Lectures: TR 11:00-12:15 Harvill 415

Instructor:
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Office Hours: TR 3:00-4:30 PM

Course Description: This course is designed to enable the student to learn the fundamental laws of surface water hydrology and how to apply these laws in hydrologic design and analysis. The class will consist on discussion and analysis of major topics of the hydrologic cycle and their interrelationships, such as rainfall, infiltration, evaporation, and runoff. Statistical and probabilistic methods in water supply and flood hydrology.

Main References:
(GB661.2.C43). This book is out of print but selected chapters will be placed in the D2L course site.

Additional References:

Grading:

- 2 Tests 40% each
- Homework and Class Participation 20%
- Graduate-level requirements include a project paper.

Class Attendance and Participation

No attendance will be taken. However if you decide to attend it is expected that you would actively participate in the class, e.g. arriving in time, no private conversations, no Wildcat reading, no working on homeworks, etc.

ACADEMIC DISHONESTY will not be tolerated. The UA policy will be followed. Students committing academic dishonesty will receive an “E” for the course and the proper university officials will be notified.
Tentative Outline

Topic
1. Introduction: Hydrology, Climate Change and Sustainability
2. Hydrologic Processes
3. Surface Runoff
4. Reservoir and Surface Routing
5. Probability, Risk and Uncertainty Analysis
6. Hydrologic Design
7. Groundwater
8. Groundwater Movement
9. Well Hydraulics