

Water Resources and River Dynamics Workshop Series (April 7, 14, & 28, 2022)

Instructor

Joshua Ellsworth, Adjunct Lecturer, MS Program in Sustainable Water Management/Friedman School of Nutrition Science and Policy

Overview

This non-credit, elective workshop provided by the MS Program in Sustainable Water Management (SWM) will provide an overview of water resources, river formation, channel dynamics and their link to landscape formation, agricultural and ecological productivity and biodiversity. This workshop is designed to augment learning in other SWM classes and is focused on providing students with concepts, critical thinking skills and information that will help them as SWM field practitioners to quickly adjust their work to new hydrologic and ecologic contexts by identifying relevant technical questions, recognizing what they don't yet know, and identifying with whom they should consult on water resources. It will also help provide an introduction to the topic should they choose to pursue a more in-depth academic study in the future. This non-credit workshop will be open to all SWM students, as well as others at the Friedman School discretion of the SWM program and the instructor. Any non-SWM students who are interested should email the instructor at Joshua.Ellsworth@tufts.edu to inquire about participating.



Format

The workshop series will run over three, 2+ hour sessions. The first two will be lectures and discussions. Session 3 will be either a lecture or local field trip depending on: how much we were able to cover in sessions 1 and 2; field conditions; and attendees' interests. Attendees may participate in the lectures in-person or remotely.



Dates/Times

Thursday April 7, April 14 and April 28th 3:30-5:30pm, Spring 2022

Location

Tisch Room 204; participants participating remotely will do so via zoom.

Session 1: Water Cycle; Soils and Water Retention; The Active River Area (ARA); River Formation; Channel Dynamics

Session 2: Comparisons between natural and human-impacted river systems; Surface water and groundwater resources and their relation to agriculture, irrigation and ecology; Soil characteristics and soil resources; Plants, disturbance ecology and their link to hydrogeomorphology

Session 3: Plants, disturbance ecology and their link to hydrogeomorphology continued; Field visit TBD