

<b>Course Number</b>	<b>ESM320</b>
<b>Title</b>	<b><i>Environmental Systems 1</i></b>
<b>Section</b>	<b>001</b>
<b>CRN(s)</b>	
<b>Credits</b>	<b>4</b>
<b>Design Credits</b>	<b>0</b>
<b>Prerequisite(s)</b>	
<b>Days/Time</b>	TR 10:00-11:50 am
<b>Location</b>	<b>EB 102</b>
<b>Final Exam Day/Time</b>	T 12/4 10:15 AM in EB 102

**Course SCHEDULE** [http://www.cecs.pdx.edu/~fishw/ESM\\_320-Schedule-2012.htm](http://www.cecs.pdx.edu/~fishw/ESM_320-Schedule-2012.htm)

<b>Instructor</b>	<b>William Fish</b>
<b>Office</b>	<b>EB202E</b>
<b>Phone</b>	<b>503-725-4278</b>
<b>E-mail</b>	<b>fishw@cecs.pdx.edu</b>
<b>Office Hours</b>	T R 12:30-1:30 pm
<b>Mailbox Location</b>	CEE Office, Engineering Building, Suite 200

**Required Text or Other Materials: Provided readings in class on online**

**Recommended References/Optional Text/Supplemental Readings & Resources:**

ALL READINGS AND MATERIALS PROVIDED AS LINKS IN COURSE SCHEDULE, LINK ABOVE

**Catalog Course Description:**

Structure and function of environmental systems, with an emphasis on physical processes and environmental system dynamics. Includes a laboratory section using quantitative techniques for conceptualizing and analyzing environmental processes.

**Design/Professional:**

{need % design and mention of ethics or other professional component, if applicable}

**Course Objectives – Students must demonstrate the ability to:**

1. Understand applications of basic physics in earth sciences
2. Quantitatively understand the movement of energy and material at the Earth's surface.
3. Apply this understanding to such concepts as basic hydrology, mass balances, and heat budgets.
4. Extend these concepts from smaller scales to global scales, such as climate change and meteorology.

## **Course Grading**

<b>Assignment</b>	<b>Points Assigned or % of Total Grade</b>
Problem Sets	20%
Midterm Exam	30%
Final Exam	40%
Class Preparedness	10%

**Incompletes:** A grade of "I" is granted by the instructor *only* with prior approval and consent. Criteria are outlined in the PSU Bulletin. **Program requirements:** {for UG courses} The CEE Department requires that junior and senior engineering courses must be completed with a minimum grade of C-, and a student's cumulative PSU GPA must be 2.33 or higher to graduate from the BSCE and BSENVE programs.

## **Course Schedule:**

### **Resources**

As a PSU student, you have numerous resources at your disposal. Please take advantage of them while you are here. A small sample is listed below:

- CE Website (includes program info, job listings, etc.): <http://www.cee.pdx.edu>
- Career Center: <http://www.career.pdx.edu/>
- Center for Student Health & Counseling: <http://www.pdx.edu/shac/>
- The Writing Center: <http://www.writingcenter.pdx.edu/>
- PSU Disability Resource Center: 435 Smith Memorial Union

Note: The PSU Disability Resource Center is available to help students with academic accommodations. If you are a student who has need for test-taking, note-taking or other assistance, please visit the DRC and notify the instructor at the beginning of the term.

### **Introduction to Library and Literature Research**

With the advent of the Internet it is very tempting to think that all necessary resources for a term project will be available in full text after typing in a few words at Google.com. This is not the case. You will often need to go to the library, use real library search tools and access real books and articles contained in refereed/archival journals.

Be sure to make use of the Vikat library catalog. Go to the PSU library home page at <http://library.pdx.edu/>. Also available on the library home page are Full Text Electronic Journals: <http://www.lib.pdx.edu/~bvws/bytitle.html>, and a list of on-line Databases: <http://library.pdx.edu/dofd/>. Try EI Compendex (<http://www.ei.org/compendex>) and Lexis-Nexis.

### **Campus Safety**

The University considers student safety paramount. The Campus Public Safety Office is open 24 hours a day to assist with personal safety, crime prevention and security escort services. Call 503-725-4407 for more information. For Campus emergencies call 503-725-4404.