



COURSE SYLLABUS

FW310 Mapping Diverse Perspectives in Conservation

Instructor Information

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Office Location: Wagar 211A

Office Hours: Monday 11am to noon (in person or virtual)

Communication Policy: Preferred contact by email (responses will usually be provided within 36 hours). *Note, if you message me through Canvas, my responses will be slower.*

Prerequisites for Course

None.

Course Description & Objectives

This course will provide students with the opportunity to use maps and geospatial tools to explore conservation through diverse social and cultural perspectives. Students will gain cultural competency skills in conjunction with applied GIS skills that will prepare them to meaningfully engage in multicultural perspectives in fish and wildlife conservation. Experience with GIS is not required.

Upon the completion of this course, students will be able to:

1. Articulate fundamental concepts in conservation science and practice, fish and wildlife management, and protected areas management, and apply them to other course activities.
2. Define key concepts in the scholarship on diversity, equity, inclusion, and justice, and differentiate the multiple dimensions of social and cultural diversity.
3. Recognize diverse human-environment relationships, including being able to examine environmental justice issues, compare dominant vs. marginalized environmental narratives, and explore cultural dimensions of human-wildlife conflict.
4. Process and analyze GIS data, visualize how cultural and societal issues intersect with conservation through mapping exercises, and identify Tribal GIS techniques.



5. Synthesize, analyze, and discuss conservation and wildlife management using diverse perspectives and different spatial contexts.
6. Practice oral and written communication skills: read and cite relevant literature in conservation, fish and wildlife management, and social justice; review peer writing and provide feedback; revise and rewrite papers; design and produce a creative project or talk summarizing a class topic.

Assignments' description & Alignment with course objectives

GIS Labs: Each student will participate in weekly GIS lab tutorials and will be responsible for turning in a weekly map assignment.

Reading and Leading Discussions: Many class sessions will include an in-class discussion of the assigned reading material. Over the course of the semester, each student will co-lead one discussion session with another student or the instructor. The **lead student(s) are expected to post 2-3 discussion questions to Canvas (Click the discussion tab on left, then click the +Discussion button) a minimum of two days prior to the discussion** (i.e., no later than 12:00 pm on Monday for a Wednesday discussion). At the start of the discussion, the lead student(s) will provide a concise (<5 min) overview of the assigned reading. Following the overview, the lead student(s) are expected to actively generate and facilitate discussion for approximately 15 minutes of the class session. All other students should come prepared to discuss the posted questions. Students unable attend an in-class discussion may earn points by posting a written response to the discussion questions to Canvas (a maximum of two times during the semester unless otherwise approved by the instructor).

GIS Project & Oral Presentation: Each student will do an independent mapping project based on any topic covered in class. Your project should include some spatial analysis of data and should be presented as a map and a brief writeup of the analysis you conducted and your interpretation of the results from your analysis. More detailed information on this assignment will be provided early in the semester. You will then have the opportunity to formally present your map to the class and share your findings in the style of a speed talk at a scientific conference (3-5 minute PowerPoint talk, 2 minutes of questions).

Exams: There will be a midterm and final exam. Both will be take-home exams consisting of short answer and essay questions and will be designed to encourage students to review and synthesize course material. Exam questions will be taken from lectures, discussions, mapping lab exercises, presentations, and assigned readings. An alternative exam date will only be approved if you speak with me several weeks in advance with a valid reason or under unforeseen circumstances (e.g., loss of family member, significant illness).

Course Schedule

Week	Topic	Lab
1 (8/21)	Introduction to Fish and Wildlife Conservation	An introduction to the use of maps in conservation
2 (8/28)	Introduction to Justice, Equity, Diversity, and Inclusion	An introduction to manipulating maps in ArcGIS to study patterns of socio-cultural diversity
3 (9/04)	Causes and Consequences of Biodiversity loss	GAP Analysis of Protected Area Coverage
4 (9/11)	Protected Areas and Displacement of Indigenous People for Parks	Mapping Indigenous Displacement for Conservation
5 (9/18)	Community/Biocultural/Place-based Conservation	Mapping Biological & Cultural Diversity Hotspots
6 (9/25)	Marginalized Narratives in Conservation	Decolonizing the Map
7 (10/02)	Introduction to Traditional Ecological Knowledge/Indigenous Science and Participatory Mapping	Participatory mapping of Traditional Ecological Knowledge
8 (10/09)	Midterm Review & Midterm	Exploring Traditional Ecological Knowledge with Storymaps
9 (10/16)	Conservation on Indigenous Lands	Tribal GIS
10 (10/23)	Environmental Justice: Pollution and Marginalized Communities in the US	Mapping Environmental Justice in US Cities
11 (10/30)	The Ecological and Evolutionary Consequences of Environmental Injustice in Urban Environments	Mapping the consequences of environmental injustice in urban environments for biodiversity and human health
12 (11/06)	Environmental Justice: Climate Change	Mapping the impacts of climate change on islands and livelihoods
13 (11/13)	Diverse perspectives in Human-Wildlife Conflict	Mapping human-wildlife conflict
	Fall Break (Nov 20-Nov 26)	
14 (11/27)	Solutions: Collaborative Conservation with Diverse Communities	Time to work on GIS Final Project
15 (12/04)	Exam Review and Course wrap-up	Presentations during final lab time
16 (12/11)	Final exam week (Dec 13-17)	No lab (finals week)

Textbook / Course Readings

There is no required textbook for this course.

