

# WATER SCIENCE AND SOCIETY CERTIFICATE

The Water Science and Society Certificate provides students from a range of majors with foundational knowledge in water science and policy. Students take courses in the biological, physical, and policy sciences, and courses focused on skills relevant to understanding and managing water. The certificate culminates in a capstone experience that enables students to apply conceptual water knowledge to a project.

## W.A Franke College of Forestry & Conservation

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2018-2019

### Summary

Code	Title	Hours
Social/Policy		3
Physical		3
Biological/Ecological		3
Skills		3
Capstone		3
Total Hours		15

### Social/Policy

Code	Title	Hours
<b>Complete one of the following courses:</b>		3
NRSM 427	Advanced Water Policy	
GPHY 335	Water Policy	
Total Hours		3

Minimum Required Grade: C-

### Physical

Code	Title	Hours
<b>Complete one of the following courses:</b>		3
GEO 320	Global Water	
GEO 420	Hydrogeology	
GEO 421	Hydrology	
NRSM 385	Watershed Hydrology	
Total Hours		3

Minimum Required Grade: C-

### Biological/Ecological

Code	Title	Hours
<b>Complete one of the following courses:</b>		3
BIOE 428	Freshwater Ecology	
BIOE 439	Stream Ecology	
BIOE 453	Ecology of Small & Large Lakes	

BIOO 340	Biology and Mgmt of Fishes	
WILD 485	Aquatic Invertebrate Ecology	
Total Hours		3

Minimum Required Grade: C-

### Skills

Code	Title	Hours
<b>Complete one of the following courses:</b>		3
CSCI 444	Data Visualization	
ECNS 201S	Principles of Microeconomics	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
GPHY 284	Intro to GIS and Cartography	
GPHY 465	Planning Principles & Processes	
GPHY 466	Environmental Planning	
GPHY 468	Community & Regional Analysis	
GPHY 482	Spatial Analysis & GIS	
GPHY 487	Remote Sensing/Raster GIS	
NRSM 379	Collab in Nat Res Decisions	
PSCI 361	Public Administration	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 491	Special Topics (Agency Policy-Making)	
PTRM 310	Nat Res Interp and Comm	
Total Hours		3

Minimum Required Grade: C-

### Capstone

**Note:** The course that satisfies this requirement must include a substantive project that is focused on water.

Code	Title	Hours
<b>Complete one of the following courses:</b>		3
ARTZ 321	Painting II	
ARTZ 394A	Seminar- Environmental Drawing	
A thesis or internship course in the student's home department.		
A field course with a project or research component.		
Total Hours		3

Minimum Required Grade: C-