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ENVS 411/511
M/W 12 – 1:50 pm
Office Hours: T/Th 12 – 1 pm

Climate Change and Indigenous Peoples in the United States

Indigenous peoples have contributed comparatively little to the causes of climate change, and yet face disproportionate risks. American Indian, Alaska Native and Native Hawaiians in the United States have unique rights, cultures, and economies that are, or could be, vulnerable to climate change impacts. For indigenous peoples, the environmental impacts of climate change and some of the proposed solutions threaten ways of life, subsistence, lands rights, future growth, cultural survivability, spirituality, and financial resources.

This course will introduce students to the impacts that climate change is already having and is anticipated to have on tribal culture and sovereignty in the United States. The course will include a brief introduction to the history, culture and political standing of indigenous peoples the United States, as well as an overview of the projected consequences of climate change for tribes in the United States. This introduction is intended to help build an understanding of why the impacts of climate change on tribal culture and sovereignty must be addressed through the myriad of climate change policies and programs currently under development at state, regional and national levels in the U.S. Other specific topics explored during the course will include indigenous rights and tribal sovereignty in the U.S., social vulnerability and climate justice.

The course will use recent literature related to climate change and tribes in the U.S., as well as research, resources and information developed through the Pacific Northwest Tribal Climate Change Project, which is a collaborative effort between the University of Oregon Environmental Studies Program and the USDA Forest Service Pacific Northwest Research Station.

Course Objectives:

- Understand how climate change will uniquely affect indigenous communities in the United States in regards to sovereignty and traditional ways of life.
- Research issues facing indigenous populations in the United States, and to investigate consequences to indigenous peoples in the U.S. broadly, including native Hawaiian populations and un-recognized tribes.
- Draw connections between the impacts of climate change on indigenous culture and traditional ways of life and a range of environmental sectors, including natural resources, fisheries and wildlife, marine and freshwater environments and other ecosystems.
- Build an understanding of traditional knowledge and environmental justice in the context of climate change, while drawing parallels with other environmental issues.

Assignments

Reading Journal/Mini-Essay

All students will be asked to keep a weekly journal that describes your reactions to the readings and in-class presentations, questions you have about the material, ideas you have for your research paper and a paragraph reflecting on the theme addressed each week. I expect journal entries to be no more than 1-2 pages each week. Journals should be submitted by email to kathy@uoregon.edu before class the day they are due. As such, each Thursday we will use the reading journals during our discussion sessions so please be sure to bring them with you (hard copy or on your computer).

In-Class Student Presentation

Each undergraduate student will give a 5-minute presentation during the course of the term. The presentations will focus on a recent event, policy or publication on the subject of indigenous peoples and climate change.

Graduate students will lead a discussion for one class period. Each discussion session will include giving a 5-10 minutes presentation on your topic, and then leading a 15-20 minute discussion with students. Students will meet with me in advance to plan the material.

Mid-term Research Paper

All students will write one research paper (undergraduates 4-6 pages; graduate students 8-10 pages) on a topic of their choice related to climate change and indigenous peoples in the United States. Topics and a draft outline are due in week 3 and draft papers are due week 5. I will provide comments and allow for revisions to be submitted for full credit by week 9.

Final Project: Tribal Profiles

Working in small groups, students will identify an indigenous community in the United States working to address climate change, and will develop a 3-4 page profile and PowerPoint presentation documenting the tribes' efforts. Each profile will include four sections: 1) a summary of potential impacts that may affect the tribe, 2) tribal goals and objectives related to climate change, 3) anticipated or current outcomes from their climate change efforts, and 4) challenges and lessons learned. To develop the profile, students should use existing information from academic literature, tribal websites, or government and non-government sources. Students ***should not*** contact tribes for more information. Presentations will be made in class during week 10, and final profiles will be submitted at that time.

By week 3, I will ask students to [sign-up](#) for profile groups by region. It's fine to have two separate profiles/groups for the same region. About once a week, I will provide time in class for profile groups to meet. For ideas on how existing profiles have been developed, visit:

<http://tribalclimate.uoregon.edu/tribal-profiles/> and

<http://www4.nau.edu/tribalclimatechange/tribes/index.asp>. These links are intended to inspire the kind of information you may look for, but you should not develop a profile based on one that has already been done. Look for new examples of tribal efforts to address climate change across the country.

