

Environmental Science 22: The Human Environment: Physical Processes Lab
Section Number: 1313 (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

Email: leonarm1@lavc.edu

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

Office: AHS / 304

Student Drop-in Hours:** M 10:00a-1:00p & 2:30-5:05 **

Phone: (818) 778 – 5595

***Please consult my schedule for additional times available by appointment.*

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

Week:	Dates:	Topic / Assignment / Readings:
01	Aug 31	Introduction – Water Audit**
02	Sep 07	"Cadillac Desert", The Scientific Method
03	Sep 14	Tujunga Wash
04	Sep 21	Streams & Rivers
05	Sep 28	Groundwater
06	Oct 05	S & R, GW (continued)
07	Oct 12	Chaparral
08	Oct 19	Water Quality Parameters
10	Nov 02	Water Quality Testing
11	Nov 02	Recycling Center
12	Nov 09	"A Chemical Reaction"
13	Nov 16	Life Cycle Assessment
14	Nov 23	"How green is our campus?" campus tour (group project)
15	Nov 30	Field Mapping (GPS & Compass) / Lab Notebooks Due
16	Dec 07	Green campus presentations

Final Exam, Wed. December 14th, 10:30am – 12:30pm *No exceptions!*

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

Required Materials (to be brought to every class): A basic **calculator**, a **dedicated notebook**, a **stapler**, a **flash drive**, and of course, most importantly a **good attitude!** Bring these items to lab every time we meet. Be prepared to be outdoors - dress comfortably; bring sunscreen, a hat, walking shoes, water.

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** (with the exception of your **water audit** which is worth **50 points**).

You will have the option to submit **ONE** of your labs **late**, one week after the due date without penalty (however, I don't recommend you use this option until/unless it is absolutely necessary). Late labs will not be accepted after this one-time, one-week grace period. No exceptions.

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... have you responded to the Doodle poll?).

Take notes. You will be submitting them, organized into a **dedicated notebook**, at the end of the semester. Your notebook will be worth the equivalent of one lab (**40 points**) toward your final grade. Lab manual/notebook guidelines are posted to the ES22 page of my Weebly site; refer to those for guidance. The more thorough your notebook, the better a reference it will be for you on the open notebook final exam (the only notebook you will be able to use will be the one you submit, a product of your own efforts in this class).

Grading will be as follows:

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

Looking for ways to earn **extra points** in this class? You have a couple of options:

1. Design, organize and make happen a class lab*, and earn the potential to garner double points (a way to make up for a lab you might have been forced to miss, for example, but also a way to create an experience in which we spend more time on an environmental science area of particular interest to you!) or;
** in conjunction with Prof Leonard*
2. Extra Credit work (see below).

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/> Watch the campus schedule for STARS events, Writing Center or general tutoring lab workshops, and other opportunities (<https://www.lavc.edu/campusnews/> ; <http://lavc.edu/writingcenter/> ; <http://lavc.edu/generaltutoring/index.html>) that can garner extra credit and academic enrichment.

Class Policies: I expect students to make their best effort 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.** As per the "Standards of Student Conduct" (see schedule of classes), 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. Take advantage of the General Tutoring Lab, my office hours, the assistance of fellow students - build your skills and raise your confidence to diminish the temptation to "cheat"!

Regular **attendance** is encouraged. If you stop attending class (or wish to drop) on or before **Nov 20, 2016** for Fall Semester 2016, 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. Also note - students that miss **more than three hours** of this 2-unit class (2 or more class periods) may be **subject to exclusion**. Make sure to communicate with me if extenuating circumstances arise. In addition, I suggest you exchange **contact information** (phone & email) with *several* of your classmates. Just in case conditions force you to miss a class, you will need to contact one of your classmates to find out what you missed.

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, 1st Floor: 818-947-2681 or TTD 818-947-2680 or email: ssd@lavc.edu).

Do you qualify for **Financial Aid**? Call 818-947-2412 or consult their website: www.lavc.edu/studentserve/site/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.

Additional academic and student support services at Valley:

<http://www.lavc.edu/counseling/services.html> (academic, career & transfer)

<https://www.lavc.edu/ASU/> (Associated Students)

<https://www.lavc.edu/asu/icc.html> (clubs - EcoAdvocates & Gardening Club, among others)

<https://www.lavc.edu/studenthealth/> (medical and psychological services)

<http://www.lavc.edu/veterans/veterans.aspx> (Veterans Services)

<http://www.lavc.edu/general tutoring/index.aspx> (General Tutoring)

<http://www.lavc.edu/writingcenter/home.aspx> (Writing Center)

Are there any additional links I should add? Please let me know!

Any questions, don't hesitate to ask!