NR 400: Public Communication in Natural Resources

This syllabus is subject to change, as situations may change throughout the semester

Department of Human Dimensions of Natural Resources

Warner College of Natural Resources, FALL 2023

Instructor:

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University Course Description:

Effective public relations and public information programs applicable to natural resource professions (3 credits).

Course Overview:

NR400 Public Communications in Natural Resources examines why public communication and engagement programs are important for natural resource management and how such programs can be implemented most effectively based on social science theory. Through readings, case studies, class projects, guest speakers, and other assignments, students will examine the desired objectives that natural resource management organizations often have for public engagement campaigns and how to best achieve these objectives. The class will focus on two objectives of public engagement campaigns: 1) building public support and changing behavior to achieve natural resource management outcomes; and 2) creating more inclusive natural resource management programs. Students will apply course material through weekly activities and discussions, two exams, and two projects, in which they will analyze and develop a public outreach campaign for a natural resource management issue.

Student Learning Goals:

In this course, students will:

- 1. **Identify the different objectives of public outreach and engagement programs** and be able to discuss, with specific examples, why each objective may be important for addressing natural resource management challenges.
- 2. **Understand key social science theories and research findings** as they relate to developing effective public outreach and engagement campaigns to achieve different objectives.
- 3. Analyze the effectiveness of real-life public engagement programs based on social science research and the desired objectives of public engagement.

4. **Design and implement public outreach and engagement strategies** to address a local natural resource management issue, based on social science research and the objectives of the public engagement program.

Class Structure:

This class will have both in-person and online content each week. You may have pre-recorded lecture content and you will often complete assignments online. Every week, you will be asked to participate in discussions and/or activities that build on the weekly lecture and readings, either alone or in a small group. Further, we recommend working with your study group each week, we will discuss forming these groups in class. The instructors and/or TA will answer questions about upcoming assignments, projects, and exams. To receive help, you may also post questions to an open discussion forum on canvas that will be accessible throughout the semester to receive feedback from other students and instructors. You may also schedule a time to meet with the instructor or TA.

COVID-19 Adjustments:

See: https://covid.colostate.edu/ for the most current info.

Assignments:

Nearly all assignments in this class should be typed and turned in via Canvas. We are confident that every student can perform well in this class if they study the lecture material and readings, complete the assignments thoroughly and on time, follow all assignment instructions posted on Canvas, and apply theories and concepts from lectures and readings to the various different assignments.

There are four different types of assignments in this class:

1) Exams

Because we all have experience working with people, some social science concepts reviewed in this class may initially

feel intuitive, until you must study and apply these concepts. To ensure that you have fully understood the material covered in lectures and readings, we will have 2 exams (1 note-sheet is permitted). These exams will happen in-person. Exams will include some questions reviewing basic concepts from the readings and lectures and some questions that require you to apply these concepts to analyze or develop strategies for a public outreach and engagement campaign. Each exam will be worth 40 points.

2) Weekly Activities

You will have one or more weekly activities or discussions due each week. Weekly activities will require you to apply concepts from lecture and readings. <u>Each set of weekly activities will be worth between 2-6 points total when combined.</u> These activities will often be introduced and administered in our weekly in-person session; sometimes they will be posted online. **They will typically be due by Sunday at midnight if they are not submitted that week in class.** Some of these weekly assignments will require you connecting and working with other students online. <u>At the beginning of</u> the semester, we will assemble study groups (in recitation) to work with on weekly activities

Grade Breakdown

- Exams: ~30% of grade, or 80 points total (2 exams, each worth 40 points)
- Weekly Activities: ~22% of grade, or 57 points total (2-6 points per week for 14 weeks); includes 5 points for general participation in recitation
- Project #1: Analyze a Communication Campaign: ~20% of grade, or 53 points total (50 points for project, plus 3 for the pre-project update)
- Project #2: Design a Behavior Change Campaign: ~20% of grade, or 53 points total (50 points for project, plus 3 for the pre-project update)
- Project #2 Flash Presentations: delivered in class week 14/15 (10 points) (~4% of grade)
- Pre- and Post- Course Reflection:
 ~4% of grade, or 10 points total (5 each)
- TOTAL POINTS: 263

throughout the semester. If you'd like to work with students other than your initial study group throughout the semester, please let the TA and instructor know by email. We recommend coordinating a way to contact group members throughout the week. For some weekly assignments, you will only have to turn in one copy per group if everyone's name is on the assignment-this will be specified in the assignment instructions. If one of your assigned group members is unresponsive and/or does not contribute to the assignment, you can exclude their name from the assignment (and they will have to complete it on their own to receive any credit). We also have 5 points allotted for general **participation** in the NR 400 in-person setting (assessment will be based on participation in recitation, communication about absences, and peer feedback).