Outstanding profiles may be invited to revise and submit for consideration to be posted on the Tribal Climate Change project website.

***Undergraduate students will work in groups of 3-4; graduate students will work in groups of 2-3.*

Grading Summary

Grading Summary	% of Grade	Due Date
Reading journals	15%	Email to kathy@uoregon.edu before the beginning of each Thursday class (weeks 1-8)
In-class Participation	15%	Duration of fall term
In-class Presentation (Graduate Student Discussion Session)	10%	Sign-up at: https://docs.google.com/spreadsheets/cc?key=0Ah2p3YBI1GbYdFN2SjhISXZROVRub3IPcU9BX3dRYIE&usp=sharing
Research Paper	20%	<ul style="list-style-type: none">• Topic and Draft Outline due 10/17/2013• Comments back to students on 10/22/2013• Draft Paper due 10/31/2013• Comments back to students by 11/12/2013• Revised Paper due 11/26/2013
Tribal Profile Project	20%	Presentations will take place on 12/3 and 12/5 during class
Take home final exam	20%	You will receive exam questions on 12/5/2013, exams are due by 10 am on 12/10/2013

Course Literature

There are two required books for this course. Both will be on hold at the Knight Library and available in my office during office hours.

- Wildcat, D. (2009). *Red Alert! Saving the Planet with Indigenous Knowledge*. Boulder, CO: Fulcrum Publishing.
- Grossman, Z. & Parker, A. (eds) (2012). *Asserting Native Resilience: Pacific Rim Indigenous Nations Face the Climate Crisis*. Corvallis, OR: Oregon State University Press.

All other articles can be accessed online. If you have trouble downloading any of the articles email kathy@uoregon.edu.

Course Policies and Procedures

Communication: If you have questions, concerns or thoughts about the class, you should email me at kathy@uoregon.edu or plan to come by and talk with me during office hours. In the subject of all emails, please include ENV5 411/511. This will ensure I look at your email in a timely manner.

Google Drive: I have created a workbook on Google Drive to manage class presentations, tribal profile projects and other details about the class. Please bookmark this link as you will use it often: <https://docs.google.com/spreadsheets/cc?key=0Ah2p3YBI1GbYdFN2SjhISXZROVRub3IPcU9BX3dRYIE&usp=sharing>. You will all see the syllabus and links to download all articles and readings that are available online.

Class format

This class will be reading intensive, and will be highly interactive. The class will open each day with a brief lecture, and move into large group discussion and/or small group discussions.

Attendance: Please arrive on time (or a few minutes early) and be prepared to participate fully in the class. Please let me know in advance (by email) if you will be arriving late or need to leave early. Attendance is a critical part of your participation in the course given the emphasis placed on class

participation and small group interactions. Please inform me *ahead of time* (or as soon as possible after the fact) if you will be absent from a class and we can work out a way to accommodate the absence.

In-class Participation: You are expected to prepare for, attend and actively participate in classes. The course content will include discussion of a wide range of cultural, political and social issues related to indigenous peoples and climate change. As such, it will require critical thinking, sensitivity, and mutual respect in all of our discussions. Being prepared for each class means completing the readings, which directly relates to that day's class discussion. Accordingly, the quality of your learning is directly related to the quality of your preparation.

Technology: To reduce distraction and increase classroom participation, cell phones are not to be used during class. Please contact me by email or during office hours if you would like to request an exception. Please be sure to turn your cell phones to silent before class begins. You may bring your computers into the classroom to take notes, reference your reading journals and occasionally conduct in-class research. However, I ask that you be highly respectful to your fellow students and me by only using your computer for class purposes during the class period.

Assignments: Assignments are due electronically on *before class* on the assigned date. All assignments must be submitted by email to kathy@uoregon.edu.

