

Groundwater Pollution

INSTRUCTOR:

Abdul-Sahib T. Al-Madhhachi, Ph.D., F.E., Associate Professor, Water Resources Engineering, College of Engineering, Mustansiriya University.

COURSE OUTLINE:

Chapters	Topics
1	Groundwater Hydrology - Introduction
2	Occurrence of Groundwater, Properties of Aquifers
3	Groundwater Movement
Exams	Exam # 1
4	Environmental Well Hydraulics
5	Well Construction
7	Groundwater Quality
8	Pollution of Groundwater
Exams	Exam # 2
9	Groundwater Flow Modeling
14	Salt Water Intrusion
Exams	Final Exam

REFERENCES:

- Todd, D. K. and L. Mays, Groundwater Hydrology, John Wiley & Sons, 3rd Ed., 636 pp, 2005.
- Freeze, R. A. and J. A. Cherry, Groundwater, Prentice Hall, 604 pp, 1979.

GRADING POLICY:

2 Exams	20%
Homework	10%
Final Exam	70%

COURSE OBJECTIVES:

The primary objective of this course is to apply the principles of groundwater to develop the groundwater supply with constraints of water quality. This will include the following concepts: Occurrence of Groundwater, Groundwater Movement, Well Hydraulics, Well Construction, Surface and subsurface Investigations of Groundwater, Groundwater Quality, Pollution of Groundwater, and Groundwater Flow Modeling.