

**Environmental Science 22:** The Human Environment: Physical Processes Lab  
**Section Number:** 1294 (Wed 11:20a – 2:30p) AHS / 152

**Course Description:** Introductory lab course in which students will work individually and in teams to investigate the causes and consequences of key environmental issues. Field sampling, laboratory procedures and data analysis skills are emphasized as we explore our natural world. Particular attention is paid to water, energy, consumption, food, sustainability, waste and recycling. **(2 Units)**

**Co-requisite:** [Environmental Science 1](#)    **Transfer credit:** UC: CSU

**Instructor:** Meredith Leonard

**Office:** AHS / 304

**Phone:** (818) 778 - 5595

**Student Drop-in Hours\*:** **MW** 9:00-9:30a & **M** 12:30-5:00p

**Email:** [leonarm1@lavc.edu](mailto:leonarm1@lavc.edu)

**Instructor web resource:** <http://leonardlavc.weebly.com>

*\*additional hours on my website*

**Tentative Schedule** (*subject to change—it is your responsibility to keep current*)

<b>Week:</b>	<b>Dates:</b>	<b>Topic / Assignment / Readings:</b>
01	Feb 12	Introduction – Water Audit*
02	Feb 19	"Cadillac Desert", The Scientific Method
03	Feb 26	Tujunga Wash
04	Mar 05	Streams & Rivers
05	Mar 12	Groundwater
06	Mar 19	S & R, GW (continued)
07	Mar 26	Chaparral
08	Apr 02	Water Quality Parameters
09	Apr 09	<b>SPRING BREAK</b>
10	Apr 16	Water Quality Testing
11	Apr 23	Recycling Center
12	Apr 30	"A Chemical Reaction"
13	May 07	Life Cycle Assessment
14	May 14	"How green is our campus?" campus tour (group project)
15	May 21	Field Mapping (GPS & Compass)
16	May 28	Green campus presentations

**Final Exam, Wed. Jun. 4<sup>th</sup>, 10:30am – 12:30pm**

*No exceptions!*

\* "LabWrite": <http://www.ncsu.edu/labwrite/>

**Required Materials (to be brought to every class):** All students are required to bring a **basic scientific calculator** to class. The calculator should perform basic data manipulation functions--such as adding, subtracting, multiplying, dividing, determining squares and square roots--and have a single, rather than multiple, memory that is easy to use. Also, you must have a dedicated **notebook** for this class; I will be collecting your notes throughout the semester, as well as your complete notebook at the end of the semester.

Also, purchase a **stapler & flash drive**. Along with your calculator, bring these items to lab every time we meet. Dress comfortably; bring sunscreen, hat, walking shoes (be prepared to be outdoors).

Also, all students must have **Internet** access. There are computer labs on campus, if you don't have access at home. In addition, all registered students have Internet privileges on campus (through the LAVC Universal Internet Access System - UIA System). Several of the assignments will require web-browsing and email capability.

**Grading:** There will be only **one exam** for this class. The exam (approximately **150 points**) will consist of multiple choice, true-false, short answer, and fill-in. You will be required to bring a

Scantron form (882 or 882-ES). Each of your labs (conducted both in- and outside of class) will be worth **40 points**. You will have the option to submit ONE of your labs late, after the due date (I don't recommend you use this option until/unless it is absolutely necessary). Therefore, the majority of your course grade will be based on your participation in and completion of laboratory exercises and one individual and one group project (paper, Power Point, or poster presentation of an environmental topic not covered in class -- further explanation will be provided). We will have at least one off-campus field trip this term (date: to be determined). Take notes. You will be submitting them, organized into a dedicated notebook, at the end of the semester. They will be worth the equivalent of one lab (**40 points**) toward your final grade.

**Grading** will be as follows:

**A** 90 – 100%      **B** 80 – 89%      **C** 70 – 79%      **D** 60 – 69%      **F** < 60%

**Extra Credit/ "Enrichment Activities": max 35 points**

Ask me about the "Service Learning" Program at LAVC or the "research option" (with a limit of **four** per student; one per month). Details will be discussed in class. <http://www.lavc.edu/servicelearning/>

**Class Policies:** I expect students to come to class prepared, and to treat me and fellow students with courtesy and respect. **Academic dishonesty (including, but not limited to, cheating / plagiarism) will not be tolerated!** Anyone found to be plagiarizing or cheating on an assignment will receive a zero (fail) on that assignment or exam, and be referred to the Vice President of Student Services for further disciplinary action (per "Standards of Student Conduct", schedule of classes).

Regular **attendance** is encouraged. If you stop attending class (or wish to drop) on or before **May 11**, 2014 for Spring Semester 2014, you must drop the class yourself – officially – by telephone, internet or Office of Admissions and Records. Failure to do so may result in a grade of 'F' in this class.

Make sure to exchange **contact information** (phone & email) with *several* of your classmates. Just in case circumstances force you to miss a class, you will need to contact one of your classmates to find out what you missed. *Without prior approval / a doctor's note*, **NO MAKE-UP EXAMS** will be given; **NO LATE ASSIGNMENTS** will be accepted. Communication is key!

If you are a student with a disability & require classroom accommodations, please let me know & be sure to contact **Services for Students with Disabilities** (Student Svcs Annex, 1<sup>st</sup> Floor: 818-947-2681 or TTD 818-947-2680 or email: [ssd@lavc.edu](mailto:ssd@lavc.edu)).

Do you qualify for **Financial Aid**? Call 818-947-2412 or consult their website: [www.lavc.edu/studentwebsite/financial/index.html](http://www.lavc.edu/studentwebsite/financial/index.html)

**What you should expect to get out of this course:**

**Course Objectives:** Demonstrate ability to identify, gather and evaluate internet-, field-, and lab-based scientific data. Demonstrate ability to use basic computer programs to store data, perform simple analysis and produce graphs, maps and images. Operate basic field equipment and perform basic monitoring, data collection, and mapping tasks. Conduct an analysis of human impacts on the environment (small-scale). Discuss appropriate non-polluting and low emission alternatives to conventional energy. Evaluate campus programs and buildings for environmental "friendliness" and prepare a report detailing problems and suggested improvements.

**Student Learning Outcome:** Students will use the scientific process to analyze human impact on the environment.