Citing Sources: For all written assignments, please cite your sources according to a commonly used standard. You can find links to commonly used style guides on the UO library website at: <http://libweb.uoregon.edu/guides/citing/index.html>. I recommend using the [APA Manual](#).

UO Affirmation of Community Standards: “The University of Oregon community is dedicated to the advancement of knowledge and the development of integrity. In order to thrive and excel, this community must preserve the freedom of thought and expression of all its members. The University of Oregon has a long and illustrious history in the area of academic freedom and freedom of speech. A culture of respect that honors the rights, safety, dignity and worth of every individual is essential to preserve such freedom. We affirm our respect for the rights and well-being of all members. We further affirm our commitment to:

- Respect the dignity and essential worth of all individuals.
- Promote a culture of respect throughout the University community.
- Respect the privacy, property, and freedom of others.
- Reject bigotry, discrimination, violence, or intimidation of any kind.
- Practice personal and academic integrity and expect it from others.
- Promote the diversity of opinions, ideas and backgrounds, which is the lifeblood of the university.”

The University of Oregon provides specific codes of conduct and how academic misconduct will be addressed. Please be aware of the following policies:

- **University of Oregon Student Conduct Code:** <http://uodos.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode/tabid/69/Default.aspx>
- **Academic Misconduct:** <http://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct/tabid/248/Default.aspx>
- **Plagiarism:** <http://library.uoregon.edu/guides/plagiarism/students/index.html>

Course Schedule

Week	Date	Topic(s)	Required Reading	Assignments
1	10/1/2013	Introduction to the course content, and an orientation to the course format. Overview of climate science and impacts, and in particular how known science impacts pertain to American Indian and Alaska Native tribes.	<ul style="list-style-type: none"> Red Alert. Introduction (pg. 1 – 12) Asserting Native Resilience. Forward (pg. 10 – 16) 	
	10/3/2013	Overview of climate science and impacts	<ul style="list-style-type: none"> Draft 2013 National Climate Assessment - Executive Summary. http://ncadac.globalchange.gov/download/NCAJan11-2013-publicreviewdraft-chap1-execsum.pdf IPCC, 2012: Summary for Policymakers. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 3-21. https://www.ipcc-wg1.unibe.ch/srex/downloads/SREX-SPM_FINAL.pdf EPA Climate Change Indicators in the United States. Summary Report. http://www.epa.gov/climatechange/pdfs/CI-summary-2012.pdf 	⇒ Reading Journal #1 due
2	10/08/13	Climate Change and Culture Cultural perspectives on climate change	<ul style="list-style-type: none"> Asserting Native Resilience. I – Cultural Perspectives (pg. 22 -50) Red Alert. Chapters 1 and 2 (pg. 13 – 38) 	⇒ Sign up for in-class presentation/discussion session
	10/10/13	Impacts of climate change on tribal culture and traditional ways of life	<ul style="list-style-type: none"> Asserting Native Resilience. II. Effects of the Climate Crisis (pg. 52 – 67). Lynn, K., MacKendrick, K. and Donoghue, E. 2011. Social vulnerability and climate change: synthesis of literature. Authors: 2011. Gen. Tech. Rep. PNW-GTR-838. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Pages 32 – 55. http://www.treearch.fs.fed.us/pubs/38465 	⇒ Reading Journal #2 due

