

# NRES 489: Applied Natural Resources Planning

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## Course Syllabus

Spring 2020

### **Dr. Robin Rothfeder**

Office: TNR Room 180

Office Hours: Mondays and Thursdays 10-11 am, or by appointment. I also have an open-door policy. If you stop by and my office is open, I will generally be available for a quick meeting.

Office Phone: 715-346-4091

E-mail: rrothfed@uwsp.edu (preferred method of contact)

### **Course Meeting Times**

TNR Room 271: Tuesday 3:30 pm - 4:45 pm

TNR Room 322 (ACL): Thursday 3:30 pm - 4:45 pm

See Course Schedule for other meeting dates

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## **I. Course Description**

This class provides students with the opportunity to practice core skills and competencies for planning careers, by applying those skills in a real-world, client-focused setting. You will develop your professional abilities and portfolio of work while also providing a valuable community contribution. The instructor's role will be to frame the project, coordinate with the clients, specify required deliverables, and provide useful tools, data, and other assistance. The students are entirely responsible for meeting the clients' needs with high quality work products.

*Materials:* There is no required textbook for this course. Weekly readings will be posted on the course learning management platform (CANVAS), along with project data, case study links, and other resources. In addition, students should have access to sufficient network storage or an external hard drive in order to store and process spatial data related to this course.

## **II. Teaching Philosophy and Approach**

My goal is to help you develop the ability to begin solving the sustainability challenges facing humanity, as well as creating and capitalizing on new opportunities. My teaching approach is to create a learning environment that is engaging, interactive, participatory, and hands-on. Every student will be responsible for a significant amount of the learning that takes place both inside and outside the classroom.

## **III. Learning Objectives**

This class is designed as an applied workshop that mirrors a professional work environment. Over the course of the semester, students will:

1. Utilize the natural resource planning knowledge and skills gained during your program of study to address a real-world problem/opportunity;
2. Cultivate professional experience working with a client;
3. Demonstrate applied research skills in data gathering, data analysis, mapping, designing, and strategic planning;
4. Communicate planning analysis in graphic, written, and presentation formats;
5. Work effectively in small and large groups, and contribute as a valuable member of a team tasked with expectations that a single individual could not complete alone.

#### IV. Projects and Teams

The Spring 2020 capstone experience will address planning, development, and design issues in Portage County, WI, as highlighted by the county's *Prosperity 2040* collaborative planning effort. Key partners in that effort include the Portage County Business Council and several local government entities: the City of Stevens Point, the Village of Plover, the Town of Hull, and Portage County.

*Prosperity 2040* identifies seven key issues “that our community must address head-on to be a great place to live and work for future generations.” The NRP capstone project will focus on two of these issues: 1) protect and diversify funding for infrastructure, especially roads, and 2) attract and retain young people and young families. The course will consist of two large (6-7 person) teams each addressing one of these topics (the ‘Roads’ team and the ‘Homes’ team).

How can Portage County improve efficiency and reduce costs in transportation planning? The *Prosperity 2040* leadership group has emphasized that local government entities would benefit from a shared platform that allows them to a) communicate and coordinate internally about road construction projects (generating potential savings in mobilization and materials costs), while also b) functioning as a tool for external public engagement (keeping people informed about the status of current projects and the future construction schedule). The Roads team will work to build a template version of such a tool, which could be replicated and expanded for wider future use. This group will also research and visualize how best practices in transportation planning and design might be implemented in key transportation corridors.

How can Portage County attract and retain young residents? One important step is to provide the desired housing stock. Increasingly, younger generations are eschewing large single-family units on the suburban fringe for smaller, more affordable units in closer proximity to work, entertainment, etc. In keeping with this trend, the Homes team will explore the potential for small or tiny home development in Stevens Point. They will identify potential development sites, examine local policy and zoning considerations, and visualize the layout and design of a future neighborhood.

Both capstone working groups will complete a parallel process with comparable deliverables, including:

1. A case study of relevant best practices and an analysis of how those apply in our local setting;
2. A current conditions assessment, context map, and suitability/site analysis;
3. A report on local policy and process considerations (e.g. inter-governmental coordination for roads, zoning and planned development for tiny homes); and
4. A final master plan and design vision, delivered through Story Maps, large posters, open house presentation, and a summary report for the *Prosperity 2040* planning document.

