

# Bemidji State University

## GEOL 3212: Hydrogeology

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

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, vadoze 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