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3	10/15/13	<p>Climate change impacts on tribal sovereignty Exploration of how climate change will impact tribal treaty and reserved rights.</p>	<ul style="list-style-type: none"> • Red Alert. Chapter 3 (pg. 39-54) • Hanna, Jonathan and Mark Squillace. 2007. "Native Communities and Climate Change: Legal and Policy Approaches to Protect Tribal Legal Rights." Boulder, CO: University of Colorado School of Law Natural Resource Law Center. (Pages 1-32) https://adapt.nd.edu/resources/696/download/07_RR_Hanna.pdf • Indigenous Peoples' Global Summit on Climate Change. 2009. The Anchorage Declaration. http://unfccc.int/resource/docs/2009/smsn/ngo/168.pdf 	⇒ Individual Paper Topic and Draft Outline due
	10/17/13	Federal Trust Responsibility in a Climate Change Context. Understanding the impacts of climate change on cultural resources on- and off-reservation.	<ul style="list-style-type: none"> • Whyte KP (2013) Justice Forward: Tribes, Climate Adaptation and Responsibility in Indian Country. Climatic Change. DOI: 10.1007/s10584-013-0743-2. http://link.springer.com/article/10.1007/s10584-013-0743-2 • Executive Order: Consultation and Coordination With Indian Tribal Governments http://www.gpo.gov/fdsys/pkg/FR-2000-11-09/pdf/00-29003.pdf • Secretarial Order 3289: Addressing the Impacts of Climate change on America's Water, Land and Other Natural and Cultural Resources • http://www.doi.gov/whatwedo/climate/cop15/upload/SecOrder3289.pdf 	⇒ Reading Journal #3 due ⇒ Robin Kimmerer Lecture ⇒ Small Groups will identify their profile topic
4	10/22/13	<p>Week 4: Traditional Knowledge and Cultural Perspectives on Climate Change The role of traditional knowledge in understanding climate change impacts</p>	<ul style="list-style-type: none"> • Red Alert. Chapter 5 (pg. 73 – 98) • Vinyeta K, Lynn K (2013) Exploring the Role of Traditional Ecological Knowledge in Climate Change Initiatives. USDA Forest Service General Technical Report. http://www.fs.fed.us/pnw/pubs/pnw_gtr879.pdf 	<i>Guest Speaker: Kirsten Vinyeta</i> ⇒ Students will receive comments on their topic outline
	10/24/13	Understanding how traditional knowledge can inform climate change solutions	<ul style="list-style-type: none"> • Nakashima, D.J., Galloway McLean, K., Thulstrup, H.D., Ramos Castillo, A. and Rubis, J.T. 2012. Weathering Uncertainty: Traditional Knowledge for Climate Change Assessment and Adaptation. Paris, UNESCO, and Darwin, UNU, 120 pp. http://www.unutki.org/downloads/File/Publications/Weathering-Uncertainty_FINAL_12-6-2012.pdf (pg. 27 – 51) • Williams, Terry; Hardison, Preston D. (2013) Culture, Law, Risk and Governance: The Ecology of Traditional Knowledge in Climate Change Adaptation. Climatic Change. 	⇒ Reading Journal #4 due

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5	10/29/13	<p>Week 5: Climate Change Impacts on Indigenous Peoples: Sea Level Rise and Marine Resources Effects of sea level rise on tribal resources and homelands; relocation</p>	<ul style="list-style-type: none"> • Maldonado JK, Shearer C, Bronen R, Peterson K, Lazrus H (2013) The Impact of Climate Change on Tribal Communities in the US: Displacement, Relocation, and Human Rights. Climatic Change. DOI: 10.1007/s10584-013-0746-z http://link.springer.com/article/10.1007/s10584-013-0746-z • Cochran P, Huntington OH, Pungowiyi C, Tom S, Chapin FS, Huntington HP, Maynard NG, Trainor SF (2013) Indigenous Frameworks for Observing and Responding to Climate Change in Alaska. Climatic Change. DOI: 10.1007/s10584-013-0735-2 http://link.springer.com/article/10.1007/s10584-013-0735-2 • Alaska Native Tribal Health Consortium – Local Environmental Observer Network (http://www.anthc.org/chs/ces/climate/leo/) 	Can't stop the water: http://www.cottagefilms.com/projects.htm
	10/31/13	Implications of sea level rise and ocean acidification in Washington State	<ul style="list-style-type: none"> • Papiez Z. (2012) Climate Change in the Quileute and Hoh Nations of Coastal Washington. In: Grossman, Zoltán and Parker, Alan (eds): Asserting Native Resilience: (pg. 68-88). 	⇒ Reading Journal #5 due ⇒ Midterm paper due
6	11/5/13	<p>Week 6: Climate Change Impacts on Indigenous Peoples: Water Resources and Fisheries Impacts of climate change on water and culturally significant fisheries</p>	<ul style="list-style-type: none"> • Dittmer K (2013) Changing Streamflow on Columbia Basin Tribal Lands- Climate Change and Salmon. Climatic Change. DOI: 10.1007/s10584-013-0745-0 http://link.springer.com/article/10.1007/s10584-013-0745-0 	
	11/7/13	Habitat restoration and species conservation in a climate change context (Pacific Northwest case studies)	<ul style="list-style-type: none"> • Grah O, Beaulieu J (2013) The Effect of Climate Change on Glacier Ablation and Baseflow Support in the Nooksack River Basin and Implications on Pacific Salmon Species Protection and Recovery. Climatic Change. DOI: 10.1007/s10584-013-0747-y http://link.springer.com/article/10.1007/s10584-013-0747-y 	⇒ Reading Journal #6 due