3) Project #1: Analyze an Outreach Campaign

For the first half of the semester, you will work on your own or preferably with a group to analyze the effectiveness of an existing public outreach campaign based on the research-based practices that you read about and discussed in Unit 1 of the class. Your analysis will involve: 1) selecting an existing outreach campaign (in the form of videos, social media posts, brochures, or signs) designed to build public support or change behavior about a natural resource management issue; 2) determining who the target audience is and what the objective of the campaign is; 3) determining whether the message used in the campaign applied research-based practices for Step 3 of the planning framework from Unit 1; and 4) providing recommendations for how the message and campaign more broadly could be improved based on social science literature. You will write up your analysis in a 12-15 minute powerpoint presentation, which you will record virtually and turn in on canvas (please upload completely...do not share via Google slides as that has not historically worked well).

4) Project #2: Design an Integrated Communication and Behavior Change Campaign

For the second half of the semester, you will work on your own or in a group to develop a behavior change campaign. Your campaign will involve: 1) choosing a target audience and target behavior; 2) conducting surveys, focus groups, and/or interviews to understand your target audience's knowledge, attitudes, beliefs, values, opinion leaders, and barriers and motivations to behavior change; 3) developing a behavior change strategy and outreach materials based on your analysis of your target audience; and 4) writing up an evaluation plan.

5) Project #2 Flash Presentation

Each group (or individual if applicable) will present a 5-6 minute "flash" presentation on their groups project. More details will be provided closer to time. A few visuals/slides ast

	will be encouraged. Presentations will happen the la regular week of classes, in recitation.
6)	Pro- and Post-Course Reflection

Grading Scale:			
PERCENTAGE	LETTER GRADE		
98-100%	A+		
93-97%	A		
90-92%	A-		
87-89%	B+		
83-86%	В		
80-82%	B-		
77-79%	C+		
73-76%	С		
70-72%	C-		
60-69%	D		
<60%	F		

6) Pre- and Post-Course Reflection

In the first and last week of the class, you will be asked to complete a one-page reflection of your views on natural resource outreach and engagement. These reflections are used to help evaluate whether and how the course influenced students' views towards public outreach and engagement. These will be graded for completion, not for content.

Grading:

The assignments in class are designed to be gender and race fair assignments. The assignments are also designed to facilitate learning, not to measure innate ability or reify stereotypes. If you study lectures and readings, follow the directions for each assignment, apply concepts from class and lectures to the assignments and project, and approach your projects with passion and thoughtfulness, you should do well in this class.

Required Materials:

There is no required textbook for this class. We will be reading scholarly articles and documents. All readings will be posted on Canvas at least two weeks before we discuss the reading in recitation.

Course Policies:

Please invest in creating a respectful and professional learning environment for everyone.

Late Assignments:

We have scheduled assignments to facilitate students' learning, and it is important that students work to meet these deadlines. Furthermore, students will have several days to complete each exam and weekly activity. Therefore, we will not offer any credit for late weekly activities/discussion posts or late exams. Late projects will be penalized by a loss of 10% of the total possible points for each day they are late. For example, if a project due on Sunday at 5pm is turned in on Sunday at 5:30pm, it will receive a grade of no more than 90%. Exceptions may be made if students have contacted the TA in advance of the assignment's due date to receive a pre-approved absence, or in the case of family, health, or other emergencies.

Communication with Instructors:

Please contact the TA of this course if you have questions about missing class, assignments, or grading (and please copy Jamie on the email). Please contact Jamie if you have questions about the course content. When communicating with the instructors, please use the <u>colostate.edu</u> emails provided in the syllabus. <u>Please do not use Canvas for email communications</u>. Jamie and the TAs of this course will do their best to respond to all email requests within 48 business hours. Do not expect an email response on weekends or anytime earlier than 9 am or later than 5 pm on weekdays. Please practice professionalism when contacting Jamie and the TAs. Email requests are best for simple questions about scheduling or assignments. If you would like more in-depth advice about assignments and your project, please make an appointment to attend virtual office hours. We hope that you will take advantage of office hours to receive feedback on your projects throughout the term.

