# NRES 474: Integrated Resource Management (spring 2021)

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Office hours: Tue 10-11 AM & Thu 10-11 AM, or by appointment (phone call or Zoom)

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## **Course Time/Location:**

Lecture- Monday 11:00 AM – 12:00 PM\*, (online, asynchronous) Discussion 1- Wednesday 9:00 – 10:50 AM\*, (online, asynchronous) Discussion 2- Wednesday 1:00 – 2:50 PM\*, (online, asynchronous)

\*course is asynchronous; class times are when we would meet in person during non-COVID times and are just provided as a guide to help you schedule your time

## **Course Description:**

Natural resource management is about making decisions and implementing actions (or not) to achieve resource objectives. This course will specifically explore how management occurs in areas with multiple types of natural resources, diverse and often competing objectives, varied stakeholders, often numerous administrative boundaries, in the face of great uncertainty, i.e., where you will most likely find yourself working as a natural resource professional. Lectures will focus on how public agencies, private landowners and NGO's manage properties with diverse natural resources and differing goals and objectives. Discussion will concentrate on developing your natural resource problem-solving and critical thinking skills through discussion of readings and management scenarios. A major component of the course will involve student teams developing and presenting a management project for a selected natural resource problem to gain practical experience with the integrated nature of natural resource management and to develop oral and/or written communication abilities.

## **Course Objectives:**

- 1. You will develop natural resource management problem-solving and planning skills.
- 2. You will develop and demonstrate oral and/or written communication, and critical thinking skills.
- 3. You will collaborate and work effectively in a team.
- 4. You will understand and be able to describe the role of public agencies, private landowners, and non-government organizations in contemporary natural resource management.

#### Readings:

1. Textbook: Gregory, R., L. Failing, M. Harstone, G. Long, T. McDaniels, and D. Ohlson. 2012. Structured decision making- a practical guide to environmental management choices.

- 2. Assigned readings (available online/Canvas)
- 3. Selected handouts or postings to Canvas

Assigned readings are testable material.

**Discussion:** The goal of discussion is to reinforce topics covered in lecture and to give students practical application in integrated resource management (IRM). We will accomplish this through discussion of readings and management scenarios and a group natural resource management project. Participation is required.

#### **Grading:**

Your course grade will be based on the following components:

Exam 1: 20%
Exam 2: 20%
Discussion/Participation: 30%
Management Project: 30%

Exams can be a combination of multiple choice, fill-in-the-blank, short answer, matching, True/False, and discussion.

Grade	%
Α	93-100
A-	90-92
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	73-76
C-	70-72
D+	67-69
D	65-66
F	Below 65

\*I will not adjust your grade up at the end of the semester just because you are "close" to the next grade. I do not give extra credit at the end of the semester. You must do the work during the semester to earn the grade you want and are capable of. I will round up from .5 to the next higher whole number.

**Exams:** There will be two midterm exams. Exams must be taken on the scheduled dates or a score of zero will be assigned. See "Due Dates/Late Policy" for absence policy.

**Discussion:** Each week during Discussion we will analyze a reading and/or a management scenario in Canvas (see Schedule). You must complete assigned readings prior to class and be prepared to discuss the reading in Canvas. Generally, you will be assigned some questions to

answer for each week's assigned reading, and then you will post responses to classmate's posts. More detailed instructions to follow. Each student is expected to contribute to the discussion each week. Thirty percent of your course grade is dependent on your discussion participation. After each discussion assignment, you will be assigned a grade of 0-100 points (100 = Excellent- above & beyond what was required; 85- Good- mastery of the material; 75 = Satisfactory- deficient in some aspect; 65 = Unsatisfactory- seriously deficient in multiple aspects; 55 = Fail- incomplete/unworthy of credit; 0 = Zero- not completed, no work turned in).

Management Project: For each Discussion section, I will assign students to teams to work on a group natural resources management project. The project is comprised of four cumulative tasks: Task #1- Inventory, Task #2- Strategy, Task #3- Implementation, and Task #4- Final Report. Task 4 is a combination written and oral assignment (I may assign this as a written-only or oral-only final report for the online version of this course). Scoring rubrics will be provided. Peer evaluation will be utilized to assess individual effort and weight task grades. Group members will independently and confidentially assign each group member (including themselves) a percentage to indicate group member contribution. For example, a group of four people would have a total of 400% to divide amongst the group members. I will take the average of the percentages assigned to each group member and multiply that number by the group's score to get an individual grade. Groups can remove a member by majority vote in consultation with the instructor. Dropped members have four options: 1) persuade their original group to re-accept them; 2) find another group willing to accept them; 3) complete the project on their own; or, 4) receive a failing grade for the project.

**Attendance:** Attendance in class is not required due to the current Covid situation. You are expected to fully participate in the course, e.g., view lectures, participate in discussions, etc., and getting a good grade in the course is usually dependent on that. Lecture and Discussion will be entirely online (asynchronous) but will follow a weekly schedule that you need to keep up with in Canvas.

**Communication:** Students are expected to routinely check their UWSP email and the Canvas course site for updates and materials.

**Due Dates/Late Policy:** All assignments are due on the specified due date at the beginning of class. Late assignments will incur a **5% penalty per day they are late**. **You are responsible for your own time management and keeping up with due dates.** Illness, family emergency, etc., may be cause for extending a due date if I am notified **prior** to the due date (email and voicemail have date and time stamps) and you can **document** (e.g., Dr.'s note) your absence.

