

**NRES 250: INTRODUCTION TO FISHERIES, FORESTRY AND WILDLIFE RESOURCES
SPRING SEMESTER 2024 SYLLABUS**

<u>Lecturers:</u>	<u>Office</u>	<u>Phone</u>	<u>Office Hours</u>
Dr. Justin VanDeHey (JV)	TNR 178	715-346-2090	12 – 1 Mon. and 10 – 11 Wed.
Dr. Shelli Dubay (SD)	TNR 325	715-346-4178	12 – 1 Tues. and Fri.
Dr. Paul Doruska (PD)	TNR 239	715-346-3988	12 – 1 Mon. and 11 – 12 Thurs.

Overall Objectives: This course will introduce students to management practices used to achieve management objectives for fisheries, forestry and wildlife resources. Specifically, the course provides students with skills to:

- 1) Identify the prevailing views toward, and conditions of, the North American fisheries, forestry and wildlife resources from pre-European settlement times to the present,
- 2) Identify key policies and legislation that has guided the management of the resources over time in addition to the reasons for their implementation,
- 3) Describe and/or apply sampling techniques when estimating fisheries, forestry or wildlife attributes,
- 4) Define the term sustainability and identify management techniques that lead to sustainability of fisheries, forestry, and wildlife resources, and
- 5) Evaluate the inter-related nature of managing fisheries, forestry, and wildlife resources identifying synergies and divergences therein.

Forestry Objectives: At the end of the course, students should be able to 1) Describe economically, socially, and environmentally sound and science-based forestry practices used to meet landowner objectives, including those related to fisheries and wildlife; 2) Select appropriate stand regeneration techniques (intermediate stand management, harvesting options for both even-aged and uneven aged stands, as well as mixed and pure stands) and relate how they can be used; 3) Identify the different forested regions of North America, predominant species present in those regions, describe common tree silvics characteristics; 4) Identify laws, policies, and market place approaches used to solve conservation, preservation, and sustainable questions; and 5) Compare and contrast the role, and management, of individual trees in urban forests and rural forests.

Fish and Wildlife Objectives: At the end of the course, students should be able to 1) Describe public attitudes and ethics involved with fish and wildlife management today, 2) Identify techniques used to sample fish and wildlife, 3) Describe the role of recruitment/natality, mortality, and growth in regulating fish and wildlife populations, 4) Describe techniques used to determine the age, sex, and growth rate of fish and wildlife species, 5) Identify techniques used to evaluate, manage, and improve habitat for wildlife and fish species, 6) Identify the various types of harvest regulations used to manage fish and wildlife populations, 7) Identify causes of fish and wildlife population decline and describe measures used to protect endangered populations.

Attendance: Attending lectures is your responsibility, and as a professional and responsible student, you are expected to attend class and familiarize yourselves with all material covered in class. You will not do well in the class if you do attend lectures and miss lab meetings. Please let Dr. VanDeHey, coordinator of this class and/or your lab instructor know *as soon as possible* regarding an unavoidable absence from class. If you are unable to take an exam because of a university-sponsored event, you must contact the instructor(s) at least 3 days before the event to arrange an alternative test time. If you miss an exam because of an emergency (health problem or family crisis), you are responsible for contacting Dr. VanDeHey or your lab instructor *as soon as possible* and arrange a make-up exam immediately. Make-up exams are not available for exams missed for reasons other than emergencies or university-sponsored events.

Logistics: Lectures: 11:00 to 11:50 on Monday, Wednesday, and Friday in TNR 170
Lectures are delivered by Drs. Doruska (PD), Dubay (SD), and VanDeHey (JV). Initials by the title of each lecture (which appear later in this document) indicate the professor that will be lecturing on that topic. If you have questions about a specific lecture, contact the lecturer who covered that specific material.

Labs: Meeting times are below and all will meet in TNR 157 unless online or a different location is specified by your lab instructor.

