GEOL 3212: Hydrogeology

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: 
Prerequisites: None
Corequisites: None
MnTC Goals: None

Groundwater flow to wells, aquifer test analysis, groundwater exploration techniques, application of computer models in groundwater studies, hydrogeologic field methods, contaminant hydrogeology, vadose zone hydrology. Lecture and laboratory. Prerequisites: GEOL 3211 or consent of instructor. May not be offered every year.

B. COURSE EFFECTIVE DATES: 08/02/2011 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Vadose zone hydrogeology
2. Flow to wells
3. Groundwater Contamination
4. Well construction methods.
5. Groundwater exploration
6. Groundwater modeling
7. Groundwater management

D. LEARNING OUTCOMES (General)

1. learn to identify specific problems in hydrology/hydrogeology
2. solve hydrologic problems through formulation and evaluation of hydrologic hypotheses by evaluating data in light of hydrologic principles
3. design a strategy for solving hydrologic problems;
4. effectively present hydrologic information in oral or written format
5. demonstrate an understanding of specific knowledge pertaining to hydrology/hydrogeology.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted