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GPHY 466.01: Environmental Planning

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Land Acknowledgement:

The University of Montana resides on the aboriginal territories of many Indigenous peoples including the Selis (Salish), Ksanka (Kootenai), and Qlispe (Kalispel). Many other Indigenous peoples including the Amskapi Pikuni (Blackfeet), Nimiipuu (Nez Perce), Shoshone, Bannock, and Schitsu'umsh (Coeur D'Alene) also relied upon their traditional knowledge and relationships with this land and this space for survival in the past and today. We bring respect for these diverse Indigenous peoples' sacred connections to their homelands, along with their continued historical, political, and sovereign rights. We honor the path they have always shown us in caring for this place for the generations to come.

ENVIRONMENTAL PLANNING

University of Montana

Course Syllabus

GPHY 466 – Spring 2023

3 credits, CRN 33113

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 start with a thorough overview of planning policies, approaches, and tools that are used in the real world to shape and influence land use and patterns of development. We will address ethics, information sources, and public process.

Building upon this foundation, we will delve into environmental planning principles and analyses related to:

- working lands, including agricultural lands
- natural areas, including open lands, wildlife habitat, and streamsides
- hazard mitigation, including floodplains and wildfire
- public health, including air and water quality (surface water, groundwater, and stormwater).

We will then integrate these analyses into approaches for overall sustainable planning such as green infrastructure, green cities, and climate resilience.

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 an excellent 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. Local case studies will provide specific examples of environmental planning in action.

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 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.

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 (such as soils, habitat, water quantity and quality) 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 areas, 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

We will be using selected chapters from two texts:

Daniels, Tom. 2017. *The Environmental Planning Handbook for Sustainable Communities and Regions* (2nd Edition). New York, NY: Routledge.

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

The chapters will be posted on the course Moodle site. Hard copies of both textbooks are on reserve at the Mansfield Library.

We are participating in the *High Country News* Classroom Program, which provides students with access to a free digital subscription for the semester. Please see instructions on Moodle.

In addition to the above texts, other required and supplemental readings and resources will be placed 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, 9th 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.umt.edu/academics/policies-procedures) (<https://catalog.umt.edu/academics/policies-procedures>).

Lateness Policy

Late work will lose a full letter grade (e.g., A to B) for each class day late. Late assignments will be not accepted more than two weeks late.

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, 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.

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. Attendance will be recorded and count toward the point total.

Small Project Assignments

Six small projects involving application of skills to specific topics will be assigned throughout the semester as follows:

- Project 1: Local Context – Bioregional Inquiry
- Project 2: Information Sources – Land Use Capability Data
- Project 3: Data Analysis– Soils and LESA
- Project 4: Regulatory Review – Streamside Zoning and Field Observations
- Project 5: Plan Document Review – Hazard Mitigation Plans
- Project 6: Public Processes – Current Proposal Observation and Analysis

A brief written report should be submitted for each project following the instructions on the assignment.

Environmental Planning Deep Dive 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 report on an analysis of an environmental planning topic in the context of a specific place. The project should:

- identify a specific environmental planning challenge related to one of the topics in this course
- explain why addressing the challenge is important
- assess the situation surrounding the challenge including the background and context (regulatory framework, public process, legal action) and the specific place and scale where this challenge is located (community, metropolitan area, county)
- describe how the challenge was or might be addressed with appropriate tools
- identify recommendations and lessons learned

It should include technical, policy, and community components and an assessment of how climate change, sustainability, and equity are being addressed. Your information gathering 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 would like you to work in **teams of 2-3** for this project. In addition to preparing a written report, each team will make a short presentation to the class.

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.

The final written paper for this assignment will be due at the end of the semester. Papers should **range between 10-12 pages, not including title page, figures and tables**. To help you succeed with this assignment, we will ask you to provide a short proposal (one paragraph) on your topic relatively early in the semester. A detailed description and rubric (including due dates) for the paper and presentation will be provided in the course schedule.

Final Exam

We will have a final exam to assess understanding of the key concepts and approaches presented in the course.

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:

Assignments:	Point Value
Attendance (24 X 5 points per class)	120
Small Projects (6 X 20 points each)	120
Deep Dive Project Proposal	20
Deep Dive Project Paper	100
Deep Dive Project Presentation	40
Final Exam	80
Total Points	480

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%		

GPHY 595: Environmental Planning

Graduate students have the opportunity to take *Environment Planning* for graduate-level credit through GPHY 595. Details are provided in the GPHY 595 syllabus.

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.