Academic Integrity; Colorado State University Student Code; and CSU Honor Pledge:

This course will adhere to the <u>Academic Standards and Policies</u> of the <u>Colorado State University General Catalog</u> and the <u>Student Conduct Code</u>. You can find additional resources information here: <u>CSU Academic Integrity/Misconduct</u>. Cheating and/or plagiarism will not be tolerated in class. If found cheating or plagiarizing, you will either automatically receive a failing grade for the class, or at a minimum, violations will result in a grading penalty and a report to the <u>Office of Conflict Resolution and Student Conduct Services</u> which can result in other University action. See the <u>Students' Rights</u> and <u>Students' Responsibilities</u> sections of the <u>Colorado State University General Catalog</u> for more information. Distractive behaviors such as talking to classmates, reading/watching videos (hardcopy or on-line) materials that are not a part of the current class, texting, phone calls, inappropriate discussion posts, and regularly coming to class late or leaving early are not acceptable. Students engaged in such activities may be asked to leave.

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: "I have not given, received, or used any unauthorized assistance."

Accommodations:

We will make reasonable accommodations for persons with documented disabilities. Any student eligible for academic adjustments because of a learning disability or medical condition should notify the Student Disability Center (https://disabilitycenter.colostate.edu/) located in TILT building, room 121 for accommodations. We can make accommodations only after receiving documentation from the Student Disability Center.

Classroom Conduct:

CSU's Principles of Community (https://inclusiveexcellence.colostate.edu/resources/principles-of-community/) challenge us to treat each other with respect and integrity, even when we disagree. CSU welcomes spirited dialogue and the opportunity to exchange challenging ideas without personal attack. We expect that as students in the class, you will: 1) Listen respectfully without interrupting; 2) Critique ideas, not individuals; 3) Avoid blame, speculation, and inflammatory language; 4) Allow everyone the chance to speak; 5) Avoid assumptions about any member of the class or generalizations about social groups and do not ask individuals to speak for their (perceived) social group.

CSU Land Acknowledgement:

Colorado State University acknowledges, with respect, that the land we are on today is the traditional and ancestral homelands of the Arapaho, Cheyenne, and Ute Nations and peoples. This was also a site of trade, gathering, and healing for numerous other Native tribes. We recognize the Indigenous peoples as original stewards of this land and all the relatives within it. As these words of acknowledgment are spoken and heard, the ties Nations have to their traditional homelands are renewed and reaffirmed. CSU is founded as a land-grant institution, and we accept that our mission must encompass access to education and inclusion. And, significantly, that our founding came at a dire cost to Native Nations and peoples whose land this University was built upon. This acknowledgment is the education and inclusion we must practice in recognizing our institutional history, responsibility, and commitment. (more information is here: https://landacknowledgment.colostate.edu/)

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.

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: https://titleix.colostate.edu/.

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

Additional Resources:

The Writing Center on campus can help you with your writing assignments. The Writing Center is located in Eddy 23. There are also electronic resources available to help you with your writing at https://writingcenter.colostate.edu/