Section 1: Monday 8:00-9:50 – Dr. Melinda Vokoun (TNR 376; 715-346-2342; mvokoun@uwsp.edu)

Section 5(H): Monday 13:00-14:50 – Dr. Shelli Dubay (TNR 325; 715-346-4178; sdubay@uwsp.edu)

Section 8: Monday 15:00-16:50 –Mrs. Jessica Tomaszewski (TNR 180B; 715-346-2536; jtomasze@uwsp.edu)

Section 6: Tuesday 13:00-14:50 – Dr. Mike Tiller (TNR 367; 346-2153; mtiller@uwsp.edu)

Section 7: Wednesday 13:00-14:50 – Ms. Emilia Skogen (eskog157@uwsp.edu)

Section 4: Thursday 12:00-13:50 – Mr. Kevin Winston (kwins967@uwsp.edu)

Section 2: Wednesday 8:00–9:50 – Mr. Kevin Winston (kwins967@uwsp.edu)

Section 3: Thursday 8:00-9:50 – Mr. Jeff Lim (TNR 362B; jlim@uwsp.edu)

Note, you are expected to attend only your scheduled lab section. Attending another section is not permissible except for (i.) pre-approved extenuating circumstances or (ii.) health problem or family crisis. Permissions must be granted by your lab instructor and the instructor’s whose lab you are trying to attend. See the attendance policy above for valid extenuating circumstances.

Canvas: This course will use the Canvas site to provide lecture materials. Use of Canvas in labs will be at the sole discretion of your lab instructor and level of use can vary from lab instructor to lab instructor.

Course Canvas site: <https://uwstp.instructure.com/courses/653838>

Readings: Readings will be assigned from the course texts (below) as well as from notes and other materials referenced from time to time in lecture. **Exams can include questions from reading assignments.**

Willis, D. W, C. G. Scalet and L. D. Flake. 2009. Introduction to wildlife and fisheries: An integrated approach. W. H. Freeman and Company, New York, New York, USA. **WS&F**

Young, R. A., and R. L. Giese, editors. 2003. Introduction to forest science. 3rd edition. John Wiley and Sons, New York, New York, USA. **Y&G**

Grading: The lecture component comprises 60% of your course grade and is based on three non-cumulative and equally weighted lecture exams that each contribute 20% toward your final grade. The remaining 40% of your grade results from the laboratory portion. The laboratory component consists of two lab exams, one scientific report, and various other assignments and lab quizzes.

Your final grade for the course will be assigned based on the final percentage of total points you earned.

Categories are as follows:

A	92.6–100%	B+	86.6–89.5%	C+	76.6–79.5%	D+	66.6–69.5%
A–	89.6–92.5%	B	82.6–86.5%	C	72.6–76.5%	D	59.6–66.5%
		B–	79.6–82.5%	C–	69.6–72.5%	F	0–59.5%

Instructors reserve the right to adjust final course grade categories (*only* to your benefit) at semester’s end. Direct questions regarding your course grade to Dr. VanDeHey, the coordinator for NRES 250 this semester.

Students with Disabilities: The University has a legal responsibility to provide accommodations and program access as legislated 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 lead instructor (Dr. VanDeHey for this course) as well as the Disability Resource Center (DRC), 108 Collins Classroom Center, voice (715) 346-3365; email: drc@uwsp.edu

LECTURE AND LAB SEQUENCE

WEEK 1: January 22–26, 2024

Lec: Course Introduction and History of wildlife management (SD)
Lec: History of fisheries management (JV)
Lec: Rectangular Land Survey (PD)
Lab: No Scheduled Lab First Week

Reading Assignments

WS&F 1.4, 1.5
WS&F 1.3 – 1.5, 1.8, 17.2, 17.3
Y&G pp. 245-248

WEEK 2: January 29–February 2, 2024

Lec: History, importance, legislation of forest management (PD)
Lec: Sampling fish and wildlife (JV)
Lec: Importance of fisheries and wildlife management (SD)
Lab: Rectangular Land Survey and Map Reading

Y&G Ch. 1, pp. 196-218
WS&F Ch. 7
WS&F Ch. 16.3

WEEK 3: February 5–9, 2024

Lec: Public attitudes, conservation ethics and values (SD)
Lec: Uses of marked animals in fisheries and wildlife science (JV)
Lec: Forest regions of North America (PD)
Lab: Fish and Wildlife Population Assessment

WS&F 16.2, 16.4, 16.5
WS&F Ch. 9.10 – 9.14
Y&G inside front cover, Ch. 3

WEEK 4: February 12–16, 2024

Lec: Animal Behavior I (SD)
Lec: Animal Behavior II (SD)
Lec: Modeling and statistics in fish and wildlife populations (JV)
Lab: The Scientific Method - Testing Hypotheses

WS&F Ch. 6, 2.8-2.10
WS&F Ch. 6, 2.8-2.10
WS&F Ch. 9

WEEK 5: February 19–23, 2025

Lec: Case study – crane research in Wisconsin (SD)
Lec: Determining age, growth, and sex of fish and wildlife (JV)
Lec: 1st LECTURE EXAM
Lab: Scientific Writing

