CME311 Water Resources Engineering

Instructor: Professor S. Derrible | 2071 ERF | derrible@uic.edu
Office hours: Monday: 2:00 – 3:00; Wednesday: 11:00 – 12:00

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Hours: Lectures: Monday, Wednesday, Friday: 1:00 – 1:50
Labs: Thursday: 10:30 – 12:30; 1:00 – 3:00; 3:15 – 5:30

Summary: This course exposes students to concepts and practices of water resources engineering. Topics studied include: hydrologic processes and frequency analysis; fluids mechanics applied to closed conduits and open channels; groundwater engineering; urban water distribution

Pre-requisites: CME211 Fluid Mechanics and Hydraulics

Textbook: Chin, D.A., 2012, Water Resources Engineering (Third Edition), Pearson Prentice Hall, New Jersey

Blackboard: All published material "should" be posted on blackboard, including syllabus, lecture materials, unmarked homework (with solutions), marked homework (no solutions), and lab instructions. Solutions to the mid-term exams will not be published. Any document placed on blackboard can be modified/deleted at any time without notification from the instructor.

Objectives: This course aims to provide students with the means to understand real world water resources engineering problems and apply their fundamental knowledge. More specifically, at the end of this course, students should be able to:

1. Understand and apply sound statistical analyses to issues related to water resources engineering,
2. Remember the fundamentals of flow in closed conduits,
3. Remember the fundamentals of flow in open channels,
4. Integrate their knowledge to plan and design urban water distribution systems,
5. Put into their own words the hydrologic cycle and recall properties of the hydrological phenomena,
6. Deduce groundwater engineering processes and main characteristics.

Grading Policy: Attendance, participation, behavior (10%)
Homework (10%) – best 5 out of 6
Labs (10%) – best 7 out of 8
Quizzes (10%) – best 5 out of 6
Two mid-term exams (12.5% each)
Final exam (35%)

The grading policy can be changed at any moment during the term.

Homework submitted early will receive an additional 5%; homework submitted late will receive a penalty of at least 5%. All homework must be submitted or the students will be assigned a 0 grade for all of their homework.

Plagiarism: While learning by collaborating is encouraged, each submission must be unique. Plagiarism is a serious offense and it will not be tolerated; see university policy.

Attendance Policy: All students are required to attend both the lectures and the labs and be on time. If at any moment a student is to be absent, he/she should have discussed it prior with the instructor.

Professional Conduct: Whether during lectures or labs, the students are always expected to conduct themselves with the utmost respect towards the instructors and their fellow students. Cellphones are to be turned off.

Safety: Any unsafe conduct, especially during labs, will not be tolerated and may lead to expulsion.

Class Schedule: TBD

Lab Schedule: TBD