

Montana Afoot and Afloat: *Human / Land Relationships*

15 semester credits

Academic Credit

All courses offered by the Wild Rockies Field Institute are accredited through the University of Montana with administrative support from the School for Extended and Lifelong Learning. Academic oversight of each Wild Rockies Field Institute course comes from University of Montana departmental leadership and faculty. Accepted students can earn credit in five academic courses (3 semester credits each):

- Environmental Studies 395- Ethics and Industrial Society in Montana
- Environmental Studies 395- Indigenous Land Ethics
- Environmental Studies 395- Public Lands Issues and Policy in Montana
- Geography 348- Environmental Geography of Central Montana
- Geography 348- Sustainability and Resilience in Montana

Estimated Course Contact Hours and Academic Work Time

The time ranges below describe daily student requirements for participation on a WRFI course. These ranges are approximate and vary with assignments, field learning opportunities, and environmental conditions:

- Instructional Contact Hours- 2-4 hours of formal classroom-style work per course day. This includes lectures, discussion-based classes, guest speaker presentations, individual meetings with course instructors or teaching assistants, and academic exercises not involving field exploration.
- Field / Laboratory Contact Hours- 2-4 hours per course day. This includes field explorations and exercises, site visits, local guest speakers, and opportunistic instruction as relevant examples of course concepts and issues arise.
- Individual Academic Work- 2-6 hours per day. This includes completing required readings, individual writing assignments, research investigation associated with course assignments, reviewing peer work.

* The average amount of Instructional and Field / Laboratory contact time is 5.5 hours per day.

* Each 3-credit WRFI course is developed with approximately 67 contact hours.

Dates

Pre-Course Remote Study	August 13 - 22, 2019
Field Expedition	August 23 - October 23, 2019
Post-Field Expedition Remote Study	October 24 - November 29, 2019

Instructors

Ryan Marsh- Ph.D. Environmental Science, Policy and Management, University of California-Berkeley; M.S. Conservation Biology & Sustainable Development, University of Wisconsin-Madison; B.S. Zoology and B.S. Anthropology, Humboldt State University

Katie Nelson- M.S. Environmental Studies, University of Montana; B.A. Global Studies, Saint Lawrence University

Daisy Purdy- Ph.D. Political Science, Northern Arizona University (in process); M.Ed. Secondary Education Social Studies, Northern Arizona University; B.A. Cultural Anthropology, University of New Hampshire

Nick Triolo- M.S. Environmental Studies, University of Montana; B.A. International Relations, University of Redlands

Mel Wardlow- M.S. Environmental Studies, University of Montana; B.A. International Studies, University of Oregon

Location

This course takes place in western and central Montana on successive explorations of the Scapegoat Wilderness, Montana's Rocky Mountain Front, Missouri River, Fort Belknap Reservation, Big Snowy Mountains, Northern Cheyenne Reservation, and the Tongue River Basin in Southeastern Montana. Throughout the course, students and instructors visit a variety of communities; meet with guest speakers, and tour sites relevant to the course curriculum.

Semester Overview

This course is an intensive nine-week field-course preceded and concluded by several weeks of online assignments and interactions. In the field we will live close to the land and water of Montana, backpacking and kayaking for the majority of the course. Our first expedition is in the Scapegoat Wilderness, followed by explorations of the Rocky Mountain Front and the Blackfoot Reservation. Next we head to the Missouri River in Fort Benton, and kayak from Coal Banks Landing nearly to the Fort Peck Reservoir. After front-country visits and travels, we explore the Big Snowy Mountains on a backpacking trip and visit managers and biologists in Yellowstone National Park. At the conclusion of that expedition we begin a kayaking journey down the Tongue River. Our final front-country travels are in the ranchlands and forests on the Northern Cheyenne Indian Reservation and in Montana's Tongue River Basin.

Tracing the course of water from montane snowfields to flatland diversions gives students a connected picture of the landscapes, ecosystems, and geography of Montana. Of equal importance are the human communities we visit between backcountry sections. These include three Native American Reservations, numerous rural towns, agricultural producers, public land managers, fossil fuel extraction industries, hardrock mines, and conservation groups, among many others.

Integrating student understanding of natural and human systems in Montana is a major goal of the semester. The traditional academic work on these issues includes daily discussions and lectures, readings, a variety of writing assignments, meetings with regional and local experts, and a public presentation by students. The course culminates with a paper articulating a personal "Land Ethic" as informed by student learning and experiences during the semester.