**Course Effort/Study:** I believe being a full-time University student is akin to having a full-time job. A full-time job generally equates to at least 40 hours of work per week. You will only spend approximately a third of this time in class. You must spend the additional time on **your own** studying, reading, completing assignments, etc. To get the most out of this course and your University experience (i.e., grades, knowledge, skills, etc.), **you** must put in the time outside of class. A good rule of thumb is to plan on spending two hours of outside preparation for every hour you spend in class. Budget this time into your weekly/monthly planner.

Academic Integrity: Academic integrity is central to the mission of higher education in general and UWSP in particular. Academic dishonesty (cheating, plagiarism, etc.) is taken very seriously. Don't do it! The minimum penalty for a violation of academic integrity is a failure (zero) for the assignment. For more information, see the "Student Academic Standards and Disciplinary Procedures" section of the Community Rights and Responsibilities document, UWSP Chapter 14. This can be accessed by viewing page 11 of the document at: http://www.uwsp.edu/dos/Documents/CommunityRights.pdf

Lecture materials and recordings for NRES 474 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 is not already recorded, you are not authorized to record my lectures without my 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.

**Professionalism:** A professional is competent, reliable, respectful, and has integrity. It is a necessary attribute for most careers, particularly law enforcement. It is never too early to begin developing a professional mindset, e.g., being on time with the appropriate equipment, being competent and knowledgeable in your field, completing assignments correctly and on time, being respectful to others, etc. I may deduct up to 5% of your final course grade for lack of professionalism, e.g., absences, profanity, disrespect, sleeping, disrupting class with unsolicited texting and talking, etc.

**Disability Policy:** Please discuss with me as soon as possible any concerns you may have regarding a disability so we can accommodate you as per UWSP policy.

#### **COVID Precautions**

Face Coverings:

• At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course. *Other Guidance:* 

- Please monitor your own health each day using the screening tool on the UWSP homepage. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
  - o As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.

## **Emergency Procedures:**

If you see/hear something, say something.

In the event of a medical emergency call 9-1-1 or use Red Emergency Phone. 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. See <a href="https://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx">www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx</a> for floor plans showing severe weather shelters on campus. Avoid wide-span structures (gyms, pools or large classrooms).

In the event of a fire alarm, evacuate the building in a calm manner. Meet at location 200 yards from building. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter/Code React – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Procedures at <a href="https://www.uwsp.edu/rmgt/Pages/em/procedures">www.uwsp.edu/rmgt/Pages/em/procedures</a> for details on all emergency response at UW-Stevens Point.

(Source: UWSP Risk Management Dept.)

#### **Tentative Schedule**

		Topic	Reading	Assignments
Week 1	Lecture	Syllabus/Introductions		
1/25-1/29	Discussion	Student introductions		Canvas
				assignment

Week 2 2/1-2/5	Lecture	Introduction to IRM	Knight & Meffe 1997; INRMP Fact Sheet	
	Discussion	Team assignments & project topics; Discussion #1 (practice)	Knight & Meffe 1997	
Week 3 2/8-2/12	Lecture	IRM Planning/Management Criteria	Williams et al. 2009; Allen et al. 2011	
	Discussion	Discussion #2 (graded from this point on)	Failing et al. 2013	
Week 4 2/15-2/19	Lecture	Ecological Considerations	Dale et al. 2000	
	Discussion	Discussion #3; Task #1: Inventory	Dale et al. 2000	Project topic due
Week 5 2/22-2/26	Lecture	Management Philosophies	Yaffee 1999	
	Discussion	Discussion #4	Messier & Kneeshaw 1999	
Week 6 3/1-3/5	Lecture	Stakeholder Considerations	Decker et al. 1996	
	Discussion	Discussion #5	Chase et al. 2002	
Week 7 3/8-3/12	Lecture	EXAM 1		
	Discussion	Task #2: Strategy		Task #1: Problem Identification
Week 8 3/15-3/19	Lecture	Non-government Organizations & Partnerships	Trauger et al. 1995	
	Discussion	Discussion #6	Video: Conservation in the Real World	
March 20-28: SPRING BREAK!				
Week 9 3/29-4/2	Lecture	Public Lands: Federal		
	Discussion	Discussion #7; Task #3: Implementation	Video: Lakes States Bat HCP	Task #2: Strategy

Week 10 4/5-4/9	Lecture	Public Lands: State/County		
4,3 4,3	Discussion	Discussion #8	WIDNR website: County Deer Advisory	
Week 11 4/12-4/16	Lecture  Discussion	Large Private Lands- Forest Discussion #9	Councils Wisconsin's Forests SFI 101	
Week 12 4/19-4/23	Lecture	Large Private Lands- Rangeland	Fuhlendorf et al. 2012; TNC Beef Roadmap	
	Discussion	Discussion #10; Task #4: Final Report	Wilkinson et al. 2020	Task #3: Implementation
Week 13 4/26-4/30	Lecture	Exam 2		
	Discussion	Presentation prep.		
Week 14 5/3-5/7	Lecture	Large Private Lands- Agriculture	Scherr & McNeely 2008	
	Discussion	Project Presentations		Task #4: Final Report
Week 15 5/10-5/14	Lecture	Small Private Lands	Mir & Dick 2012	
	Discussion	Project Presentations		
Week 16 5/17-5/21		FINAL EXAM Not Applicable		