WS&F Ch. 8

WEEK 6: February 26–March 1, 2024

Lec: Factors influencing forest growth: tree morphology (PD)
Lec: Forest ecology and the forest ecosystem (PD)
Lec: Environmental physiology of tree growth (PD)
Lab: **WORK ON LAB REPORT**

Y&G pp. 75-85, 290-293
Y&G Ch. 6
Y&G pp. 71-72, 85-97, 261

WEEK 7: March 4–8, 2024

Lec: Agricultural practices and wildlife management (SD)
Lec: Dynamics of fish and wildlife populations (JV)
Lec: Range management and grazing systems (SD)
Lab: Distance and Direction Using Compass and Pacing

WS&F 2.11, 14.4, 18.9
WS&F Ch. 3
Y&G Ch. 15; WS&F 15.1

WEEK 8: March 11–15, 2024

Lec: Silviculture and stand regeneration techniques (PD)
Lec: Even vs. uneven-aged approaches to forest mgmt. (PD)
Lec: Intermediate forest management practices (PD)
Lab: Comparing GPS to Compass and Pacing

Y&G pp. 290-301
Y&G pp. 301-312
Y&G pp. 260-262, 293-296

LECTURE AND LAB SEQUENCE (continued)

SPRING BREAK: March 18–22, 2024

Reading Assignments

WEEK 9: March 25–March 29, 2024

Lec: Sampling forest resources (PD)
Lec: Wildlife and Forest Management I (SD)
Lec: Wildlife and Forest Management II (SD)
Lab: **MIDTERM LAB EXAM**

Y&G pp. 249-265, WS&F 13.5
Y&G Ch. 14, WS&F 13.7, 14.5, 15.1
Y&G Ch. 14, WS&F 13.7, 14.5, 15.1

WEEK 10: April 1–5, 2024

Lec: Impacts of diseases on forests, fish, and wildlife (SD)
Lec: Population Genetics in fisheries and wildlife (JV)
Lec: **2nd LECTURE EXAM**
Lab: Tree Identification

Y&G 148-160, WS&F 10.9
WS&F Ch. 4

WEEK 11: April 8–12, 2024

Lec: Wildlife mgmt. in urban settings: benefits and problems (SD)
Lec: Urban forestry and urban forest ecosystems I (PD)
Lec: Forestry Case Study Lecture (PD)
Lab: Timber Resource Measurements

WS&F 14.3
Y&G Ch. 22

WEEK 12: April 15–19, 2024

Lec: Forest protection and managing natural resources (PD)

Lec: Wetland management (ALL)
Lec: **Attend CNR Undergraduate Research Symposium**
Lab: Timber Cruising (Schmeckle Reserve)

Y&G Ch. 8, pp. 288-290, Ch. 18,
WS&F, pp. 290-291
WS&F 12.2, 14.6, 15.2, 15.6

WEEK 13: April 22–26, 2024

Lec: Sustainable forestry, Ecosystem Management & BMPs (PD)

Lec: Lake and reservoir habitat management (JV)
Lec: Trout stream management (JV)
Lab: Snags and Woody Debris (Schmeckle Reserve)

Y&G pp. 181-193, 196-218, Ch. 10,
pp. 307-312
WS&F Ch. 15.3
WS&F Ch. 15.4

WEEK 14: April 29 – May 3, 2024

Lec: Wildlife Nutrition (SD)
Lec: Manipulating fish & wildlife resources: stocking & removals (JV)
Lec: Manipulating fish & wild. resources: harvest mgmt. (JV)
Lab: Forest Succession (Schmeckle Reserve)

WS&F Ch. 5
WS&F Ch. 10
WS&F Ch. 17, 19

WEEK 15: May 6–10, 2024

Lec: Management of depleted species (SD)
Lec: Harvest management Case studies (JV)
Lec: Case study: Lake whitefish in Lake Michigan (JV)
Lab: **FINAL LAB EXAM**

WS&F Ch. 11

FINAL LECTURE EXAM: Monday, May 13 from 08:00 AM-10:00 AM (third exam, not cumulative) in TNR 170

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.

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.

Academic Misconduct Statement

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 <https://www3.uwsp.edu/infotech/Pages/Policies/Policies.aspx>).

(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.

Anti-Harassment Statement

The College of Natural Resources believes we all have a responsibility in creating a safe, inclusive, professional environment in all college-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 CNR 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 is 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 CNR-related programming who experience or witness incidents of harassment are strongly encouraged to report the incident. The CNR 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>