

# ENVIRONMENTAL PLANNING

University of Montana  
**Course Syllabus**

GPHY 466 – Spring 2022  
3 credits, CRN 33902  
Tuesdays/Thursdays 12:30-1:50pm in Forestry 106

## **Instructors:**

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## General Course Information

### **Course Description**

The course is designed to engage students in the vast field of environmental planning for sustainability, which includes elements of physical planning, community planning, planning design at the landscape level, and conservation planning.

In this course, we will explore the evolving field of environmental planning as it is unfolding in Montana, the Rocky Mountain West, and beyond. We will include a thorough overview of planning policies and approaches that are used in the real world to shape and influence land use and patterns of development. Building upon this foundation, we will delve into environmental planning principles and analyses related to soils and working lands planning, natural areas planning, and water and air quality planning. We will then integrate these analyses into various approaches to overall sustainable planning.

We will address the recent turn in environmental planning philosophy toward the broader issue of sustainability. The implementation of “sustainable” strategies cross-cuts and transcends boundaries and scales (e.g., public/private, local/regional, city/county, national/international) and social, cultural, economic, political, and environmental orientations. Through assignments

and discussions, we will explore a variety of initiatives for approaching environmental planning with sustainability and climate resilience in mind. Further, we will actively employ an inclusive and critical lens to better understand the interactions between environmental planning and social and environmental equity and justice concerns.

In many ways the study of environmental planning in Montana is especially relevant and timely given that Montana is the consummate example of a western state facing extremely dynamic demographic, political, environmental and climate change circumstances. Similar to other western states, it is confronting a number of planning problems and opportunities as a result of: 1) shifts in rural population dynamics, with de-population in some places and rapid population growth in others; 2) rapid social, economic and technological change associated with the “New West;” 3) national economic restructuring and its attendant emphasis on global economic competition; 4) landscape fragmentation and environmental degradation; and 5) conflicts in values and philosophies toward living on and with the land. Montana, like many places in the West and beyond, is at a difficult intersection between what it “was,” what it “is,” and what it “will be” in the future. These developments provide the context for environmental planning practice and thought in Montana and the Rocky Mountain West more generally.

To thoroughly investigate environmental planning in this course, we will examine readings, resources, tools, and innovations informed by scientific disciplines and applied planning practice. We will explore environmental planning at several jurisdictional levels and geospatial and temporal scales, with consideration of future scenarios.

This course is reading and participation intensive, with significant class discussion and peer learning components. Students will be asked to read and analyze a variety of texts including peer-reviewed planning articles, land use plans, policy documents, and regulations. This course is designed for students working towards a degree in any and all environmental and planning-related fields. This course is also designed for students who want a better understanding of environmental planning and resilient built environments in the U.S. and globally.

### **Expected Learning Outcomes**

- Students will be able to describe elements of environmental planning and the jurisdictions and contexts in which they operate.
- Students will be able to describe the impacts of development on environmental quality (i.e., air quality, water quantity and quality, and stormwater) and programs for managing these impacts.
- Students will be able to distinguish among and recognize the utility of planning approaches such as land capability and suitability assessment, conservation planning, and green infrastructure planning.
- Students will be able to articulate and describe the use and practicality of

environmental planning strategies and tools for farmland, natural area, and watershed and streamside protection, as well as the process of planning for hazards, including flooding and wildfire.

- Students will evaluate planning innovations to support climate-resilience in the face of changing climate and to intensifying climate-driven weather events.
- Students will develop skills to locate data and information relevant to environmental planning and synthesize reliable sources of information available to support informed public engagement.
- Students will engage in discovering everyday connections between environmental planning and our relationships to place and our communities.
- Students will analyze various current or pending environmental planning processes and policies.

### **Course Texts & Required Materials**

We have one required text for this course:

Randolph, John. 2012. *Environmental Land Use Planning and Management* (2<sup>nd</sup> Edition). Washington, D.C.: Island Press.

In addition to the above text, other required and supplemental readings and resources will be placed throughout the semester on the course Moodle site. These are included in the Course Readings and Resources page and others will be announced in class. We also recommend that you refer to this manual to address any research, formatting and citation questions that might arise:

Turabian, Kate L. 2018. *A Manual for Writers of Research Papers, Theses, and Dissertations*, 9<sup>th</sup> Edition. Chicago: The University of Chicago Press.