Environmental Studies 395- *Ethics and Industrial Society in Montana*

Course Description

The Montana Afoot and Afloat semester overall is designed to give students the experiences and academic background to formulate a personal land ethic – that is, a vision of a wise and beneficial way to relate to the land. This course will give students an introduction to some contemporary approaches to environmental ethics that have developed in several ethical traditions, including Western philosophical thought in Deontological, Utilitarian, and Virtue ethics; Native American philosophies, permaculture practices, and “Deep Ecology.” We will examine many current regional environmental issues through these lenses, including wilderness policy, fossil fuel extraction and use, renewable energy, agricultural policy, endangered species conservation, and restoration ecology.

Academic Objectives

1. For students to understand the effects of aboriginal, pre-industrial, and industrial land-use practices on Montana’s landscapes;
2. For students to gain a basic understanding of moral philosophy, critical thinking, and the practical importance of developing environmental ethics;
3. For students to understand some contemporary approaches to environmental ethics, particularly contemporary Native American approaches.
4. For students to integrate the ecological, cultural, political, and geographical learning on the course with their understanding of environmental ethics.
5. For students to articulate a land ethic that is grounded in academic study and direct experience on the course.

Environmental Studies 395- *Indigenous Land Ethics*

Course Description

The course is designed to give students a grounded and contextual understanding of Native Peoples’ traditional relationships with the land in Montana, and to explore how and why those relationships have changed in relation to dynamic economic, political, and cultural factors. The class will meet with Native knowledge holders to learn first-hand about the history and current issues facing regional tribes—with a particular emphasis on sovereignty and self-determination. Indigenous ideas and philosophies will be considered as valuable alternatives to Western thought, especially in relation to land ethics and strategies for increasing social and ecological resilience in Montana’s dynamic environment. As opportunities are available, students may participate in resource management and sustainability projects directed by the tribe, engage with intergenerational community members including elders and young knowledge holders, and participate in culturally appropriate social ceremonies as invited by tribal members.

Academic Objectives

Each student will:

1. Become familiar with the history of Native peoples in Central Montana; contemporary home of the Blackfeet, Gros Ventre, and Assiniboine, and Northern Cheyenne Nations;
2. Understand the outlines of traditional and contemporary Indigenous relationships with the land in Central Montana;
3. Understand the cultural, social and economic changes that have been imposed on regional tribes as a result of settler colonialism, genocide, and forced relocation to reservations;

4. Become familiar with the Bureau of Indian Affairs, boarding schools and other institutions that continue to impact tribal-land relationships;
5. Recognize how the necessity of adapting to the invading culture has affected the tribes' and individuals relationships with the land;
6. Understand and apply culturally appropriate Indigenous Knowledge to current regional issues regarding the land, community, economy, and long-term sustainability.

Environmental Studies 395- *Public Lands Issues and Policy in Montana*

Course Description

This course is designed to help students develop a reasoned position on how to best manage Montana's public lands and wildlife. We will explore this topic through extended expeditions on public lands, meetings with diverse stakeholders on those lands, background readings in land policy and class discussions. Relating public lands policy to the other courses in ethics, sustainability, regional geography, and Native American perspectives will provide ample opportunity for students to engage with important regional issues, and to participate in public lands management debates in an informed and responsible fashion.

Academic Objectives

1. For students to develop a clear understanding of the legal framework in which public lands and wildlife are managed;
2. For students to develop an understanding of the historical roots and current state of controversies surrounding public land management;
3. For students to directly experience the landscape and community effects of a variety of management regimes;
4. For students to integrate the ecological, cultural, geographical, and natural resource sustainability learning on the course with their understanding of public lands issues.
5. For students to develop informed policy recommendations for the management of Montana's public lands and wildlife.

Geography 348- *Environmental Geography of Central Montana*

Course Description

This field course examines relationships between humans and the natural environment in Central and Eastern Montana. We explore both wild and settled environments to understand the following questions: What are the elements (climate, vegetation, landforms) that characterize landscapes in this area? How and why have successive human cultures modified these landscapes? How have environmental conditions here influenced human activities? Assignments, discussions, and exercises are designed to help each student build a grounded perspective and address these essential geographic issues.

