

CEE 6930 Special Problems (CRN 45103)

Advanced Hydrology through [CUAHSI Virtual University](https://www.cuahsi.org/virtual-university/)

Fall 2024

David Tarboton david.tarboton@usu.edu

CUAHSI Virtual University is a unique national online course, consisting of highly specialized water research modules from recent research advances. It aims to enhance the depth of graduate course offerings at universities across the nation. Students from participating universities enroll in a subset of modules of their choosing. Students earn credit at their home institutions. Each module is offered by an instructor at one of the participating universities scheduled in a four week block at the times below. Students choose which of these modules they want to take. **Register for one unit of CEE 6930 (CRN 45103) for each module you will take.** Each module is significant work and three modules are equivalent to a full semester course. Classes are taught online using Zoom and Canvas by the instructor from a participating university.

	Module 1: Sept. 4 - Oct. 1	Module 2: Oct. 7 - Oct. 31	Module 3: Nov. 4 - Dec. 3
Monday/Wednesday 11:00 am - 12:30 pm ET / 9:00 am - 10:30 am MT	Climate Modeling for Hydrologists Sanjiv Kumar, Auburn University	Hydrological Catchment Modeling Using Bucket-Type Models Jan Seibert, University of Zurich	Modeling Watershed Dynamics Using LandLab Erkan Istanbuluoglu, University of Washington
Monday/Wednesday 2:30 – 4:00 pm ET / 12:30 – 2:00 pm MT	Applying Geographic Information Systems for Terrain and Watershed Analysis in Hydrology David Tarboton, Utah State University	Hydrologic Remote Sensing Mekonnen Gebremichael, University of California, Los Angeles	Seminal Papers in Flood Hydrology Daniel Wright, University of Wisconsin, Madison
Tuesday/Thursday 2:30 – 4:00 pm ET / 12:30 – 2:00 pm MT	Modeling Coupled Water, Energy, and Carbon Cycles Alejandro Flores, Boise State University	Sensing and Modeling Hydrology of Irrigated Agriculture Meetpal Kukal, University of Idaho	Applications of Climate and Remote Sensing Data in Hydrology Justin Huntington, University of Nevada-Reno

Times are given in Eastern Time (ET) as well as Mountain Time (MT) used in Utah.

To attend, you register twice:

- Register at USU for CEE 6930 to receive USU credit (1 unit / module)
- Register at [CUAHSI](https://www.cuahsi.org/virtual-university/) to enter into the CUAHSI system

For more information, see

<http://hydrology.usu.edu/dtarb/CUAHSIVirtualUniversity/>



Virtual University

Fall 2024



CUAHSI
allied for water science

Take on-line classes with hydrology experts at other universities and get credit at your university!

For more information, including the course catalog, please visit www.cuahsi.org or email Veronica Sosa Gonzalez at vgonzalez@cuahsi.org

Course Offerings

- Climate Modeling for Hydrologists*
 - Sanjiv Kumar, Auburn University
- Applying Geographic Information Systems for Terrain and Watershed Analysis in Hydrology**
 - David Tarboton, Utah State University
- Modeling Coupled Water, Energy, and Carbon Cycles
 - Alejandro Flores, Boise State University
- Hydrological Catchment Modeling Using Bucket-Type Models*
 - Jan Seibert, University of Zurich
- Hydrologic Remote Sensing**
 - Mekonnen Gebremichael, University of California - Los Angeles
- Sensing and Modeling Hydrology of Irrigated Agriculture
 - Meetpal Kukal, University of Idaho
- Modeling Watershed Dynamics Using Landlab*
 - Erkan Istanbuluoglu, University of Washington
- Seminal Papers in Flood Hydrology
 - Daniel Wright, University of Wisconsin - Madison
- Applications of Spatial Climate and Satellite Remote Sensing Data in Hydrology**
 - Justin Huntington, University of Nevada - Reno

*These courses are part of a track on Modeling

**These courses are part of a track on GIS/Remote Sensing