

Texas A&M University-San Antonio
Department of Natural Science
Program of Water Resources Science and Technology

WATR 4191/5111 WATER RESOURCES SEMINAR (1 SCH)

Wednesday 12:30 – 1:30 pm

INSTRUCTOR INFORMATION

Dr. Walter Den, Email: walter.den@tamusa.edu, Tel: 210-784-2815

OFFICE HOURS

MW 2:00-3:00 pm

COURSE MATERIALS

Access to the internet.

COURSE DESCRIPTION

This course provides students an opportunity to explore current topics in water resources science and technology. The course will have guest presentations by experts in the field covering a variety of water-related topics. Students will research topics before class and participate in discussions. Students are responsible for note-taking and summarizing each of the guest presentations, just as what they would do in a content course.

COURSE OUTCOMES

1. Explore current topics in water resources science and technology
2. Ability to digest and summarize critical messages delivered from guest lectures
3. Opportunity to network with experienced professionals

METHOD OF INSTRUCTION

The class will be conducted with online delivery unless otherwise noted. The class will meet on Zoom each week at the scheduled start time. Attendance will be required despite the availability of recordings. Students who registered for the course will be required to turn on their camera and be engaged.

The class should anticipate weekly lectures with active student participation through Q&A. This semester the course will have **10-12** invited guest speakers from a diverse professional backgrounds, covering topics ranging from research findings to engineering project management, from policy-making to best practices implementation, from local water projects to national and international ones.

METHOD OF ASSESSMENT

The course will adopt a point system, with a total of 1000 points:

- Attendance of guest lectures, 50 points each, totaling 500 points. If you miss more than three lectures, you will not receive a score here. If you have to miss more than three, please make sure you have my approval to do so before each lecture.
- Three sets of summary reports (see SCHEDULE for due dates). 100 points for each report, totaling 300 points. All reports are due on the day as scheduled, no later than 11:59 pm. No late reports are accepted!
- Participation. Be prepared to ask questions at the end of the presentations. I hope all of you will proactively engage with the guest speakers. I expect no less than 5 questions from each of you and I WILL call on you if you stay dormant for too long. The total worth of simply interacting with the speakers by asking enough questions over the course of the semester is 200 points.

REPORTS

The following narratives provide a guideline for the summary reports.

1. Each set of reports should consist of your summary for each one of the lectures. You should clearly outline the key takeaways that you observe from the lectures. There is no strict report format. At the very least, you should include the title of the lecture, the motivation and background of the topic, and structure your thought process by thinking of three major takeaways using subheadings. You are welcome to extrapolate or interpret your comments or thoughts beyond what the speakers cover. But these extensions need to be justified (e.g., literature references, media reports, etc.)
2. A minimum of two pages for each lecture. Times New Roman, text font size 12, subheading 14, title 16 bold. 1.5 line spacing.

****POLICY TO USE AI-ASSISTED TECHNOLOGY**

Use of Generative AI Permitted Under Some Circumstances or With Explicit Permission

There are situations and contexts within this course where you may be asked to use artificial intelligence (AI) tools to explore how they can be used. Outside of those circumstances, you should not use AI tools to generate content (text, video, audio, images) that will end up in any student work (reports and theses) that is part of your evaluation in this course. Any student work submitted using AI tools should clearly indicate with attribution what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, students should reach out to their instructor for clarification before submitting work for grading. Use of AI-generated content without the instructor's permission and/or proper attribution in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

SCHEDULE

The following semester schedule is tentative, covering guest lectures and discussion sessions.

- Change of guest lectures is possible if their availability becomes an issue.
- Please expect that, despite my best effort to monitor the time, some of the guest speakers will go overboard with time. Please refrain from logging off after reaching the scheduled time out of respecting the speakers. The open dates more than compensate for the extra length of time used by the speakers.

Week	Date	Activity
1	8/26	Class introduction and expectations
2	9/2	Guest speaker: Erin Cavazos Engineering Manager, San Antonio River Authority
3	9/9	Guest speaker: Joshua Sierra Water Quality Analyst, San Antonio River Authority
4	9/16	Guest speaker: Dylan Baddour Independent Journalist & Reporter Inside Climate News
5	9/23	Guest Speaker: Dr. Yu Zhang Assistant Professor, Atmospheric Science Texas A&M University
6	9/30	Guest speaker: Dr. Venki Uddamari Professor, Engineering Sciences Texas A&M University-San Antonio
7	10/7	Guest speaker: Dr. Matthew Gacek R&D Manager, Fluid Southwest Research Institute
8	10/14	Guest speaker: Dr. Danny Reible Professor, Civil, Environmental, and Construction Engineering Texas Tech University
9	10/21	Guest speaker: Dr. Monica Schoch-Spana Professor, Community Health Texas A&M University-San Antonio
10	10/28	Guest speaker: Nathan Howell Professor, Civil and Environmental Engineering West Texas A&M University
11	11/4	Guest Speaker: Tom Ptak Professor, Energy Geographies Texas State University
12	11/11	Guest speaker: Brent Doty Associate Director, Aquifer Science Edwards Aquifer Authority
13	11/18	Open

14	11/25	Thanksgiving Holiday
15	12/2	Open