

# Water and Sustainability

University of Washington Bothell

## Water and Sustainability (BIS 392)

5 credits

**When:** Autumn, MW 5:45-7:50

**Location:** UW2 005

**Instructor:** Chuck Henry email: [clh@u.washington.edu](mailto:clh@u.washington.edu)

**Web site:** <http://faculty.uwb.edu/chenry/watersustain/>

**Purpose:** To give students an understanding of past and present water challenges, and some of the activities going on around us. Waters in the US were at their cleanest when beavers were the engineers. Since humans took charge of water management, we have done our best to harness it, use it, and in the process, abuse it.† Recently, we've also started to try to salvage it. What is the state of water in the US and how did we get to this point? What are the future prospects for wisely using our water resources?

Each week the class format will include: i) two lectures, ii) eReserve reading assignments from pertinent books and articles, and iii) a homework assignment. There is no text for this class.

Completion of the class includes construction and presentation of a website or poster, and a final.

## Schedule

Date	Title	Reading
Week 1	Class objectives & administration: assignments using Catalyst; class schedule	Outwater Introduction
	Water mythology and history of water in ancient civilizations	DeVilliers pp. 46-64
Week 2	Hydrologic cycle How to do websites	Outwater: 3; 4; Kruckeberg pp. 349-381
	History of water - US and Washington perspectives Websites part 2	Kruckeberg pp. 349-381; Outwater: 1; 2
Week 3	Water supply and use Water conflict through the years	Outwater: 9
	Wastewater production and treatment	Outwater: 9 Outwater: 5; 6
Week 4	Here comes the engineers! Dams in the West	Outwater: 7&8; DeVilliers pp. 117-135
	Water and agriculture What's happened, and happening	Reisner Ch12, Hurt Ch4
Week 5	The influence of agriculture: Case studies	Outwater: 9 (again)
	Pollutants in the water, off the soil, and from air	Outwater: 10
Week 6	The Clean Water Act & biosolids	PL 92-500 (find this yourself!)
	Creating more, using less	<a href="http://www.savingwater.org/">http://www.savingwater.org/</a> ,
Week 7	Water reuse	<a href="http://dnr.metrokc.gov/wtd/reuse/">http://dnr.metrokc.gov/wtd/reuse/</a>
	Challenges and alternatives for developing countries	Poverty and sustainability, Sustainability Guidelines
Week 8	Alternatives for the US	Water & Sustainability (Pacific Institute)
	Water in environmental planning	Dunne & Leopold: 1

Week 9	Coming crises in world water supply	Movie
	Student presentations	Review of student websites (or posters)
Week 10	Student presentations	
	Review	
	<b>Final Exam</b>	

**Assignments:** Students will be required to do weekly reading assignments. Weekly problems will be given to the students for submittal by internet. This class is “paperless”, that will give the student practice with email distribution lists, web sites, and submitting and receiving assignments over the web. No assignments will be accepted in paper.

**Text:** *Water: A Natural History*. Alice Outwater. 1996. ISBN 0-465-03780-1, 212 pages, paperback. Basic Books.

**Grade Will Be Based On:**

Weekly assignments (10 @ 3% each)	30%
Website production	30%
Final exam	30%
Participation	10%

**Student Eligibility:** This class is open to all students. No prerequisites.

**Academic Honesty**

As UW Bothell students, you are expected to uphold the highest standards of academic conduct. In this class, you should be particularly aware that instances of cheating on exams or plagiarism in writing will be dealt with very seriously. A separate, more detailed handout on academic honesty will be provided to you on the first day of class. You are responsible for reading it thoroughly and understanding its contents.

All work on the exams and papers should be strictly your own and without the aid of any materials not specifically allowed. Plagiarism is defined in the UW Bothell catalog as (I have placed a section in bold and underlined it for emphasis):

“Plagiarism is the use of the creations, ideas or words of someone else without formally acknowledging the author or source through appropriate use of quotation marks, references, and the like. Plagiarizing is stealing someone’s work and presenting it as one’s own original work or thought. Student work in which plagiarism occurs will not ordinarily be accepted as satisfactory by the instructor, and may lead to disciplinary action against the student submitting it. **Any student who is uncertain whether his or her use of the work of others constitutes plagiarism should consult the course instructor for guidance before formally submitting the course work involved.**”