Academic Objectives

1. For students to understand the general climate, vegetation ranges, animal habitats, and human land use patterns of the landscapes they visit;
2. For students to understand how the geography of Central Montana has influenced the people living there, and how the people have in turn affected the geography.
3. For students to understand how global changes in climate and biogeography are affecting Montana's environmental geography.

4. Become adept at reading topographic maps, atlases, river maps, and other graphic representations of regional landscapes. Use these media effectively for navigation and analysis of regional natural resource issues.
5. For students to integrate the ecological, cultural, political, and natural resource sustainability learning on the course with their understanding of environmental geography.
6. For students to be able to apply environmental geography principles learned here to their home environments and their land ethic.

Geography 348- Sustainability and Resilience in Montana

Course Description

The course is designed to give students an understanding of the concept of sustainability and resilience, and their application to a variety of issues specific to the geography Montana, including: wilderness, agriculture, mining, energy production, green building principles, transportation, and climate change. The course explores the essential goals of sustainability (*what* is to be sustained) and the means to that end (*how* to sustain it) through various conceptual frameworks. These include: Native American philosophies and practices, 19th and 20th century conservation ethics, conservation biology, bioregionalism, and permaculture design. The other primary lens for our studies will be the concepts of resilience and systems theory. The common dynamics seen in environmental, climatic, cultural, economic, and interpersonal systems will provide students with a powerful way to perceive patterns in these diverse realms, and allow them to position themselves more effectively as citizens and actors in these systems.

Academic Objectives

1. An understanding of the concepts and debates around sustainability in Montana.
2. An understanding of the concepts of systems theory and resilience.
3. Direct experience with sustainability and resilience issues and practices via expeditions, site visits, meetings, and project work in Montana.
4. An understanding of how sustainability and resilience apply to specific social-ecological issues in Montana, including: biodiversity conservation, river conservation, water policy, energy production and use, agriculture, fossil fuel extraction and use, mineral extraction, wilderness conservation, prairie restoration, and climate change.
5. An understanding of the views and priorities of land managers, agricultural producers, elected officials, conservationists, citizens, tribal nations, and regional industries relating to sustainability and resilience in Montana.
6. An understanding of the relationship between the objectives described above and the other concurrently taught courses in ethics, Native American perspectives, public lands management, and regional geography.
7. Developing analytical thinking, discussion, writing, and presentation skills relating to sustainability and resilience in Montana.

Requirements and Assessment

All students will receive distinct letter grades for each of the five courses comprising the field semester based upon their participation and performance on the following assignments and activities. Students will be required to complete the following:

- Plant Study (5%)- Present a detailed plant studies to the class based on extensive observations and research in field guides.
- Blogs (10%)- Write one to two blog entries regarding course experiences and learning. It will be to be posted on the WRFI website and available for public comment.
- Citizen Letter (10%)- Write a letter to a public official (or public forum such as newspaper editorial pages) regarding an issue relevant to course topics and experiences.
- Participation (10%)- Divided equally between academic and experiential participation.
- Field Journal (20%)- Keep a detailed academic journal during the course and participate in group journal readings.
- Section Essays / Exams (20%)- Complete examinations at the conclusion of each course section, including conceptual definitions, plant identifications, and essays that summarize learning across course subjects. These assignments are designed to synthesize the learning and references from each section into a concise format that will be useful for the student in composing their final paper and presentation.
- Final Paper (20%)- Write a paper articulating a personal land ethic. Subject matter in each course discipline must be substantively addressed and related to the other course disciplines included in the semester. This paper requires extensive references to personal experiences, speakers, readings, and discussions. This paper is outlined and assigned during the field course, and written in the post-field expedition period. Students are required to critique drafts of other students' papers.
- Final Presentation (5%)- Participate in a public presentation at course-end. This presentation shares the learning and experiences obtained on the course with interested citizens and professionals in Missoula, Montana. Students create and deliver the presentation in consultation with course instructors and guest speakers. Each student must speak for 5-10 minutes during the presentation.

Disability Services for Students

The University of Montana is an equal opportunity education provider and will provide reasonable accommodations for any student taking this course for academic credit. Students with disabilities, who are taking courses through the Wild Rockies Field Institute, may request reasonable accommodations by contacting their field instructors. For questions, concerns, or additional information, students may also contact Roger Maclean, Dean, UM School of Extended and Lifelong Learning: 406-243-2983 or roger.maclean@umontana.edu.

