### CEE 6930 Special Problems (CRN 46929)

Advanced Hydrology through CUAHSI Virtual University – Fall

2023

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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 46929) 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. 6 - Oct. 3	Module 2: Oct. 9 - Nov. 2	Module 3: Nov. 8 - Dec. 7
Monday/Wednesday 11:00 am - 12:30 pm ET / 9:00 am - 10:30 am MT	Ecohydrology of Groundwater Dependent Ecosystems Steve Loheide, University of Wisconsin - Madison	Geophysical Data Interpretation for Critical Zone Hydrology Qifei Niu, Boise State University	
Monday/Wednesday 2:30 - 4:00 pm ET / 12:30 - 2:00 pm MT			Sustainable Human-Water Systems Landon Marston, Virginia Tech
Monday/Wednesday 3:30 – 5:00 pm ET / 1:30 – 4:00 pm MT	Food, Energy, & Water Systems: Informatics and Resilience – Part 1 (may be done without part 2) Benjamin Ruddell, Northern Arizona University	Food, Energy, & Water Systems: Informatics and Resilience – Part 2 (requires Part 1) Benjamin Ruddell, Northern Arizona University	Snow Hydrology: Focus on Modeling Jessica Lundquist, University of Washington
Tuesday/Thursday 11:00 am – 12:30 pm ET / 9:00 – 10:30 am MT	Applying Geographic Information Systems for Terrain and Watershed Analysis in Hydrology David Tarboton, Utah State University	<b>Hydrologic Data</b> <b>Visualization</b> Sam Zipper, University of Kansas	Hydrological Catchment Modeling Using Bucket- Type Models Jan Seibert, University of Zurich
Tuesday/Thursday 3:30 pm – 5:00 pm ET / 1:30 pm – 3:00 pm MT		Water Quality and the Critical Zone Elizabeth Boyer, Pennsylvania State University	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 <u>CUAHS</u>I to enter into the CUAHSI system For more information, see http://hydrology.usu.edu/dtarb/CUAHSIVirtualUniversity/



# Virtual University Fall 2023



## 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**

- Applications of Spatial Climate and Satellite Remote Sensing Data in Hydrology
  - Justin Huntington, University of Nevada Reno
- Applying Geographic Information Systems for Terrain and Watershed Analysis in Hydrology
  - David Tarboton, Utah State University
- Food, Energy, & Water Systems: Informatics and Resilience
  Benjamin Ruddell, Northern Arizona University
- Geophysical Data Interpretation for Critical Zone Hydrology
  Qifei Niu, Boise State University
- Hydrologic Data Visualization
  Sam Zipper, University of Kansas
- Hydrological Catchment Modeling Using Bucket-Type Models
  Jan Seibert, University of Zurich
- Snow Hydrology: Focus on Modeling
  Jessica Lundquist, University of Washington
- Sustainable Human-Water Systems
  - Landon Marson, Virginia Tech
- Ecohydrology of Groundwater Dependent Ecosystems
  Steven Loheide, University of Wisconsin Madison
- Water Quality and the Critical Zone
  - Elizabeth Boyer, Penn State University