

# **EAS 131: Water Our Precious Resource**

## Spring 2015, 3 Credits

**Instructor:** Dr. Liz Hasenmueller, O'Neil Hall 104F, 977-7518, hasenmuellerea@slu.edu  
*Office Hours:* 12:15 pm – 1:15 pm TR or by appointment

**Teaching Assistant:** Heather Robinson, O'Neil Hall 102, robinsonhk@slu.edu  
*Office Hours:* By appointment

**Meeting Times and Place:** 11:00 am - 12:15 pm TR, Morrissey Hall 0002

**Website:** Blackboard (<http://blackboard.slu.edu>)

**Course Description:** This course is focused on freshwater, which is one of most important and vulnerable resources on Earth. The availability of water for human consumption, industry, and agriculture will become a major focus of national and international relations in the years to come. In this course, we will learn the basics about water resources, drinking-water and wastewater treatments, water-borne disease, water pollution, river dynamics and flooding, land use in floodplains, and national and international conflicts related to water resources. The course fulfills 3 hours of science requirement.

**Textbook:** *Introduction to Water Resources and Environmental Issues* by Pennington and Cech, Cambridge University Press, ISBN: 978-0-521-86988-1.

**Course Responsibilities and Grading Policies:** Course grades will be determined based on three exams, a term project, homework, in-class activities, and news pieces. Due dates for all assignments are noted below.

**Exams: 60%**

Three exams will be given (20% each). Exams will focus on the most current material and readings but students must be able to recall information from throughout the course to be successful on the 2<sup>nd</sup> and 3<sup>rd</sup> exams. If you miss an exam and provide me with an acceptable, *written* excuse within *5 days* of the missed exam, I may choose to schedule an oral or written make-up exam or assign 30% to each of the other two exams.

**Poster Project: 25%**

At the end of the semester, you will work in pairs on a poster presentation. A hand-out covering specific details, including topics of this assignment, will be made available during the semester.

**Homework/In-Class Activities/News Pieces: 15%**

Problem sets, in-class activities, and news pieces will be assigned throughout the course. Late assignments will be accepted until the graded assignment is returned in class. A penalty of –10% per day (including weekends and holidays) will be enforced. Late homework must be turned in to the instructor in person unless other arrangements have

been made. No homework will be accepted on weekends or university holidays. Under certain circumstances, and only with approval from the instructor, short extensions may be granted. In-class activities are generally unannounced, so it is the student's responsibility to attend class to participate in these assignments.

**Grading:** Final grades will be determined by the instructor. However, students are guaranteed the following minimum letter grade (+/- grades will be given):

- A: 90 – 100%
- B: 80 – 90%
- C: 70 – 80%
- D: 60 – 70%
- F: < 60%

**Academic Support:** In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. Students who think they might benefit from these resources can find out more about:

- Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor.
- University-level support (e.g., tutoring/writing services, Disability Services) by visiting the Student Success Center (BSC 331) or by going to <http://www.slu.edu/success>.

Students who believe that, due to a disability, they could benefit from academic accommodations are encouraged to contact Disability Services at 314-977-3484 or visit the Student Success Center. Confidentiality will be observed in all inquiries. Confidentiality will be observed in all inquiries. Course instructors support student accommodation requests when an approved letter from Disability Services has been received and when students discuss these accommodations with the instructor after receipt of the approved letter.

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**Writing Services:** I encourage you to take advantage of the writing services in the Student Success Center; getting feedback benefits writers at all skill levels. Trained writing consultants can help with any kind of writing project, multimedia project, and/or oral presentation. They offer one-on-one consultations that address everything from brainstorming and developing ideas to crafting strong sentences and documenting sources. For more information, call 977-3484 or visit <http://www.slu.edu/writingservices.xml>.