Readings

Note that readings are adapted and updated each year to reflect current issues. A course reading list is available upon request.

Guest Speakers

Note that speakers often change due to availability, course travel, and logistics. We may also alter plans to accommodate emerging issues and events. Below is a sample of guest speakers we've met with recently.

Jeanie Alderson & Terry Punt, Ranchers and Activists for the Northern Plains Resource Council
 Minerva Allen, Fort Belknap Elder
 Lars Anderson, American Prairie Reserve

Nathan Birkeland, The Nature Conservancy Pine Butte Preserve
Alexis Bonogofsky, Goat Farmer, Organizer for National Wildlife Federation, featured in *This Changes Everything*, by Naomi Klein
Otto Braided Hair, Host on Northern Cheyenne Reservation
Vanessa Braided Hair, Runs ecoCheyenne
Lou Bruno, Former Director of the Montana Wilderness Association and Glacier-Two Medicine Alliance
Sarah Calhoun, Owner of Red Ants Pants, Activist
Sheldon Carlson, Blackfeet Bison Program
Scott Christiansen, Conservation Director of the Greater Yellowstone Coalition
Bill Cunningham, Former Director of the Montana Wilderness Association, longtime outfitter
Eric Detmer, Spring Creek (coal) Mine
Conrad Fisher, Tribal Historic Preservation Office
Mike Flatt, Reclamation Engineer, Spectrum Engineering, Zortman Mine
Ed Gullick, Green Architect, High Plains Architects; Activist for Northern Plains Resource Council
Art Hays, Rancher, Manager for Tongue River Dam & Irrigation
Kascie Herron, Conservation Associate for American Rivers
Hal Herring, Writer
Derf Johnson, Smith River Mine Campaign for Montana Environmental Information Center
Chad Kruse, Hydrologist, BLM Lewistown
Randy Matchett, Biologist for the Charles M. Russell National Wildlife Refuge
Clint McCrae, Rancher, Organizer against Tongue River Railroad
Brian and Mariah O'Hallorans, Owners of Rising Trout Café, former farmers in Lentil Underground
Mike Pease & Bob Hardy, Buffalo Field Campaign
Michael Prater, Plant Manager, Judith Gap Wind / Invenergy
Sean Reynolds, River Ranger for BLM and Missouri River Breaks National Monument
Anna Ryan, Host on Northern Cheyenne
Nancy Schlepp, Community Relations for Tintina Resources
Mike Scott, Goat Farmer, Organizer for the Sierra Club's Beyond Coal Campaign
Mary Sexton, Former Director of the Montana Department of Natural Resources, Former County Commissioner
Don Sorenson, Owner/operator of Virgelle Mercantile
Bronc Speak Thunder, Fort Belknap Bison Program
Jim Stone, Board Chair of the Blackfoot Challenge, Rancher
Scott Studiner, Forest Supervisor/Range Specialist for USFS Ashland District
Keith Tatsey, Blackfeet Community College
Mike Wheat, Montana Supreme Court Justice
Cody Yeager, Owner of feedlot north of Choteau
Harold Yeager, Rancher, Montana Overthrust Management, Activist against grizzly expansion

Enrollment

Enrollment in this course will be limited to twelve students. There are no academic prerequisites for this course. No backpacking or camping experience is required, but a reasonable level of fitness will be necessary to complete the course.

Sponsoring Organization

The Wild Rockies Field Institute (WRFI) is an independent, nonprofit educational organization founded in 1993. Our mission is to broaden the nature of a liberal arts education; teach critical thinking about social and environmental issues; to foster understanding of and respect for

natural and human communities; and to cultivate a sense of place that encourages personal, social and environmental responsibility. WRFI courses seek to understand the complex relationships between ecological processes and human actions. To varying degrees within each course, students study local ecology, policies directing public lands management, and ethics that underlie social relationships to the land. Our courses combine traditional classroom teaching methods – including lectures, readings, discussions, papers, and exams – with experiential explorations of the landscapes and communities we visit. We encourage careful observations, critical thinking, thoughtful dialogue, and exploration of diverse perspectives in order to develop the capacity for engaged citizenship in our students.

Wild Rockies Field Institute; P.O. Box 7071, Missoula, MT 59807. (406) 549-4336