



2021

Indigenous Knowledge and Climate Adaptation Science

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Indigenous Knowledge and Climate Adaptation Science

Course: Geology 497K (Special Topics)

Credits: 1-credit seminar course

Format: Virtual

Day: Thursdays

Time: 4:00-5:15 PM

Date: February 1st - May 4th, 2021

Zoom Access:

<https://umass-amherst.zoom.us/j/98478133611>

Meeting ID: 984 7813 3611

Passcode: 497

Instructors:

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Description:

Through this seminar we seek to engage and partner with environmental coordinators, scholars and elders from Tribal Nations to explore prominent examples of Indigenous climate adaptation science, models for collaboration on diverse knowledges in scientific research, and the co-creation of best practices for resilience and adaptation to our rapidly changing climate.

Format:

3-week rotations of paired Tribal Elders/Knowledge Keepers and Tribal Scholars/Environmental Coordinators. Each module will focus on a particular climate related topic and will be matched to the particular expertise of the module's pair of invitees.

Week 1: Presentations by the modules Tribal participants;

Week 2: Panel discussion with the same Tribal participants; and

Week 3: Synthesis via an internal discussion on topics between course participants and UMass faculty leads.

Modules:

Proposed modules include *Climate and Coastlines/Water*, *Climate and Forestry/Plants*, and *Climate and Fish/Wildlife*. The 4th module will focus on education and opportunities for Tribal youth engagement.

Invited Speakers:

- *Dr. Casey Thornbrugh*, Tribal Climate Science Liaison - United South and Eastern Tribes Inc., Northeast/Southeast Climate Adaptation Science Centers and citizen of the Mashpee Wampanoag Tribe.
- *Dr. Darren Ranco*, Assistant Professor of Anthropology and Coordinator of Native American Research, University of Maine Orono and citizen of the Penobscot Nation

- *Patricia Saulis*, Executive Director of the Maliseet Nation Conservation Council, MIT MLK Visiting Scholar and citizen of the Maliseet Tribe
- *John Banks*, Director of the Penobscot Nation’s Natural Resources Department and citizen of the Penobscot Nation
- *Dr. John Daigle*, Professor of Forest Recreation Management, University of Maine Orono and citizen of the Penobscot Nation
- *Dr. Kelsey Leonard*, Assistant Professor in Environment, University of Waterloo and citizen of the Shinnecock Indian Nation
- *Shavonne Smith*, Environmental Director for the Shinnecock Indian Nation and citizen of the Shinnecock Indian Nation

Tentative Schedule:

Week 1: February 4

Introductions, course structure and expectations

Weeks 2-4: Module 1 - February 11, 18, 25

Indigenous Science and Baselines of Wabanaki Climate Adaptation;

Indigenous-led Conservation and Stewardship

Dr. Darren Ranco and Patricia Saulis

Weeks 5-7: Module 2 - March 4, 11, 18

Plants and Forestry; Wabanaki Natural Resources

Dr. John Daigle and John Banks

Weeks 8-10: Module 3 - March 25, April 1, 8

Coastlines and Water

Dr. Kelsey Leonard and Shavonne Smith

Weeks 11-12: Module 4 - April 15, 22

Education and Tribal Youth Engagement

TBD

Week 13: April 29

Course wrap-up

Expectations:

Students will be graded on *active participation, critical thinking, and development of questions* to be considered by the panel and for class discussion. Questions for each panel are submitted via *Moodle* the Monday before the respective week 2 panel discussion. An online discussion forum will be available to continue the conversation between sessions. Optional participation in a mentorship program for Tribal youth recruitment into undergraduate programs will be discussed and explored.

Class Conduct:

Remember that Tribal Nations view their history through a different lens. The knowledge and stories shared with us are a gift, and it is important to be mindful of this as we listen and engage with sensitivity and respect.

To facilitate healthy and productive discussions, we expect you to follow a few ground rules to the best of your ability. We will provide you with the opportunity to modify these rules as a group.

1. Be respectful of others. Use a respectful tone and content.
2. It is fine to challenge someone’s viewpoint; please do so respectfully.
3. Engage in discussions – everyone is expected to participate.
4. One person speaks at a time; everyone will be heard.
5. Be present in the discussion and minimize disruptions; no cell phones / online chats.
6. Be mindful of how much you contribute to discussions; allow others to contribute.
7. “Call in, don’t call out”

- Calling **out** is often a one-sided critique and leaves no room for learning/growth
- Calling **in** is done with compassion and patience; leaves room for learning/growth while exploring differences

http://www.racialequityvtnea.org/wp-content/uploads/2018/09/Interrupting-Bias_-Calling-Out-vs.-Calling-In-REVISED-Aug-2018-1.pdf

8. Pay attention to hand-raising feature; mute mics when not speaking; look for unmuted mics as a signal that someone wishes to speak

University Policies:

Classroom civility and respect:

For more information on this policy see Dean of Student's policy: [Classroom Civility & respect](#)

Academic honesty:

For more information on this policy see Dean of Student's policy: [Sen. Doc. No. 16-038A](#)

Disability statement:

For more information on this policy see: [Disability services](#)

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