Project teams will be designated by the instructor during the first week of class, as well as smaller sub-groups within those teams. Some deliverables will be assigned to the team as a whole; others will be assigned to sub-groups.

A note on group work: This will be an inevitable part of your professional experience. It is imperative that you communicate with your group in an open, honest, and respectful way; that you address issues early and directly; and that you draw on the instructor if needed, with sufficient time to complete all work to the highest standard. Projects will be structured such that all students must contribute in all skill areas. You should not look to assign a ‘mapper,’ a ‘writer,’ a ‘photo-shopper,’ etc.

A note on free riding: This will not be tolerated. Students who do not contribute meaningfully to all required elements of the capstone experience will either a) be docked credit for relevant portions of the project, and/or b) be removed from the group and required to complete separate deliverables individually. Again, if there is a problem with group dynamics, it essential that we address it as soon as possible.

## V. Assignments

This course will require a significant investment of time and energy, both in and out of the classroom. The quality of the work that you produce should reflect your highest effort, and you should strive to exceed expectations throughout the semester.

### 1. *Attendance and Participation (Individual – 7.5%, 75 points total)*

Because this course focuses on collaborative work during class time, **consistent attendance with enthusiastic participation is mandatory**. Absences from class negatively affect learning for both you and your classmates. Thus, your final grade will be reduced by up to 10 points for each unexcused absence during the semester. In addition, students with repeated unexcused absences may be removed from project teams and required to complete an alternate assignment individually.

### 2. *CANVAS Reading Discussions (Individual – 5%, 50 points total)*

There will be 5 discussions of readings during the semester, worth 10 points each. These discussions will take place in threads posted to CANVAS and also in the classroom. For every discussion, each student will be required to submit 1 detailed response to prompting questions posed by the instructor, 1 question of their own for further reflection, and 1 response to another student's question. At least one post must be completed by 3 pm on Tuesday for the week of the assigned readings, with remaining posts completed by Friday at 5 pm.

### 3. *Case Study Reflections (Individual – 5%, 50 points total)*

To advance our knowledge of applied natural resource planning, we will review high quality case examples produced by professionals in the field. There will be 2 case study assignments worth 25 points each. Students will be required to choose from among a list of case examples provided by the instructor, complete a short reflection analyzing key insights from that example, and come to class prepared to share and discuss those insights.

### 4. *Semester Project (Groups and Sub-Groups – 65%, 650 points total)*

The bulk of the grade for NRES 489 involves completing your professional group project for our local government clients, as described above. Specific grading requirements will include the following:

- Part 1 – Best practice case study (poster and in-class presentation, *100 points*)
- Part 2 – Current conditions assessment, context map, and suitability/site analysis (poster, Story Map, and in-class presentation, *100 points*)
- Part 3 – Policy and process analysis (written report and in-class presentation, *100 points*)
- Part 4 – Master plan and design vision
  - Draft materials for Story Map and poster (*50 points*)
  - Final Story Map, poster, PowerPoint presentation, and summary report (*250 points*)
  - Final open house presentation for clients (*50 points*)

### 5. *Peer Evaluations (Individual – 10%, 100 points total)*

Each student will provide a peer evaluation of every team member's contribution, both at the mid-point of the semester and at the conclusion. Each round of peer evaluations will be weighted to constitute up to 50 points. Points will be docked for failing to provide timely and appropriate peer evaluations for your teammates.

### 6. *Progress Reports (Individual – 7.5%, 75 points total)*

Each student will submit a short personal progress report on a biweekly basis (every two weeks). This will include simple but specific goals and a brief summary of accomplishments related to those goals. Grading will be based on timely submittal of reports, not goal completion.

