encouraged, but disruptive behavior will not be tolerated. Electronic devices are not allowed (unless I specifically state otherwise).

ACADEMIC INTEGRITY: Academic dishonesty in any form will not be tolerated. You will adhere to the Student Academic Standards outlined in Chapter UWS 14 of the Wisconsin Administrative Code (<http://www.uwsp.edu/dos/Documents/CommunityRights.pdf>). Cheating or plagiarism related to any of the course assessments will result in a score of zero for that assessment.

COVID-19 AND OTHER PRECAUTIONS: We will follow university guidance (which includes CDC guidance) regarding COVID-19, monkeypox, and other health-related issues. Please reference the [UWSP's website related to COVID](#). The [CDC website](#) provides guidance on isolation and precautions related to COVID. As needed, we will announce policy changes that affect you in this class. It is expected that everyone will respect the needs and preferences of classmates and instructors.

SEMESTER DROP/ADD DATES <https://www3.uwsp.edu/regrec/Pages/calendars.aspx>

SEMESTER ACADEMIC CALENDAR <https://www3.uwsp.edu/regrec/Pages/calendars.aspx>

GRADING:

Assessment	Points
Lecture exams (3 @20 pts each)	60
Site assessment exercises (10 @ 2.5 pts each)	25
Final site assessment assignment	15
	100

Grading scale

Percent and corresponding letter grade

≥93	A
87-92	A-
81-86	B
74-80	B-
67-73	C
61-66	C-
55-60	D
<54	F

FOR 332 TENTATIVE SCHEDULE 2022

Week	Date	Topic	Readings
1	Sept 7-9	Course introduction, ecology definitions; introduce site assessment assignment	Chapter 1
2	Sept 12-14	Physiography	Chapter 10:224-233
	Sept 16	<i>Site assessment part 1 Know your site</i>	
3	Sept 19-21	Light; temperature	Chapters 8 and 9
	Sept 23	<i>Site assessment part 2 Habitat type your site</i>	
4	Sept 26-28	Soil; tree structure and growth	Chapter 11 Chapter 6
	Sept 30	<i>Site assessment part 3 Invasive species survey</i>	
5	Oct 3-5	Regeneration ecology; invasives	Chapter 5
	Oct 7	<i>Site assessment part 4 Overstory and understory vegetation survey</i>	
6	Oct 10-12	Community interactions and competition	Chapter 4 Chapter 15
	Oct 14	<i>Site assessment part 5 Bird/animal survey</i>	
7	Oct 17-19	Northern and southern forests of WI Lecture exam 1 due Oct 21	
	Oct 21	<i>Site assessment part 6 Basal area/CWD</i>	
8	Oct 24-26	Climate; hydrologic cycle	Chapter 7
	Oct 28	<i>Site assessment part 7 Vertical and horizontal structure</i>	
9	Oct 31-Nov 2	Landscape ecology; physiographic diversity	Chapter 21 Chapter 10: 234-248
	Nov 4	<i>Site assessment part 8 Water resources survey</i>	
10	Nov 7-9	Disturbance ecology; fire	Chapters 12 and 16
	Nov 11	<i>Site assessment part 9 Web Soil Survey</i>	
11	Nov 14-16	Forest Succession	Chapter 17
	Nov 18	<i>Site assessment part 10 Summarize your site</i>	
12	Nov 21-23	Forest wildlife; diversity	Chapters 14 and 20
	Nov 24-25	THANKSGIVING BREAK	
13	Nov 28-30	Site quality; nutrient cycling	Chapters 13 and 19
	Dec 2	Site assessment final document due Dec 2	
14	Dec 5-7	Carbon balance; climate change Lecture exam 2 due Dec 9	Chapter 18
	Dec 9		
15	Dec 12	Review Sophie / Review Michael	
16	Dec 19	FINAL EXAM WEEK 12/20/2022, Tuesday 2:45PM - 4:45PM	

Adherence to the following code of conduct is required of the faculty and staff of the College of Natural Resources and of all students enrolled in the College of Natural Resources courses.

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