Course Materials & Equipment

Course materials include articles from the primary literature, lecture material, and online media sources, which will all be posted on the class canvas page modules for each week. Students will also use ArcGIS Pro software, which will be available on the computers used in the lab sections.

Participation/Behavioral Expectations

This interactive class emphasizes student involvement and participation. Although there will be lectures by the instructor and guest speakers, the focus of the course will be on student-led discussions and mapping activities, and engagement in these discussions and activities is expected. I expect students to spend approximately 5 hours/week working on the course outside of the classroom.

It is my expectation that all students will engage in the course respectfully and that each student will participate in setting and upholding classroom norms that will support everyone in bringing their authentic experiences and ideas to the classroom. It is my intent that students from all backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups.

Course Policies (late assignments, make-up exams, etc.)

All late assignments will incur a 10% drop in grade per day unless an exception is granted in advance by the instructor. Make-up assignments and exams will be permitted for reasonable valid circumstances, but students must obtain permission from the instructor.

Grading Policy

Note: CSU does not use grades of C-, D+, or D-.

GRADE	RANGE
A+	100% to 96.67%
A	<96.67% to 93.33%
A-	<93.33% to 90.0%
B+	<90.0% to 86.67%
B	<86.67% to 83.33%
B-	<83.33% to 80.0%
C+	<80.0% to 76.67%

C	<76.67% to 70.0%
D	<70.0% to 60.0%
F	<60.0% to 0.0%

As a student enrolled in this course, one of your responsibilities is to submit course work by the due dates listed in Canvas. With that said, I take my role as your instructor very seriously, and, in fact, I care about how well you do in this course and that you have a satisfying, rewarding experience.

To that end, it is my commitment to you to respond individually to the work you submit in this class and to return your work in a timely manner. Smaller, **weekly assignments will be returned within 5 days and major assignments and exams will be returned within 10 days.** (If, however, due to unforeseeable circumstances, the grading of your work takes longer than the times I have listed here, I will keep you informed of my progress and make every effort to return your work with feedback as soon as I can.)

ASSIGNMENT	GRADE POINTS	GRADE PERCENTAGE
Weekly GIS Labs	300 (20-25 points/lab; 13 labs)	30
Weekly Discussions	100 (6-8 points/discussion; ~14 discussions)	10
Discussion Lead	100 points	10
Participation	50 points	5
GIS Project	200 points	20
Oral presentation	100 points	10
Exams	150 points (50 midterm + 100 final)	15
Total:	1000	100 %

*Keep a copy of all work created for the course, including work submitted through Canvas course learning management system.

Academic Integrity & CSU Honor Pledge

This course will adhere to the [CSU Academic Integrity/Misconduct](#) policy as found in the General Catalog and [the Student Conduct Code](#).



Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you affirm the CSU Honor Pledge as part of completing your work in this course.

COVID Guidelines

For the latest information about the University's COVID resources and information, please visit the CSU COVID-19 site: <https://covid.colostate.edu>

CSU Resources and Policies

Canvas Information & Technical Support

Canvas is where course content, grades, and communication will reside for this course.

Login: canvas.colostate.edu

Support: info.canvas.colostate.edu

For passwords or any other computer-related technical support, contact the [Central IT Technical Support Help Desk](#).

Voice: (970) 491-7276

Email: help@colostate.edu

The [Technical Requirements](#) page identifies the browsers, operating systems, and plugins that work best with Canvas.

Further information about Academic Integrity is available at CSU's [Academic Integrity - Student Resources](#).

Universal Design for Learning/Accommodation of Needs

I am committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning.

If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodation must be discussed in a timely manner. A verifying memo from [The Student Disability Center](#) may be required before any accommodation is provided.

The Student Disability Center (SDC) has the authority to verify and confirm the eligibility of students with disabilities for the majority of accommodations. While some accommodations may be provided by other departments, a student is not automatically eligible for those accommodations unless their disability can be verified and the need for the accommodation confirmed, either through SDC or

through acceptable means defined by the particular department. Faculty and staff may consult with the SDC staff whenever there is doubt as to the appropriateness of an accommodative request by a student with a disability.

The goal of SDC is to normalize disability as part of the culture of diversity at Colorado State University. The characteristic of having a disability simply provides the basis of the support that is available to students. The goal is to ensure students with disabilities have the opportunity to be as successful as they have the capability to be.

Support and services are offered to student with functional limitations due to visual, hearing, learning, or mobility disabilities as well as to students who have specific physical or mental health conditions due to epilepsy, diabetes, asthma, AIDS, psychiatric diagnoses, etc. Students who are temporarily disabled are also eligible for support and assistance.

