

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

**WATR 4191/5111 GRADUATE SEMINAR (1 SCH)**  
Fall 2024, Wednesday 12:30 – 1:20 pm

**INSTRUCTOR INFORMATION**

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

Dr. Pride Aboingwa, Email: pride.abongwa@tamusa.edu

**OFFICE HOURS**

MW 2:00-4:00 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.

## 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	8/28	Class introduction and expectations
2	9/4	Guest speaker: <b>TBD</b>
3	9/11	Guest speaker: <b>Geary Schindel</b> President of Karst Works, Inc. Topic: Karst aquifer science and protection
4	9/18	Guest speaker: <b>Dr. Eliot Atekwana</b> Professor, Earth and Planetary Sciences, UC Davis Topic: Geochemistry of aquifer

5	9/25	Guest Speaker: <b>Aaron Mendell</b> Founder/CEO Wacomet Water Topic: Water entrepreneurship
6	10/2	Guest speaker: <b>Dr. Vikram Kapoor</b> Associate Professor, Civil & Environmental Engineering, UTSA Topic: Microbial tracking for the Edwards Aquifer
7	10/9	Guest speaker: <b>Steven Seibert</b> Project Manager, Water Resources, San Antonio Water System Topic: 2024 SAWS Water Management Plan
8	10/16	Guest speaker: <b>Mark Black</b> Retired Battalion Chief, San Antonio Fire Department Topic: Protection of the Edwards Aquifer from firefighting runoff
9	10/23	Guest speaker: <b>Dr. Nick Bader</b> Associate Professor of Geology, Whitman College Topic:
10	10/30	Guest Speaker: <b>Dr. Henry Agbogun</b> Assistant Professor of Geology, Fort Hays State University Topic:
11	11/6	Guest speaker: <b>Dr. Andrew katumwehe</b> Associate Professor, Kimbell School of Geosciences, Midwestern State University Topic:
12	11/13	Guest speaker: <b>Dr. Steven Opsahl</b> Hydrologist, Oklahoma-Texas Water Sci Center, U.S. Geologic Survey (USGS) Topic: Water quality trend in the Edwards Aquifer
13	11/20	Guest speaker: <b>TBD</b>
14	11/27	Thanksgiving Holiday
15	12/4	Open