



Division: Science
Course name: Environmental Science 1
Section: 4081 / **Semester:** Fall 2015

Instructor Name: Vered Mirmovitch	School Website: www.wlac.edu
Class Hours: Wednesday	Address: 9000 Overland Ave., Culver City, CA 90230
5:10 pm – 8:25 pm	Location: MSA 203
Office Hours: W 4-5 pm; 8:25-9:00 pm M 2:30-3:30 pm, T, TH 11:00 am – 1:00 pm	Instructor's E-mail: MirmovV@wla.edu
or by appointment	Location: MSB 229 (310) 287-4316

ENVIRONMENTAL SCIENCE 1

Course Description

This course introduces students with the basics of environmental science. It emphasizes the effects of humans on their physical environment. Topics include: the fundamental elements of the physical environment (with emphasis on atmosphere & oceans), types and sources of air pollution, global climate change (global warming and global dimming), acid rain/deposition, types and sources of water pollution, environmental impacts of producing & using energy from fossil fuels and radioactive materials, environmental impacts of mining and mineral processing procedures, renewable energy sources (solar, wind, water and geothermal) as alternatives to fossil fuel and nuclear energy sources, and thoughts on sustainable living.

Environmental Science 1 meets 3 hours a week. It is a 3-unit course.

Student Learning Outcomes (SLOs):

Upon completion of this course the student will be able to:

1. Describe the natural (i.e. unpolluted) chemical composition of Earth's atmosphere, water, & soil.
2. Define air pollution, water pollution, and soil pollution; describe what chemical compositional changes happen when the atmosphere, water, & soil get polluted.
3. Explain how each of the following impact the environment: mining and mineral refining processes; extraction, transportation, and burning of fossil fuels; industrial and agricultural activities; nuclear energy production procedures, nuclear wastes, and solid & hazardous wastes.
4. Discuss the main factors that cause global climate change (global warming, global dimming, and severe weather) and discuss ways of mitigating global climate change.
5. Discuss methods and ways of harnessing renewable energy resources for a sustainable living: solar, wind, geothermal, biomass, running water, and ocean waves.

Required & Recommended Books:

1. **Raven, Hassenzahl, Hager, Gift & Berg; Environment; John Wiley & Sons Publishers. 9th edition 2015, or 8th edition 2012.**
2. Check the class **Dropbox** site regularly for lecture slideshows.
3. **Etude** – Check the site weekly for forum discussion, additional resources and extra credit opportunities.
4. **Required environmental movies to watch:**
 - a. Al Gore's "An inconvenient Truth"
 - b. Josh Fox's "Gasland"
 - c. James Blalock's "Extreme Ice"

There are many additional movies and books on environmental issues. You are encouraged to explore and share with classmates using forum discussions in Etude.

Lecture Examination Schedule (Tentative):

EXAMINATION 1.....	OCT 14 5:10 – 7:00 p.m. (WED)
EXAMINATION 2.....	NOV 18 5:10 – 7:00 p.m. (WED)
FINAL EXAMINATION..... (comprehensive)	DEC 16 10:15 a.m. - 12:15 p.m. (THU)

Computation of Course Grade:

2 Midterm Examinations.....	60% of Course Grade
Final Examination.....	40% of Course Grade

You are required to take all 3 lecture examinations. About 30% of the questions on the Final Exam will come from the previous 2 lecture exams. Class participation, extra credit exercises, and forum participation in etude can be accumulated up to additional bonus of 10%.

All examinations will consist of combination of objective-type questions (ie., True/False; Multiple Choice; and Matching questions) that will be answered on **SCAN-TRON (882) forms** and fill-in, drawing, computation and short essay questions. You will be expected to provide SCAN-TRON 882 forms (available at the bookstore) and a **soft lead No. 2 pencil with a good eraser** for each examination for computer scoring. The Final Examination is comprehensive for the entire semester. **There are no make-up examinations.**

Grading Policy:

89 - 100%	A
77 - 88%	B
62 - 76%	C
50 - 61%	D
below 50%	F

Attendance Policy:

Attendance is mandatory. Roll will be taken. There is a strong correlation between poor attendance and poor grades. Please inform the instructor via e-mail if you are going to be absent due to special circumstances. **You are responsible for information, exam announcements, date changes, etc. presented in class, whether or not you are present.** A student who misses more than two class meetings, might be excluded from the class by the instructor.

Students who are given add slips must complete the process by the 3rd class meeting (Sept. 17). No replacement add slips will be signed.

Please note that if you have any questions you will need to contact me using my college email, not via Etudes. If you send private messages via Etudes you will not get any response from your instructor.

Withdrawal from Class:

You are responsible for your credit and enrollment status. Any student withdrawing from class must inform the admissions office of this decision. Last Day to drop without a "W" on the transcript is September 11. **Students failing to follow the correct procedure for withdrawals will receive a grade of "F" for the semester. No withdrawals are permitted after Friday, Nov. 20.**

Cheating/Academic Dishonesty:

In accordance with code 9803.28, **academic dishonesty is prohibited and will not be tolerated in this class.** Each student is expected to do his/her own work on all assignments, reports, examinations, etc. **CHEATING ON AN EXAM WILL RESULT IN AN “F” FOR THE COURSE.**

Here is a list of some actions that are considered cheating:

NO TALKING DURING THE EXAM.