	Weekly Schedule		
Week and Objective	<u>Lecture</u> - in-person session	Weekly Activities- due in class sessions and/or by Sunday at midnight in Canvas	Readings- (to be completed prior to our in- person session each week)
	Unit 1 –Build	ling Public Support and Cha	nging Behavior
Week 1: Class overview; Unit 1 model (starts August 21)	Lecture Introduction and City of Fort Collins Natural Areas Department and Public Outreach by Zoe Shark (and complete weekly readings for recitation as assigned in week 1 via email)	Complete Pre-Course Reflection (in class) Case Study Jigsaw: Linking public perceptions to public support/behaviors & NRM outcomes Discussion: Post your introduction to Canvas discussion (and any proposed additions to the class code of ethics) (generally due by Sunday at midnight)	Read one of these three papers that corresponds with your assigned jigsaw number in canvas and take notes on 1) what knowledge, attitudes, beliefs, and barriers influenced public support/behavior and 2) how public support/behaviors influenced a natural resource management outcome Group 1: Public Opposition to Biocontrol in Hawaii – Warner, K. D., & Kinslow, F. (2013). Manipulating risk communication: value predispositions shape public understandings of invasive species science in Hawaii. Public Understanding of Science, 22(2), 203-218 Group 2: Public Perceptions on Wolf Management and Restoration – Nie, M. A. (2001). The sociopolitical dimensions of wolf management and restoration in the United States. Human Ecology Review, 1-12. Group 3: Public Perceptions of Wildfire – Lichtman, P. (1998). The politics of wildfire: lessons from Yellowstone. Journal of Forestry, 96(5), 4-9. All students skim: Niemiec, R., Berl, R. E., Gonzalez, M., Teel, T., Salerno, J., Breck, S., & Crooks, K. (2022). Rapid changes in public perception toward a conservation initiative. Conservation Science and Practice, 4(4), e12632.
Week 2 The problem with the rational-actor model (starts Aug. 28)	Lecture: How should we conduct public outreach and engagement? The problem with the rational actor	Discussion: Acknowledging our assumptions about communication → introduce project #1 Activity: Exploring cognitive biases Dan Ariely's TED talk: https://www.youtube.com/wat ch?v=9X68dm92HVI (why humans do not behave rationally)	Read Cone, J. (2008). Hold that thought: questioning five common assumptions about communicating with the public. Oregon State University, Oregon Sea Grant. Cognitive Bias Cheat sheet: https://betterhumans.coach.me/cognitive-bias-cheat-sheet-55a472476b18 Connections to democracy→ 11 cognitive biases that influence politics. (2020): https://www.weforum.org/agenda/2020/08/11-cognitive-biases-that-influence-political-outcomes/ OPTIONAL→ Cognitive Bias 101: What it is and How to Overcome It. (2023) https://health.clevelandclinic.org/cognitive-bias/

Week 3 A revised model of outreach: the planning framework (starts Sept. 4)	Lecture: The planning framework for outreach and behavior change, Parts 1-3	Activity: Conducting audience research to inform the planning framework + project #1 connections Examples related to democracy. Video on global warming's six Americas: https://climatecommunication.yale.edu/news-events/global-warmings-six-americas/ Video on interview techniques: https://www.youtube.com/watch?v=9t_hYjAKww	Read National Interagency Fire Center "Communication Planning and Strategy" section B 4.5-4.10: https://www.nifc.gov/PUBLICATIONS/communicators_guide/4%20Communication.PDF de Bruin, W. B., & Bostrom, A. (2013). Assessing what to address in science communication. <i>Proceedings of the National Academy of Sciences</i> , 110(Supplement 3), 14062-14068. Overview of biased survey questions: https://surveytown.com/10-examples-of-biased-survey-questions/ Global Warmings Six Americas, website. (2023). https://climatecommunication.yale.edu/about/projects/global-warmings-six-americas/
Week 4 Effective message framing (starts Sept. 11)	Lecture: Research-based practices for message framing, Part 1 and 2	Discussion: Reflecting on effective message framing Activity: Designing messages based on research-based practices for effective framing + project #1 connections Video on Jonah Berger's virality principles: https://www.youtube.com/watch?v=iRMdvhBiOQU	Read All but lesson #3 on social norms: Kusmanoff, A. M., Fidler, F., Gordon, A., Garrard, G. E., & Bekessy, S. A. (2020). Five lessons to guide more effective biodiversity conservation message framing. Conservation Biology All but best practice #2 on social norms: Van der Linden, S., Maibach, E., & Leiserowitz, A. (2015). Improving public engagement with climate change: Five "best practice" insights from psychological science. Perspectives on Psychological Science, 10(6), 758-763. Berger, J., & Milkman, K. L. (2013). Emotion and virality: what makes online content go viral? GfK Marketing Intelligence Review, 5(1), 18-23.
Week 5 Combatting misinformation, denial, and defensiveness (starts Sept. 18)	Lecture: Outreach interventions for combatting misinformation, denial, and defensiveness, Part 1 and 2	Activity: Combatting misinformation, denial, and defensiveness	Read Cook, J., Lewandowsky, S., & Ecker, U. K. (2017). Neutralizing misinformation through inoculation: Exposing misleading argumentation techniques reduces their influence. <i>PloS one</i> , 12(5). Introduction (Section I) of Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-affirmation theory. <i>Advances in experimental social psychology</i> , 38, 183-242.
Week 6 More on behavior change	Lecture: Additional barriers, motivations, and strategies for behavior change, Parts 1-4	Case Study Jigsaw: Exploring barriers & motivations to behavior change and behavior change	Read

