Instructor: Linda Schweitzer, Ph.D., Associate Professor
Textbook: none; basic hydrology texts may be helpful
Class: M/W 5:30 – 7:17 PM in 276 South Foundation Hall
Office hours “open door” or by appointment in 289 SEB.
Phone (248) 370-2092. Email/text: schweitz@oakland.edu

Final Exam Monday April 26 3:30-6:30 PM
Holidays: Monday Jan. 18 no class due to MLK day, Feb. 20-Mar 1 Winter Break

Objectives
Introductory principles of watershed hydrology, watershed management, water resource economics, introduction to water treatment, water quality

Topics – In Order
1. Introduction – concepts of sustainability, importance of water as a resource, renewable vs nonrenewable resources
2. The Hydrologic (i.e., water) Cycle, concept of the Watershed
3. Groundwater and Soil
4. Rivers and runoff, erosion & weathering
5. Quantitative hydrology (Darcy’s Law, runoff equations)

Exam I
6. Lakes and Oceans
7. Ice, e.g. glaciers, permafrost, snow and snowmelt
8. Dams & Diversions
9. Wells
10. Wetlands and other Biomes
11. Water in the Atmosphere

Exam II
12. Water Quality, Pollution
13. Legislation and Advocacy
14. Water Treatment – basics of drinking water and wastewater treatment
15. Water Resource Economics – intro to supply/demand macroeconomics, cost-benefit analysis, full cost accounting, water privatization

Expectations:
(1) Develop broad knowledge of water resource topics
(2) Be able to do practical calculations of basic hydrology
(3) Gain a general understanding of the principles of macroeconomics as it is related to the field of water resource management
(4) Gain an appreciation of water as a vital resource
(5) Think critically about sustainable practices for managing water resources in the face of climate change and resource depletion
Policy on Academic Misconduct
The University's regulations that relate to academic misconduct will be fully enforced. Any student suspected of cheating will be referred to the Academic Conduct Committee. Students found guilty of academic misconduct face suspension or permanent dismissal.

Grading Scale:
Considered “A”s

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\begin{array}{cccc}
4 & 95.00-100 & 3.4 & 78.38-80.74 \\
3.9 & 92.63-94.99 & 3.3 & 76.00-78.37 \\
3.8 & 90.25-92.62 & 3.2 & 73.63-75.99 \\
3.7 & 87.88-90.24 & 3.1 & 71.25-73.62 \\
3.6 & 85.50-87.87 & 3.0 & 68.88-71.24 \\
3.5 & 80.75-85.49 & & \\
\end{array}
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Considered “B”s

Considered “C”s: 2.0-2.9
Considered “D”s: 1.0-1.9

Formula: GPA = % points awarded /23.75

Grading: 2 exams each @ 25%, participation 10%, homework 15%, Final 25% (approx. 1/2 new material, 1/2 integrative).
If class is missed, alternatives can be proposed to make up participation.