Due Date	Brief Description	Points
Weeks 2, 3, 7, 9, 13	Reading Discussions (10 points each) <ul style="list-style-type: none"> <li>• First post due Tuesday by 3:00 pm</li> <li>• Remaining posts due Friday by 5:00 pm</li> </ul>	50
Weeks 3, 5, 7, 10, 12	Progress Reports (12.5 points each) <ul style="list-style-type: none"> <li>• Due Friday by 5:00 pm</li> </ul>	75
Weeks 6, 10	Case Study Reflections (25 points each) <ul style="list-style-type: none"> <li>• Due Tuesday by 3:00 pm</li> </ul>	50
Week 4	Semester Project Part 1 <ul style="list-style-type: none"> <li>• Poster completed Monday by midnight, presentation Tuesday in class</li> </ul>	100
Week 8	Semester Project Part 2 <ul style="list-style-type: none"> <li>• Poster completed Monday by midnight, presentation Tuesday in class</li> </ul>	100
Week 11	Semester Project Part 3 <ul style="list-style-type: none"> <li>• Report completed Monday by midnight, presentation Tuesday in class</li> </ul>	100
Week 12	Semester Project Part 4 Draft <ul style="list-style-type: none"> <li>• Poster and Story Map completed Monday by midnight, presentation Tuesday in class</li> </ul>	50
Week 15	Semester Project Part 4 Final <ul style="list-style-type: none"> <li>• All components completed Monday by midnight</li> </ul>	250
Week 15	Semester Project Open House Presentation	50
Weeks 8, 15	Peer Evaluations (50 points each) <ul style="list-style-type: none"> <li>• Due by Friday at 5:00 pm</li> </ul>	100
Weekly	Course Attendance and Participation	75
<b>Total</b>		<b>1,000</b>

## VI. Course Policies

### 1. Grading Scale

92.6% or higher = A

90.0 – 92.5% = A-

87.6 – 89.9% = B+

82.6 – 87.5% = B

80.0 – 82.5% = B-

77.6 – 79.9% = C+

72.6 – 77.5% = C

70.0 – 72.5% = C-

67.6 – 69.9% = D+

62.6 – 67.5% = D

60.0 – 62.5% = D-

Less than 60% = F

### 2. Late Assignments

To receive full credit, assignments must be submitted by the stated deadline. Assignments turned in after the deadline will be considered late and will be subject to a 10% per-day late penalty, including weekends. Deductions will be capped after one week, meaning that even very late assignment will be worth up to 30% of the total available points.

### 3. Academic Integrity

All work (unless part of a group project) must be done independently. Cheating, plagiarism, and other

forms of academic misconduct will not be tolerated and will result in a grade of zero on the assignment. I encourage you to discuss any questions you may have about citation, paraphrasing, or related topics with me prior to turning in an assignment. In addition, assignments turned in through CANVAS will be linked to turnitin.com – a program that compares your work to other sources to check for originality. The UWSP Community Bill of Rights and Responsibilities specifies the University policies regarding academic misconduct and disciplinary action. This can be found at the following web address:

<https://www.uwsp.edu/dos/Pages/Academic-Misconduct.aspx>.

Please also note the free-riding possibility, specified on page 2, above.

#### **4. *Other Course Policies***

- Unless otherwise noted (see schedule, below), the class will meet in TNR 271 on Tuesdays and in TNR 322 on Thursdays, both from 3:30-4:45 pm.
- Posting course materials onto course-sharing websites directly violates the instructor's copyright on his intellectual property; permission to do so is unequivocally denied.
- All written work is expected to be grammatically correct, neat, and well organized. All visual and design work is expected to be polished, refined, and error-free. Work that is sloppy, hard to read, does not follow the prescribed format, and/or contains many errors will be docked points, up to and including the possibility of receiving a grade of zero.
- Cell phones will be put into pockets/backpacks/bags or otherwise stowed away during class time. Appearance of your cell phone during class will indicate your disinterest in the topic and will thus count as an absence, and you will lose attendance points when this occurs.

#### **5. *Emergency Preparedness***

- In the event of a medical emergency, call 911 or use one of the red emergency telephones, which are located outside Room 151, outside Room 172, between Rooms 252 and 255, and between rooms 219 and 221 (across the hall). Offer assistance if trained and willing to do so. Guide emergency responders to victims when instructed.
- In the event of a tornado warning, stay in the classroom. Lecture and discussion rooms in TNR both provide 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. Notify the instructor and/or emergency command personnel of any missing individuals.
- Active Shooter – Run/Escapes, Hide, Fight. If trapped, hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.
- See the UW-Stevens Point Emergency Management Plan at [www.uwsp.edu/rmgt](http://www.uwsp.edu/rmgt) for details on all emergency response issues at UWSP.