## **Policies & Expectations**

### **Attendance**

We will cover a great deal of material over the course of the semester and attendance is expected. We assume students will be engaged and prepared to discuss readings, assignments, and materials. We ask that you actively engage and contribute to creating a positive learning environment. Students who miss class are responsible for all materials and missed in-class work. Please communicate with us about planned absences and unforeseen events that may result in missing class. The UM “Class Attendance/Absence Policy” can be found in the [UM Catalog Academic Policies and Procedures](https://catalog.umd.edu/academics/policies-procedures) (<https://catalog.umd.edu/academics/policies-procedures>).

### **Respect, Inclusiveness and Diversity of Thoughts, Ideas and People**

We believe that all students are entitled to and deserve respect, courtesy and tolerance,

regardless of their race, background, religious affiliation, gender, sexual preference, disability or any other perceived difference. Likewise, faculty, staff and fellow students deserve the same treatment from other students. We will make every effort to promote and create a safe space for diverse thoughts, regardless of the form of communication. Please see the UM Diversity webpage for additional background:

<https://www.umt.edu/diversity/>.

### **Academic Honesty**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the [Student Conduct Code](http://www.umt.edu/student-affairs/community-standards/default.php) (<http://www.umt.edu/student-affairs/community-standards/default.php>).

### **Plagiarism**

Plagiarism in any form will not be tolerated. Students need to be familiar with plagiarism and how to properly cite references and attribute the ideas of others to original sources in their work. The following is taken directly from the [UM Catalog Academic Policies and Procedures](https://catalog.umt.edu/academics/policies-procedures) (<https://catalog.umt.edu/academics/policies-procedures>):

### **Equal Access**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and the Office for Disability Equity (ODE). If you anticipate or experience barriers based on disability, please contact ODE by phone at (406) 243-2243, by email at [ode@umontana.edu](mailto:ode@umontana.edu), or visit the [Office of Disability Equity](https://www.umt.edu/disability/) (<https://www.umt.edu/disability/>) online for more information. As your instructors, we will work with you and ODE to implement an effective accommodation, and you are welcome to contact us privately if you wish to ask questions and discuss.

### **Basic Needs Security Statement**

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the [Office for Student Success](http://www.umt.edu/oss/) (<http://www.umt.edu/oss/>) for support. Furthermore, please notify us if you are comfortable in doing so. This will enable us to provide any resources that we can.

### **Mask requirement**

As per UM policy, we are all required to wear masks while in the classroom. We know this is not ideal and we all hoped things would return to normal for Spring but we are still dealing with lots of cases of Covid in Missoula and masks are the best way to stay safe. Please note that refusing to wear a mask in class is a violation of the UM Student

Conduct Code. To summarize:

1. We cannot begin until everyone is properly masked (over mouth and nose)
2. If there is anyone who does not comply then the student will be reported to our Dean (this is what UM Faculty have been instructed to do)
3. Class will be cancelled for the day as refusal to wear a mask compromises the safety of everyone else in the class (this is also what UM Faculty have been instructed to do).

### **Student Support Resources**

A list of helpful resources has been compiled by the Office of the Provost and is readily available on our course Moodle site.

## **Assignments & Assessment**

### **Participation**

This is an advanced undergraduate/graduate level course, and as such your participation and responsibility with regard to reading and preparation is expected. To ensure that the reading expectation is met, you should complete the readings corresponding to each class session and be prepared to contribute meaningfully to class discussion. Your engagement is also critical to enhancing the learning experience for all during the progression of the course. For instance, we will begin the course with a Bioregional Inquiry that is designed to foster participation.

### **In-Class Reading Quizzes**

We plan to give a total of 10 Reading Quizzes this semester. The questions will relate to the readings that week, and answers to these questions will require only short responses. The questions are designed to highlight important points or concepts in the assigned readings.

