NRES 474: Integrated Resource Management (Spring 2019)

Instructor: Dr. Michael Rader

Office: TNR 378

Office hours: Tue Thu 10-11am or by appointment

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Course Time/Location:

Lecture- Monday 11:00 - 11:50 am, TNR 320

Discussion 1- Wednesday 9:00 – 10:50 pm, TNR 240 Discussion 2- Wednesday 1 – 2:50 pm, TNR 120

Course Description:

This course will explore the interdisciplinary nature of contemporary natural resources management and examine how discipline-specific knowledge is combined to solve real-world problems. We will also consider how social, economic, and biophysical dimensions affect current resource management issues. Lectures will focus on management challenges in a variety of natural resource sub-disciplines, such as soils, water, wildlife, forestry, fisheries, etc. Discussion will concentrate on developing your natural resource problem-solving and planning skills. A major component of the course will involve student teams developing and presenting a planning project for a selected natural resource problem to gain practical experience with the integrated nature of natural resource management and to develop oral and written communication abilities.

Course Outcomes:

- 1. You will develop problem-solving and planning skills
- 2. You will develop and demonstrate oral and written communication, and critical thinking skills.
- 3. You will collaborate and work effectively in a team.
- 4. You will be able to evaluate and integrate data and information from a variety of natural resources sub-disciplines.

Readings:

- 1. Chiras, D.D., and J.P. Reganold. 2010. Natural resource conservation. 10th edition. Pearson Education, Inc., Upper Saddle River, NJ. **(textbook; required)**
- 2. Yoe, Charles. 2013. Introduction to natural resource planning. CRC Press, Boca Raton,
- FL. (suggested; key reference for planning component of course)
- 3. Selected handouts or postings to D2L

Assigned readings are testable material.

Discussion: The goal of discussion is to reinforce topics covered in lecture and to give students practical application of integrated resource management in the form of a group-planning project that seeks to solve a natural resource management problem. Groups will select the general topic in consultation with the instructor. Attendance and participation are mandatory.

Grading Scheme:

Your course grade will be based on the following components:

| Midterm Exam: | 25% |
|---------------------------------------|-----|
| Final Exam: | 25% |
| Discussion/Assignments/Participation: | 20% |
| Planning Task #1: | 5% |
| Planning Task #2: | 5% |
| Planning Task #3: | 5% |
| Planning Task #4: | 15% |

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 |

Exams: There will be a midterm and a final exam. Each exam will cover approximately one-half of the course material. The final is not cumulative. Exams must be taken on the scheduled dates or a score of zero will be assigned. See "Due Dates/Late Policy" for absence policy.

Planning Tasks: During discussion, I will assign students to teams to work on a group natural resources planning project. The project is comprised of four cumulative tasks: Task #1- Problem Definition, Task #2- Developing Solutions, Task #3- Comparing Solutions, and Task #4- Final Report. Tasks 1-3 are written assignments and Task 4 is a combination written and oral assignment. 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 is mandatory and necessary to be successful in the course. I consider attendance to be a component of professionalism (See "Professionalism" below). Additionally, material will be covered in class that is pertinent to exams and class assignments that will not be directly stated in any provided slides, class outlines, class notes, etc. I have noticed in previous classes that success is consistent with regular attendance.

Communication: Students are expected to routinely check their UWSP email and the D2L 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

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

Tentative Schedule

| | | Topic | Reading | Assignments |
|----------------------|------------|--|----------|-----------------------------|
| Week 1 | Lecture | NO CLASS | | |
| 1/21-1/25 | Discussion | Introduction/syllabus | | |
| Week 2 1/28-2/1 | Lecture | NO CLASS | | |
| | Discussion | NO CLASS | | |
| Week 3 2/4-2/8 | Lecture | Natural Resource Management | Ch. 1 | |
| | Discussion | Planning Process | | |
| Week 4 2/11-2/15 | Lecture | Economics, Ethics, & Critical Thinking | Ch. 2 | |
| | Discussion | NO CLASS | | Project topic due |
| Week 5 2/18-2/22 | Lecture | Ecological Fundamentals | Ch. 3 | |
| | Discussion | Problem Definition | | |
| Week 6 2/25-3/1 | Lecture | Soil Conservation | Ch. 7 | |
| | Discussion | Obtaining Information | | Task #1: Problem Definition |
| Week 7 3/4-3/8 | Lecture | NO CLASS | | |
| | Discussion | NO CLASS | | |
| Week 8 3/11-3/15 | Lecture | MIDTERM EXAM | | MIDTERM EXAM |
| | Discussion | Public Involvement | | |
| 3/16-3/24 | | SPRING BREAK | | |
| Week 9 3/25-3/29 | Lecture | Water Resources | Ch. 9-11 | |
| | Discussion | Develop Solutions | | |
| Week 10 4/1-4/5 | Lecture | Fisheries | Ch. 12 | |
| | Discussion | Evaluate Solutions | | Task #2: Develop Solutions |
| Week 11 4/8-4/12 | Lecture | Rangelands | Ch. 13 | |
| | Discussion | Compare Solutions | | |
| Week 12 4/15-4/19 | Lecture | Forests | Ch. 14 | |
| | Discussion | Make a Decision | | Task #3: Compare Solutions |

| Week 13 | Lecture | Threatened & | Ch. 15 | |
|---------------------|------------|----------------------------|-----------|----------------|
| 4/22-4/26 | | Endangered Species | | |
| | Discussion | Task #4 preparation | | |
| Week 14 4/29-5/3 | Lecture | Wildlife Management | Ch. 16 | |
| | Discussion | Project Presentations | | Task #4: Final |
| | | | | Report |
| Week 15 5/6-5/10 | Lecture | Energy, Air & Climate | Ch. 18-23 | |
| | Discussion | Project Presentations | | |
| Week 16 | | FINAL EXAM | | FINAL EXAM |
| 5/13-5/17 | | Wed., 5/15 12:30 – 2:30 PM | | |

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 www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx 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 www.uwsp.edu/rmgt/Pages/em/procedures for details on all emergency response at UW-Stevens Point.

(Source: UWSP Risk Management Dept.)