(starts Sept. 25)	The video that corresponds with your jigsaw number: Group 1- Fishery Management: https://vimeo.com/246978894 Group 2- Meat Consumption: https://vimeo.com/246968480 Group 3- Illegal Wildlife Trade: https://vimeo.com/247003950	strategies + project #1 connection	McKenzie-Mohr, D., & Schultz, P. W. (2014). Choosing effective behavior change tools. <i>Social Marketing Quarterly</i> , 20(1), 35-46 Sections on social norms in Van der Linden et al. (2015) and Kusmanoff et al. (2020)
Week 7 Environmental education and interpretation (starts Oct. 2)	Lecture: Research-based practices for enhancing learning through interpretation and environmental education, Part 1 and 2 RECITATION may be a walkable field trip one of these weeks- stay tuned!	Group Activity: Analyzing interpretation exhibits Project # 1 discussion and touch base in class	Read Introduction, pg 372-373, 375, and 377 of Ballantyne, R., Packer, J., Hughes, K., & Dierking, L. (2007). Conservation learning in wildlife tourism settings: Lessons from research in zoos and aquariums. Environmental Education Research, 13(3), 367-383. Read Skibins, J. C., Powell, R. B., & Stern, M. J. (2012). Exploring empirical support for interpretation's best practices. Journal of Interpretation Research, 17(1).
Week 8 Building trust (starts Oct. 9)	Lecture: Tools and techniques for building trust, Part 1 and 2 RECITATION may be a walkable field trip one of these weeks- stay tuned!	Discussion: Building trust (be sure you posted your Exam Q/A discussions) Project #1 is due! Discussion week (8 & 9): Exam #1 Q/A sessions in class and online	Read Davenport, M. A., Leahy, J. E., Anderson, D. H., & Jakes, P. J. (2007). Building trust in natural resource management within local communities: a case study of the Midewin National Tallgrass Prairie. Environmental management, 39(3)
Week 9: Recruiting and Retaining Volunteers (starts Oct. 16)	Lecture: Recruiting and retaining volunteers, Part 1 and 2 RECITATION may be a walkable field trip one of these weeks- stay tuned!	Group Activity (9): Design a volunteer program to enhance retention	Read Asah, S. T., & Blahna, D. J. (2013). Practical implications of understanding the influence of motivations on commitment to voluntary urban conservation stewardship. <i>Conservation Biology</i> , 27(4), 866-875.

