

Disturbance in coastal wetlands

Distributed graduate course. Fall 2023.

Lectures will be on Tuesdays at 2:30 pm ET in room CAS132. The online component begins at 3 pm and will be recorded unless speaker requests otherwise.

Outline of lectures

No distributed lectures in August. Individual institutions may have local paper discussions or lectures depending on when their semesters start.

Sep 5. Introduction: common types of disturbance in coastal wetlands; how to think about disturbance. Steven Pennings and Zoe Hughes Course introduction/Alber types and definitions /Kominoski models.

Sep 12. Wrack disturbance 1. Experiments. Pennings.

Sep 19. Wrack disturbance 2. Landscape patterns. Alber.

Sep 26. Sediment deposition (VCR or California) Christopher Hein.

Oct 3. Herbivore disturbance. Sinead Crotty.

Oct 10. Headward-eroding creeks. Zoe Hughes.

Oct 17. Creekbank slumping. Giulio Mariotti.

Oct 24. Marsh dieback. Jim Morris.

Oct 31. Ice erosion and ice rafting. Danika van Proosdij.

Nov 7. Hurricanes 1. Mangroves and Harvey. Armitage.

Nov 14. Hurricanes 2: Impacts to Atlantic and Gulf coasts. TBD.

Nov 21. Hurricanes 3. Synthesis. Christopher Patrick.

Nov 28. Freezing and mangroves. Kyle Cavanaugh.

No distributed lectures in December. Individual institutions may have local paper discussions or lectures depending on when their semesters end.

Attendance: Your attendance is required at all lectures. Students who attend lecture earn much better grades compared to those who do not. Attendance and participation is part of your grade. TO DEMONSTRATE YOUR PARTICIPATION – I will make a note of who is present in class, I will expect some kind of interaction from every person during each class, whether it be answering or asking questions or just adding to discussions. Failure to do this will mean reduced a participation grade.

Responsibilities – It is your job to participate and communicate. Please ask questions during class – there are NO dumb questions. Don't wait for the end of the semester to tell me your thoughts on any aspect of the course. I love constructive comments and suggestions, and will respond where possible, but I can only do this if you talk to me – so let me know. You are very welcome to contact me outside of class. This does not just apply to course material – if you are interested in a particular subject and would like more information on current topics, something you saw on the news, read in the paper or if you are

interested in careers in oceanography, becoming a marine science major, research opportunities at BU, etc.– I am happy to help and point you in the right direction.

Policy Statements

I want to stress the importance of your familiarity with, and adherence to, Boston University's ***College of Arts and Sciences Academic Conduct Code***. It is the responsibility of every student to be aware of the Academic Conduct Code's contents and to abide by its provisions. The Academic Conduct Code can be found at <http://www.bu.edu/academics/policies/academic-conduct-code/>. Cases of academic misconduct will be promptly referred to the Dean's Office.

Generative AI: Artificial intelligence (AI) language models, such as ChatGPT, may be used to gather ideas for writing extra credit essays and assignments but only with appropriate citation and an appendix of the interaction, and may not be used for exams. If you are in doubt as to whether you are using AI language models appropriately in this course, I encourage you to discuss your situation with me. An example of how to cite AI language models are available at <https://libguides.slcc.edu/ChatGPT/Citations>. You are responsible for fact checking statements composed by any generative AI.

Please refer to the University's policy on Religious Observance (<http://www.bu.edu/chapel/religion/>) and the Multi-faith Calendar (<http://www.interfaithcalendar.org/>)

Diversity & Inclusion – Diversity enriches all research and education, and is realized only with all voices, views, and perspectives operating within a supportive and respectful community. For this reason, the Department of Earth & Environment, including myself, are committed to fostering diverse, inclusive, and equitable living, learning, and working environments that are supportive and free from violence, harassment, disruption, and intimidation. As a student taking this course, you are also committing to fostering such an environment. Further, the Department of Earth & Environment recognizes that creating a safe environment and a culture of respect is the shared responsibility of all members of our community. To ensure an equitable environment that values and respects the unique experiences and perspectives of our community, the Department, including myself are dedicated to promoting diversity, inclusion, and equity among all members of our departmental community and encouraging open, honest, and compassionate communication. Again, as a student enrolled in this course you are committing to creating such an environment. You can read more about our departmental efforts for fostering a safe, inclusive, learning environment here: <http://www.bu.edu/earth/about/diversityinclusion/>.

Class Land Acknowledgement: In this class we acknowledges that the territory on which Boston University stands is that of The Massachusetts, Wampanoag and Nipmuc People. BU's campus is a place to honor and respect the history and continued efforts of the Native and Indigenous communities of Eastern Massachusetts and the surrounding region. This statement is one small step in acknowledging the history that brought us to reside on the land and to help us seek an understanding of our place within that history. Ownership of land is itself a colonial concept; many tribes had seasonal relationships with the land we currently inhabit. Today, Boston is still home to indigenous peoples,

including the [Massachusetts of Ponkapoag](#), the [Praying Indians of Natick](#) (Massachusetts-Nipmuc), the [Mashpee Wampanoag](#), the [Wampanoag Tribe of Gay Head \(Aquinnah\)](#) and tribes of the [Nipmuc Nation](#). For more information, please visit the [North American Indian Center of Boston](#) and the Commission on Indian Affairs of the State of Massachusetts.