### **Environmental Planning Small Project Assignments**

Four small projects will be assigned throughout the semester as follows:

- Project 1: Public Processes – Observation and Analysis
- Project 2: Data and Information Sources – Land Use Capability Data
- Project 3: Policy and Regulatory Approaches – Streamside Protection
- Project 4: Plan Document Review – Hazard Mitigation Plans

A brief written report should be submitted for each project. Each project report should document the problem, the objective, the resources utilized, the method(s) utilized, the results, a conclusion, and references/resources utilized. Attach any field notes (legible and complete) and similar items as appendices where appropriate.

## Environmental Planning Research Paper and Presentation

We want you to be familiar with the process of critically analyzing an environmental planning situation. As part of assessment in this course, we will ask you to identify a specific environmental planning challenge related to one of the topics in this course, assess the situation surrounding the challenge, the current context (regulatory framework, law, public process, legal action), and the specific place and scale where this challenge is located (community, metropolitan area, county). It should include technical, policy, and community components. Your methods should include at least one in person contact (whether in person interview or phone call), and if possible or local, a site visit with field notes. We ask that you clearly communicate the environmental planning challenge in writing—including potential solutions or paths forward. We encourage you to choose an environmental planning challenge that is closely related to your personal or professional interests. We will provide potential examples as well as time in class to brainstorm with each other in small groups. You are welcome to meet with us to discuss possibilities. A final written paper for this assignment will be due at the end of the semester. UG papers should range between 8-10 pages; G papers should range between 12-15 pages, not including title page, figures and tables. G papers should also include a fuller literature review. To help you succeed with this assignment, we will ask you to provide a short paragraph on your topic relatively early in the semester. We will provide a detailed description and rubric (including due dates) for the paper and presentation

## Grading Summary

This course is graded on the traditional letter grade scale (i.e., A – F); it is not offered under the credit/no credit option. The total points possible in the course and the translation of points into a letter grade are as follows:

### Points:

Assignments:	Point Value
Reading Quizzes (10 @ 15)	150 points
Small Projects (4 X 50 points each)	200 points
Environmental Planning Research Paper	150 points
Project Presentation	50 points
Attendance (during in-class presentations)	30 points
<b>Total Points</b>	<b>580 points</b>

### Grading Scale:

Course grades will be based upon the following percentages of the total points possible for the course. Graduate and undergraduate students will be graded separately.

A ≥93.0%	A- = 90.0-92.9%	
B+ = 87.0-89.9%	B = 83.0-86.9%	B- = 80.0-82.9%
C+ = 77.0-79.9%	C = 73.0-76.9%	C- = 70.0-72.9%
D+ = 67.0-69.9%	D = 63.0-66.9%	D- = 60.0-62.9%
F ≤ 59.9%		

## Graduate Increment

Graduate students can take the course as offered for credit with the completion of additional work known as a “graduate increment.” The graduate increment for this course will consist of three specific requirements:

1. Longer paper with fuller literature review for the Environmental Planning Research Project (as described above);
2. Completion of additional readings in *High Country News*;
3. Two additional meetings (time/place TBD) with the course instructors and other graduate students, to pursue a discussion of additional readings.

The logistical requirements (and due dates) for the undergraduate assignments will be the same for graduate students, but graduate students will be required to engage more substantively and critically with course topics as demonstrated in the completion of the referenced graduate requirements. In addition to the overall learning objectives of the course, through the graduate increment, graduate students will:

- Understand the intersection between environmental planning and environmental management and be able to articulate the contributions of environmental planning to sustainable communities; and
- Engage with popular long-form media of relevance to environmental planning and critique the potential efficacy of proposed messages, policies, and other actions.

The graduate increment will be collectively worth an **additional 100 points** (readings and additional meetings), making a total of 680 points for graduate students’ overall grade. Additional details will be provided in class and on Moodle.

## Course Readings & Topic Schedule

We have designed this course as a series of topics and will work through the material at a pace dictated by the interests of the class as a whole. We plan on having a couple of optional field trips that will be scheduled outside of our regular class meeting times. Please be attentive to announcements in class and on Moodle as we update the schedule and assigned readings. Please be sure you are working off the most updated schedule in Moodle or bring a copy of the schedule with you to class in order to record adjustments.