

CWR 6126 – ADVANCED GROUNDWATER HYDROLOGY
PROJECT - Spring 2020
POINTS = 30/100 POINTS - DEADLINES: See below

Objective

Ultimate goal is to demonstrate the application of the theory of groundwater flow *and* contaminant transport either in the protection of a groundwater supply or the remediation/clean-up of contaminated groundwater. More specifically, students may either develop, improve, or implement a computational methodology (e.g., computer model) *and then* demonstrate its application in studying or solving a specific groundwater flow or contaminant transport problem(s) or both. PhD students may consider, as an alternative to the above, writing a “review paper” on any of the highlighted themes or topics of the course program or others (topic is to be approved by the instructor on a case by case basis); paper should be based on a thorough, *good literature review*.

Guidelines

Students will, *individually*, or in team (s) (as approved by the instructor) complete and present written and oral reports of professional quality. Paper should be 10-20 pages long, excluding appendices. Written report contents should include, at least, the following items or equivalent as applicable:

- Cover Page & Team Members
- Table of Contents
- List of Figures
- List of Tables
- 1. Introduction (background and justification)
- 2. Objective(s)
- 3. Theory
- 4. Description (any specifics of case study)
- 5. Methodology
- 6. Results and Discussion
- 7. Conclusions
- 8. Recommendations
- References
- Appendices (as necessary)

Deadlines

- a) Project Proposal: March 7, 2023, *or earlier* in instructor's mailbox.
One page: tentative title, objective, approach, and initial list of references; team members must sign at the bottom of the page.
- b) Written Report: April 21, 2023, by 11:59:00 PM *or earlier* in instructor's mailbox.
Maximum of 20/100 points equally based on technical content and quality.
- c) Oral Presentations: April 25th, 2023, at 5:00 PM.
Maximum of 10 points equally based effectiveness of delivery and quality. Duration: 15-20 minutes followed by questions (final number of minutes will be decided by the instructor in advance to the presentation). An electronic copy of the oral presentation must be presented to the instructor at the end of the oral presentation.
- d) Reports and electronic material may not be returned by the instructor. Students are thus recommended to make full copies of all turned in materials.

Draft 01/10/2023