

Geology 372: Watershed Hydrology

Syllabus - Fall 2006 Dr. Robert Mitchell

Text

Hydrology and the Management of Watersheds, Brooks et al., 3rd Edition, 2003

Course Description

An introduction to the processes controlling the water budget of a watershed and streamflow. Basins in the Lake Whatcom watershed will be used as a model for teaching hydrological concepts. An overview of current hydrological issues will also be discussed.

General Topics Discussed

Hydrologic Cycle and Water Budgets
Measuring Streamflow and Hydrographs
Precipitation, Interception and Fog Drip
Infiltration, Percolation and Soil Storage
Ground Water Hydrology
Riparian and Hyporheic Zones
Energy, Evaporation, and Transpiration
Snow Hydrology
Runoff and Hydrograph Analysis
Flooding and Flood Control
Water Quality

I reserve the right to change the syllabus as required throughout the term to better meet the instructional needs of the class.

Homework

You will complete about 5 assignments that are designed to teach you how to gather, analyze, and interpret real data from a watershed.

Exams

One midterm exam and a comprehensive final exam will be given. You will be required to take all exams at the scheduled times. Make-up exams will be given only in the case of official prearranged absences or emergencies. An excused absence form from the office of Student Affairs is required.

Grading

The grading break down will be as follows:

Homework - 30%
Midterm - 30%
Final Exam - 40%

The final exam is scheduled Thursday Dec 14 at 3:30 pm

A grading scale will be as follows (a curve is possible but not certain):

100-93 = A, 92-90 = A-, 89-88 = B+, 87-83 = B, 82-80 = B-, 79-78 = C+, 77-73 = C, 72-70 = C-, 69-68 = D+, 67-63 = D, 62-60 = D-, 60 or below = F