#### **6. *Accessibility Statement***

If you have a learning or physical challenge which requires classroom accommodation, please contact the UWSP Disability Services office with your documentation as early as possible in the semester:  
103 Student Services Center, (715) 346-3365; TTY (715) 346-3363;  
[www.uwsp.edu/special/disability/studentinfo.html](http://www.uwsp.edu/special/disability/studentinfo.html)

**\*\* THE SYLLABUS, ASSIGNMENTS, READINGS, GRADE WEIGHTS, AND COURSE SCHEDULE ARE ALL SUBJECT TO CHANGE. THE INSTRUCTOR WILL NOTIFY THE STUDENTS AS SOON AS ANY SUCH CHANGES ARE MADE AND WILL PROVIDE UPDATED COURSE MATERIALS AS APPROPRIATE. \*\***

	Date	Topic	Due
<b>Week 1</b>	(T) 1/21	Course Introduction Semester project overview and kickoff	
	(Th) 1/23	'Open House' Practice Team Building	Personality Assessment
<b>Week 2</b>	(T) 1/28	Street Planning/Design	Reading 1 <sup>^</sup>
	(Th) 1/30	Guest Visit? Field Exploration? Work Session?	
<b>Week 3</b>	(T) 2/4	Small/Tiny Homes	Reading 2 <sup>^</sup>
	(Th) 2/6	Guest Visit? Field Exploration? Work Session?	Progress Report 1 (due Friday by 5 pm)
<b>Week 4</b>	(T) 2/11	Case Studies Presentation and Feedback	Project Part 1*
	(Th) 2/13	Guest Visit	
<b>Week 5</b>	(T) 2/18	Field experience with Kyle Kearns	
	(Th) 2/20	Work Session	Progress Report 2 (due Friday by 5 pm)
<b>Week 6</b>	(T) 2/25	Present and Discuss Site Analysis Case Reflections	Case Reflection 1 (due by 3 pm)
	(Th) 2/27	Work Session	
<b>Week 7</b>	(T) 3/3	Development Plans and Master Plans	Reading 3 <sup>^</sup>
	(Th) 3/5	Work Session	Progress Report 3 (due Friday by 5 pm)
<b>Week 8</b>	(T) 3/10	Current Conditions Assessment, Site Analysis Presentations and Feedback	Project Part 2*
	(Th) 3/12	Work Session	Peer Evaluation 1 (due Friday by 5 pm)
<b>SPRING BREAK</b>		<b>March 14-22</b>	
<b>Week 9</b>	(T) 3/24	Redevelopment/Revitalization/Infill	Reading 4 <sup>^</sup>
	(Th) 3/26	Work Session	
<b>Week 10</b>	(T) 3/31	Present and Discuss Redevelopment/Revitalization Case Reflections	Case Reflection 2 (due by 3 pm)
	(Th) 4/2	Work Session	Progress Report 4 (due Friday by 5 pm)
<b>Week 11</b>	(T) 4/7	Policy and Process Analysis	Project Part 3*
	(Th) 4/9	Work Session	

<b>Week 12</b>	(T) 4/14	Draft Master Plan and Design Vision (StoryMap and Poster), Presentation and Feedback	Project Part 4: Draft*
	(Th) 4/16	Work Session	Progress Report 5 (due Friday by 5 pm)
<b>Week 13</b>	(T) 4/21	Green Infrastructure	Reading 5^
	(Th) 4/23	Work Session	
<b>Week 14</b>	(T) 4/28	<b>Review: Practice Team Presentations</b>	
	(Th) 4/30	Work Session	Progress Report 6 (due Friday by 5 pm)
<b>Week 15</b>	(M) 5/4	Final Master Plan and Design Vision	Project Part 4: Final
	(TBD)	Final Open House Presentations	Peer Evaluation 2 (due Friday by 5 pm)
<b>Finals Week</b>		<b>Final Revisions – Wednesday 5/13</b>	<b>REVISIONS TO FINAL PROJECT</b>

^ First post due Tuesday by 3:30 pm, remaining posts due Friday by 5 pm

\*Posters/Reports must be complete and printed by midnight on the Monday before presentations are delivered