Week 10: The ethics of attitude and behavior change (starts Oct. 23)	Lecture: Ethics of behavior change	Activity: Intro activity for Project #2 initial planning due on Canvas Discussion week (8 & 9): Exam #1 Q/A sessions in class and online Discussion: The ethics of attitude and behavior change Exam #1 to be held in class (recitation)- week 10	History of PWV: https://lnt.org/authority-of-poudre-wilderness-volunteers Authority of the Resource: https://lnt.org/authority-of-the-resource/ Read Sunstein, C. R. (2015). Nudging and choice architecture: Ethical considerations. yale Journal on Regulation, Forthcoming . SKIM FOR KEY TAKE-AWAY: Tannenbaum, D., Fox, C. R., & Rogers, T. (2017). On the misplaced politics of behavioural policy interventions. <a href="https://www.pwv.org/about-us/https://www.pwv.org/about-us/https://www.pwv.org/about-us/https://www.pwv.org/about-us/https://www.pwv.org/about-us/https://www.pwv.org/about-us/https://www.pwv.org/about-us/https://www.pwv.org/about-us/history-of-poudre-wilderness-volunteers-volun</th></tr><tr><td></td><td>Unit 2 – Creating More
Inclusive Natural
Resource Management
Programs</td><td></td><td></td></tr><tr><td>Week 11 → Diversity and inclusion in NRM: an introduction (starts Oct. 30)</td><td>Unit 2 Introduction (catch-up on any missed ethics content)</td><td>Lecture on diversifying conservation Online lecture by Jose Gonzalez, Latino Outdoors https://www.youtube.com/watch?v=gcMPfhuvY0I Project #2 check-in draft plans and share in class (including issue and current questions drafted) >> Discussion Post on Canvas <td>Read Gould, R. K., Phukan, I., Mendoza, M. E., Ardoin, N. M., & Panikkar, B. (2018). Seizing opportunities to diversify conservation. <i>Conservation Letters</i>, 11(4), e12431. Jones, M. S., & Solomon, J. (2019). Challenges and supports for women conservation leaders. <i>Conservation Science and Practice</i>, 1(6), e36. Toone, T. A., et al. (2022) Inclusive restoration: ten recommendations to support LGBTQ+ researchers in restoration science. https://doi.org/10.1111/rec.13743 Taylor, D. E. (2014). The state of diversity in environmental organizations. <i>Ann Arbor</i>, MI: University of Michigan.</td>	Read Gould, R. K., Phukan, I., Mendoza, M. E., Ardoin, N. M., & Panikkar, B. (2018). Seizing opportunities to diversify conservation. <i>Conservation Letters</i> , 11(4), e12431. Jones, M. S., & Solomon, J. (2019). Challenges and supports for women conservation leaders. <i>Conservation Science and Practice</i> , 1(6), e36. Toone, T. A., et al. (2022) Inclusive restoration: ten recommendations to support LGBTQ+ researchers in restoration science. https://doi.org/10.1111/rec.13743 Taylor, D. E. (2014). The state of diversity in environmental organizations. <i>Ann Arbor</i> , MI: University of Michigan.
Week 12 Indigenous knowledge in NRM education and research (starts Nov. 6)	Dr. Dominique David-Chavez's lecture (first third of video): https://www.youtube.com/wat ch?v=-C2_mXLV1ng&t=196s Dr. Megan Bang's lecture: https://www.youtube.com/wat ch?v=vOqlWD0vU	Discussion: Indigenous knowledge in NRM education and research Individual Activity: Diversifying conservation	Read Huntington, H. P. (2000). Using traditional ecological knowledge in science: methods and applications. <i>Ecological applications</i> , 10(5), 1270-1274. David-Chavez, D. M., & Gavin, M. C. (2018). A global assessment of Indigenous community engagement in climate research. <i>Environmental Research Letters</i> , 13(12), 123005.	

			Indigenous Education Tools, Briefs 1 and 5: http://indigenouseducationtools.org/bf/01 http://indigenouseducationtools.org/bf/05
Week 13 Promoting environmental justice (starts Nov. 13)	Cate Mingoya and Dr. Jeremy Hoffman lecture: https://www.youtube.com/wat ch?v=hSXCS8mukFc&feature =youtu.be	Group Activity: Environmental justice case studies & Exploring redlining in your city Time for check-in on flash presentations.	Read Schell et al. 2020. The ecological and evolutionary consequences of systemic racism in urban environments. Science. https://science.sciencemag.org/content/early/2020/0 8/12/science.aay4497 The principles of environmental justice: https://www.nrdc.org/sites/default/files/ej-principles.pdf AND: Cesar Chavez's address: https://ufw.org/cesar-chavezs-first-major-address-36-day-1988-fast-pesticide-poisoning-farm-workers-2/ OR Flint Water Crisis: https://www.nrdc.org/stories/flint-water-crisis-everything-you-need-know#sec-summary
FALL (Nov. 20)	BREAK	FALL BREAK	FALL BREAK
Week 14 Involving diverse publics in decision-making (starts Nov. 27)		Project #2 Flash Presentations in Recitation!	
Week 15 (starts Dec. 4)	Lecture: Involving diverse publics in decision-making, Lecture: Involving diverse publics: a case study of wolf reintroduction and US wildlife management	Discussion: Exam #2 Q&A in class and online Group Activity: Stakeholder engagement connections to project #2 Project #2 report due by midnight on Sunday	Read Luyet, V., Schlaepfer, R., Parlange, M. B., & Buttler, A. (2012). A framework to implement stakeholder participation in environmental projects. Journal of Environmental Management, 111, 213– 9. Reed, M. S. (2008). Stakeholder participation for environmental management: a literature review. Biological conservation, 141(10), 2417- 2431. Manfredo, M. J., Salerno, J., Sullivan, L., & Berger, J. (2019). For US Wildlife Management, Social Science Needed Now More Than Ever. BioScience, 69(12), 960-961.

Week 16 (starts Dec.11) Finals Period		Final Exam, will be Finals Week (in-person)	
Have a great break and please stay in touch!			
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