KEEP YOUR EYES ON YOUR OWN EXAM.

USING NOTES OF ANY KIND (ON CARDS, STRIPS OF PAPER, DESK TOP, ETC.) DURING AN EXAM IS NOT PERMITTED.

Showing a fellow student your exam, or passing information in any way is not permitted.

Place your answer sheet(s) directly in front of you.

If you have a question, quietly walk up to the instructor and whisper your question.

Translation dictionaries are not permitted.

Changing the answers on a returned Exam & claiming it was scored wrongly.

All of these demonstrate a lack of Honesty & Integrity which is Essential in all jobs, all relationships, & in all Areas of Life.)

IMPORTANT DATES: <i>Last day to:</i>	<i>College is closed on the following days</i>
Drop a class without a fee: Sep 11	Labor Day: Sep 7
Drop a class without a "W": Sep 11	Veteran's Day: Nov 11
Drop a class with a "W": Nov 20	Thanksgiving: Nov 26-29

	No Class on Yom Kippur 9/23/15

Recommendations for Succeeding in Class:

- 1. Expect to Work. This is not supposed to be easy.**
- 2. Get to class on time, every time, and stay the whole time.**
 - Never miss class unless you're dead, & take good notes.
- 3. Find someone in the class to contact if you miss a meeting.**
- 4. Be organized! Use a daily calendar to set times for regular studying for each of your classes.**
- 5. Study & Review each night the class is given.**
 - Learning is easier if you schedule time daily to read, to think & review.

- Every time you study. spend at least 10 minutes reviewing previous lessons. (These "refresher shots" are the secret for long-term memory.)
- Focus your studying on the class slideshows at the Dropbox site.
- Read the relevant chapters in your textbook; hi-lite pertinent lines, & add these notes to your class notes (never read without writing).
- Use the class Etude site.
- Use associations to help you remember things.
- Prepare note cards and carry them with you to review.

6. Increase your studying the weekend before a scheduled Exam!!

7. Anything you turn-in (exams, reports) should look neat.

Campus Resources

If you are having problems, come and talk with me and check out some of the campus resources available to you.

Office of Disabled Student Programs and Services (DSP&S)

Student Services Building (SSB) 320 | (310) 287-4450.

West Los Angeles College recognizes and welcomes its responsibility to provide an equal educational opportunity to all disabled individuals. The Office of Disabled Students Programs and Services (DSP&S) has been established to provide support services for all verified disabled students pursuing a college education. DSP&S students may qualify for: priority registration, registration assistance, special parking permits, sign language interpreters and assistive technology (WLAC College Catalog).

Instructional Support (Tutoring) & Learning Skills Center

Heldman Learning Resources Center (HLRC) | (310) 287-4486

Improve your reading, language, vocabulary, spelling, math fundamentals and chemistry knowledge with convenient, self-paced computer-aided courses in the Learning Skills Center. Increase your knowledge and learning success: sign up for tutoring in various college subjects (WLAC College Catalog).

Library Services - Heldman Learning Resources Center (HLRC) |

(310) 287-4269 & (310) 287-4486

The WLAC Library provides instruction on how to use the online catalog, periodical and research databases. In addition to a large collection of books, periodicals and videos the WLAC Library has course textbooks which students may use while in the Library. Web access is available in LIRL as well as meeting rooms. The upper floors provide a beautiful view ideal for study (WLAC College Catalog). For more information refer to attached link:

http://www.wlac.edu/academics/pdf/WLAC_12-14Catalog_Policies.pdf

TENTATIVE SCHEDULE OF TOPICS
(schedule subject to change)

Modules	Lecture Topic	Textbook
1. Introduction to Environmental Science	1.1 Introduction The Physical Environment	Pg. 65-82
	1.2 Air Pollution	Ch. 19 - Pg. 373-381; 391-397
	1.3 Water Pollution	Ch. 21 - Pg. 415-437
2. Sources of Pollution	2.1 Fossil Fuels	Ch. 11 - Pg. 207-224
	2.2. Mining Processes	Ch. 15 - Pg 291-309
	2.3 Volcanoes	Pg. 79-80
	2.4 Agriculture Activities	Pg. 364-369
Midterm Exam 1 (Modules 1&2) October 14		
3. Effects of Pollution	3.1 Global Warming	Ch. 20 - Pg. 398-414
	3.2 Global Dimming	Pg. 401-403
	3.3 Severe Weather	Pg. 77-78; 409-410; 403
	3.4 Ozone Depletion	Pg. 384-386
	3.5 Acid Deposition	Pg. 387-389
Midterm Exam 2 (Module 3) November 18		
4. Solutions To Pollution	4.1 Dealing with Global Climate Change	Pg. 390-395; 481-482
	4.2 Renewable Energy	Ch. 12 - Pg.225-236
	4.3 Nuclear Energy	Ch. 12 - Pg.236-249
	4.4 Prevention Reduction and Disposal of Waste	Ch. 23 - Pg.456-473
	4.5 Changing Personal Attitudes and Practices	Ch. 24 - Pg.474-487
	4.6 U.S. Environmental Policy	Pg. 25-28; 381-384; 451-543; 484-485
Final Exam (Module 4) December 16		

NO Class: Yom Kippur 9/23/15; Veterans Day 11/11/15