

Water Sustainability in the Western U.S.  
GES 120

Spring 2025  
TBD  
Gifford 149  
3 Credits

Course Coordinator

John C. Tracy, Ph.D.  
Professor, Department of Ecosystem Science and Sustainability  
Warner College of Natural Resources  
Email: Use the Inbox function in Canvas to send me an e-mail  
Office Hours: By appointment

This is a multi-disciplinary introduction to understanding the sustainability of water resources, with a focus on the western United States. This will include assessing:

The principles that affect the sustainable management of water resources;  
The role that water resources play in supporting communities, economies, and ecosystems;  
The history of the social norms, governance, and development of water resources in the western United States;  
The sustainability of existing water policies and management strategies in the Western United States; and  
Emerging challenges to sustainable management of water resource systems.

**Learning Objectives**

Students successfully completing the course will be able to:

1. Describe the basic principles of sustainable water systems;
2. Describe the characteristics of water that are related to its suitability for different uses
3. Explain how the climate and landscape of the West affects water availability
4. Describe the basic social and governance processes that are used to manage water in the West
5. Describe how public attitudes and values towards water are evolving in the West
6. Describe the level of equity that exists in setting water policy and developing water plans in the West

**Course Requirements**

Assignments will be posted on Canvas

Reading Quizzes	Short quizzes on Canvas related to topics covered in assigned readings (5)	15%
Water in the News	Brief synopsis of current news reports related to water issues from the general circulation media (5)	15%
Reflection Papers	Short essays responding to topics covered in class (2)	10%
Book or Project Review	A review of a book or water project selected from a list provided by the instructor. Due Dec. 5	20%
Analysis and Opinion Paper	Assessment of the sustainability of a water plan or system in the western United States. Due Nov. 16	20%
Final Exam	Essay questions posted Dec. 7 Due during final exam.	20%

A final letter grade will be assigned as follows: 99.1-100.0% = A+, 92.0-99.0% = A, 90.0-91.9% = A-, 88.0-89.9% = B+, 82.0-87.9% = B, 80.0-81.9% = B-, 78.0-79.9% = C+, 70.0-77.9% = C, 60.0-69.9% = D, <60.0% = F

## Reading Materials

### Required Readings:

*Henry Darcy and the Public Fountains of the City of Dijon*, Patricia Bobeck, Geotechnical Translations, 2004  
(pdf posted on CANVAS).

On Reserve at Morgan Library <https://lib.colostate.edu/find/reserves/>

Citizen's Guide to Colorado Water Law, 5<sup>th</sup> Ed., 2021

Citizen's Guide to Colorado's Interstate Compacts, 3<sup>rd</sup> Ed., 2021

Citizen's Guide to Colorado's Transbasin Diversions, 2014

Citizen's Guide to Colorado Groundwater, 2020

Other readings will be provided via links on Canvas

## Class Schedule

See the Schedule document for details and reading assignments.

## Class Policies

### Classroom Environment

Use of electronic devices can be very disruptive to others in the classroom. You must silence your phone during class. The use of electronic devices during class for any purpose other than taking notes or participation during in-class activities is not permitted.

Classroom behavior is expected to be respectful of others. Everyone must feel free to express their opinions. Abusive, threatening or harassing behavior is unacceptable.

Please be respectful of the health of others in the class. If you are ill, please stay home until you are well. Class materials and assignments will be available for you electronically.

**Academic Integrity** The course will adhere to the Colorado State University General Catalog Academic Integrity Policy and Student Conduct Code. Please refer to the "Students' Responsibilities" section of the "University Policies" which may be found in the General Catalog (available here: <http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/> ).

*Specific Policies for this Course:* . Proper attribution of sources of information is required. (See <https://tilt.colostate.edu/integrity/resourcesStudents/> for more information.)

**Class Assignments** Students are expected to submit assignments by the stated due date. Electronic submission via Canvas will be the norm; if you are unable to submit in that way, please contact the course coordinator to make alternative arrangements.

You must inform the Course Coordinator in writing or by e-mail in advance regarding a University Excused Absence if you will be absent from class when a graded activity is scheduled. If illness prevents you from attending class, you should contact the course coordinator.

**Intellectual Property** The content of this course is subject to copyright protection held by its respective creators. It is provided for the sole use of students registered for this course and may not be copied or disseminated in any fashion. Students who make audio or video recordings of lectures agree that such recordings are being made for their personal use only and will not be disseminated except to other students currently enrolled in the course.

**Accommodation** The Americans with Disabilities Act requires that reasonable accommodations be made for students with disabilities. If you need such assistance, please contact the course coordinator as soon as possible. Additional assistance can be found through the University's Student Disability Center. Students with learning issues who may require more time on examinations are encouraged to contact SDC regarding policies and procedures for accommodating such situations.