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7	11/12/13	<p>Week 7: Climate Change Impacts on Indigenous Peoples: Forests</p> <p>Impacts of climate change in forested areas on culturally important fungi, plant and animal species</p>	<ul style="list-style-type: none"> Lynn K, Daigle J, Lake FK, Ranco D, Voggesser G (2013) Cultural Impacts to Tribes from Climate Change Influences on Forests. Climatic Change. DOI:10.1007/s10584-013-0733-4 http://link.springer.com/article/10.1007/s10584-013-0733-4 Mason L, White G, Morishima G, Alvarado E, Andrew L, Clark F, Durglo M, Durglo J, Eneas J, Erickson J (2012) Listening and learning from traditional knowledge and Western science: a dialogue on contemporary challenges of forest health and wildfire. J For 110:187–193 http://www.bia.gov/cs/groups/xnifc/documents/text/idc-018689.pdf 	⇒ Students will receive comments on midterm papers
	11/14/13	Tribal practices related to forestry, invasive species, traditional use of fire and tribal-federal coordination on resource management projects in a climate context.	<ul style="list-style-type: none"> Daigle JJ, Putnam D (2009) The meaning of a changed environment: initial assessment of climate change impacts in Maine—indigenous peoples. In: Jacobson GL, Fernandez IJ, Mayewski PA, Schmitt CV (eds) Maine’s climate future: an initial assessment. University of Maine, Orono, pp 37-40 http://climatechange.umaine.edu/files/Maines_Climate_Future.pdf 	⇒ Reading Journal #7 due
8	11/19/13	<p>Week 8: Climate Change Impacts on Indigenous Peoples: Traditional Foods</p> <p>Cultural context for the importance of traditional foods to tribal culture and examination of the multi-faceted relationship that tribes have with places, ecological processes and species. Approaches to conserving and managing for traditional foods in a climate change context.</p>	<ul style="list-style-type: none"> Lynn K, Daigle J, Hoffman J, Lake FK, Michelle N, Ranco D, Viles C, Voggesser G, Williams P (2013) The Impacts of Climate Change on Tribal Traditional Foods. Climatic Change. DOI: 10.1007/s10584-013-0736-1. http://link.springer.com/article/10.1007/s10584-013-0736-1 Viles C (2012) First Foods and Climate Change. Tribal Climate Change Profile. http://www4.nau.edu/tribalclimatechange/tribes/tdk_firstfoods.asp 	
	11/21/13	Tribal Strategies to Address Climate Change: Mitigation and Adaptation Strategies	<ul style="list-style-type: none"> Asserting Native Resilience – Current Responses (pg. 125 – 158) 	⇒ Reading Journal #8 due
9	11/26/13	Week 9: Considerations for the Future	<ul style="list-style-type: none"> Asserting Native Resilience – Possible Paths (pg. 161 – 192) Red Alert, Chapter 7, Conclusion (pg. 113 – 139) 	⇒ Revised Papers due
	11/28/13	No Class – Thanksgiving		
10	12/3/2013	Week Ten: Profile Presentations		
	12/5/2013	Final Project Presentations		⇒ Submit Profiles
11	12/10/13	<p>⇒ Finals Week: Take Home Exam</p> <ul style="list-style-type: none"> You will receive exam questions on 12/5/2013, exams are due by 10 am on 12/10/2013 		

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