Any student who is enrolled at CSU, and who self-identifies with SDC as having a disability, is eligible for support from SDC. Specific accommodations are determined individually for each student and must be supported by appropriate documentation and/or evaluation of needs consistent with a particular type of disability. SDC reserves the right to ask for any appropriate documentation of disability in order to determine a student's eligibility for accommodations as well as in support for specific accommodative requests. The accommodative process begins once a student meets with an accommodation's specialist in the SDC.

Copyrighted Course Materials

Please do not share material from this course in online, print, or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in the course are also subject to copyright protections. Posting course materials on external sites (commercial or not) violates both copyright law and the CSU Student Conduct Code. Students who share course content without the instructor's express permission, including with online sites that post materials to sell to other students, could face appropriate disciplinary or legal action.

Undocumented Student Support

Any CSU student who faces challenges or hardships due to their legal status in the United States and believes that it may impact their academic performance in this course is encouraged to visit [Student Support Services for Undocumented, DACA & ASSET](#) for resources and support. Additionally, only if you feel comfortable, please notify your professor so they may pass along any additional resources they may possess.

Food Insecurity

Any CSU student (along with faculty and staff) who is experiencing food insecurity can receive support from the [Rams Against Hunger](#) program. Services include a food pantry, a meal-swipe program, pocket pantries, and in-person assistance with navigating federal aid eligibility. The RAH page includes numerous resources as well as county, state and federal programs which are described and linked.

Title IX/Interpersonal Violence

For the full statement regarding role and responsibilities about reporting harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking, and the retaliation policy please go to: [Title IX – Sexual Assault, Sexual Violence, Sexual Harassment](#).

If you feel that your rights have been compromised at CSU, several resources are available to assist:

- Student Resolution Center, 200 Lory Student Center, 491-7165
- Office of Equal Opportunity, 101 Student Services, 491-5836

A note about interpersonal violence: If you or someone you know has experienced sexual assault, relationship violence and/or stalking, know that you are not alone. As instructors, we are required by law to notify university officials about disclosures related to interpersonal violence. Confidential victim advocates are available 24 hours a day, 365 days a year to provide support related to the emotional, physical, physiological and legal aftermath of interpersonal violence. Contact the Victim Assistance Team at: 970-492-4242.

Religious Observances

CSU does not discriminate on the basis of religion. Reasonable accommodation should be made to allow individuals to observe their established religious holidays.

Please see [CSU's Religious Observances Calendar](#).

Students seeking an exemption from attending class or completing assigned course work for a religious holiday will need to fill out [the Religious Accommodation Request Form](#) and turn it in to the Division of Student Affairs, located on the second level of the Administration building.

Once turned in, the Division of Student Affairs will review the request and contact the student accordingly. If approved, the student will receive a memo from the Dean of Students to give to their professor or course instructor.

Students are asked to turn in the request forms as soon as the conflict is noticed. Similarly, unanticipated conflicts requiring a religious observance, such as a death in the family, can also be reviewed.

CSU Principles of Community

Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents and contributions.

Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.

Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

Diversity and Inclusion

Respect for Diversity: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Student Parents/Guardians/Caregivers

I realize that student parents/guardians and caregivers face distinctive challenges in succeeding academically, and I'm committed to supporting those of you who are parents to achieve our course's learning outcomes. If you encounter challenges in meeting course expectations – for example, fulfilling attendance and participation requirements or submitting assignments due to a child or person in your care's illness, essential appointment, school closure, etc. – please contact me as soon as possible (beforehand if feasible or as soon afterward you reasonably can if not). We'll develop a plan for you to make up missed work. If you need to bring your child or person you care for to class, for example because you're nursing or planned childcare became unavailable, I encourage you to do

so if it's feasible for you to participate in class and support your child or person in your care.

Our group work assignments are designed to provide flexible approaches to participating, and all groups should develop plans that enable all members to contribute equitably. If your group encounters challenges in doing so, please reach out to me so we can work together to devise a solution.

Finally, know that [pregnant and parenting students are guaranteed equal educational opportunities by Title IX](#); know your rights, the protections provided, and how to advocate for yourself.

Student Case Management

[Student case management](#) is available to help students with extenuating life circumstances and connect them with resources. In some cases, after you and I discuss your situation, I may request [verifiable documentation for class absences](#) from the SCM office if you request considerations for absences or missed coursework.

Mental Health and Wellness

CSU is a community that cares. You are not alone. CSU Health Network Counseling Services has trained professionals who can help. Your student fees provide access to a wide range of support services.

Call Counseling Services at (970) 491-6053, and they will work together with you to find out which services are right for you.

Visit <https://health.colostate.edu/about-counseling-services> to learn more and <https://health.colostate.edu/mental-health-resources/> for additional student mental health and well-being resources. An extensive set of mental health resources is available to CSU students: <https://health.colostate.edu/mental-health-resources/>

If you are concerned about a friend or peer, use **Tell Someone** by calling (970) 491-1350 or visiting <https://supportandsafety.colostate.edu/tell-someone/> to share your concerns with a professional who can discreetly connect the distressed individual with the proper resources. Rams Take Care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.