**Classroom Conduct:** Students must be respectful and courteous to each other and the instructor at all times. Demeaning, abusive or otherwise foul language is prohibited. Talking on the cell phone (and cell phone ringing) is disruptive. All cell phones must be silenced before class begins. Do not make or receive calls during class under any circumstances. If you must use your

phone, leave the classroom. Laptops are allowed in class for taking notes. Surfing the net, checking social media websites, or doing non-related work on a laptop during class is viewed as disrespectful.

**Academic Integrity and Honesty:** The university is a community of learning, whose effectiveness requires an environment of mutual trust and integrity. Academic integrity is violated by any dishonesty such as soliciting, receiving, or providing any unauthorized assistance in the completion of work submitted toward academic credit. While not all forms of academic dishonesty can be listed here, examples include copying from another student, copying from a book or class notes during a closed book exam, submitting materials authored by or revised by another person as the student's own work, copying a passage or text directly from a published source without appropriately citing or recognizing that source, taking a test or doing an assignment or other academic work for another student, securing or supplying in advance a copy of an examination or quiz without the knowledge or consent of the instructor, sharing or receiving the questions from an online quiz with another student, taking an on-line quiz with the help of another student, and colluding with another student or students to engage in academic dishonesty.

All clear violations of academic integrity will be met with appropriate sanctions. In this course, academic dishonesty on an assignment will result in an automatic grade of 0 for that assignment and a report of academic dishonesty sent to the Academic Honesty Committee of the College of Arts and Sciences. In the case of Class B violations, the Academic Honesty Committee may impose a larger sanction including, but not limited to, assignment of a failing grade in the course, disciplinary probation, suspension, and dismissal from the University.

Students should refer to the following SLU website for more information about Class A and B violations and the procedures following a report of academic dishonesty:  
<http://www.slu.edu/x12657.xml>.

**Schedule:** Listed below is a *tentative* schedule. The instructor reserves the right to modify the order and topics as necessary. Changes to the schedule will be announced in class, and it is the student's responsibility to attend class or make other necessary arrangements to keep abreast of the situation. All readings are from the textbook; specific readings will be announced in class.

Week	Dates	Lecture Topics	Reading	Assignments/Exams
1	Jan. 13, 15	Introduction, perspectives on water and environmental issues	Ch. 1	
2	Jan. 20, 22	Water through human history	Ch. 2	News Piece #1 (due 1/22)
3	Jan. 27, 29	The hydrologic cycle, climate, and weather	Ch. 3	
4	Feb. 3, 5	Water quality	Ch. 4	HW #1 (due 2/5)
5	Feb. 10, 12	Watershed basics	Ch. 5	<b>Exam #1 (2/12)</b>
6	Feb. 17, 19	Watershed basics (con't), water recharge	Ch. 5	News Piece #2 (due 2/17) <b>Poster Topic (due 2/19)</b>
7	Feb. 24, 26	Groundwater	Ch. 6	
8	Mar. 3, 5	Lakes and ponds	Ch. 7	HW #2 (due 3/5)
9	Mar. 10, 12	<b>Spring Break: No Class</b>		
10	Mar. 17, 19	Rivers and streams	Ch. 8	<b>Poster Abstract (due 3/17)</b> News Piece #3 (due 3/19)
11	Mar. 24, 26	Wetlands	Ch. 9	<b>Exam #2 (3/24)</b>
12	Mar. 31, Apr. 2	Dams and reservoirs; <b>No Class (4/2)</b>	Ch. 10	News Piece #4 (due 3/31)
13	Apr. 7, 9	Drinking and wastewater treatment	Ch. 11	HW #3 (due 4/9)
14	Apr. 14, 16	Water allocation law; Role of management agencies	Ch. 12; Ch. 13	News Piece #5 (due 4/16)
15	Apr. 21, 23	Poster Presentations		<b>Poster Presentations (4/21-23)</b>
16	Apr. 28, 30	Water conflict, solutions, and our future	Ch. 14	<b>Exam #3 (4/30)</b>