

Weekly class topics and assignments: (subject to change when need be)
Field trips are tentative depending on availability of the host location.
This section will be edited in the next two weeks.

Dates by week Lecture Day	Readings: textbook: Principles of Environmental Science , Cunningham & Cunningham, 10th ed., McGraw Hill, Supplemental readings are posted in Moodle or online articles. Important videos are in Moodle.	Assignments exams
Jan 16- Jan 19	<p>Ch 1: <i>Understanding Our Environment</i> What is Environmental Science? The Nature Of Science</p> <p>How to examine urban ecology using environmental science and an analysis of the spatial dimensions and constraints for infrastructure and adaptation to change</p>	<p>See Moodle readings and the PDF for chapter One. First class is “live remote” to get to know each other.</p>
Jan 22- Jan 26	<p>Ch 2: <i>Environmental Systems, Matter Energy and Life</i> Understanding matter, energy and evolution: a systems approach.</p> <p>Ch 3: <i>Evolution, biodiversity and population ecology</i> Species Interaction and Community Ecology, Ecological communities Levels of Ecological Organization.</p>	<p>Online Discussion on biological and ecological dimensions of earth science.</p>
Jan 29- Feb 2	<p>Ch 5: <i>Biomes and Biodiversity</i> Ch 6: <i>Environmental Conservation, Forests, Parks, and Nature Preserves</i></p> <p>Ecological zones and land use globally and in the US, California. Protected areas and biodiversity</p>	<p>Discussion on alternative building materials</p>
Feb 5- Feb 9	<p>Ch 4 <i>Human Population Growth</i>: Eight billion, growing or declining? Demography. Population and Society, the Malthus problem in the real world</p> <p>The problem of the geriatric society. Aging and shrinking populations and the role of immigration in avoiding the Japan problem</p>	<p>Discussion continues on alternative building materials</p>
Feb 12- Feb 16	<p>Ch 7: <i>Food and Agriculture: the case of California</i> Agriculture, San Joaquin Valley, “water and growers”, crop choices, groundwater extraction</p> <p>Agroecology and alternatives to industrial food production, organic farming and scale, commodity trade and vs food sovereignty</p>	<p>Discussion: Food and Ag</p>

Feb 19-
Feb 23

Ch 8: *Environmental Health and Toxicology* Toxics and Toxicity

Discussion: Toxic sites, “brownfields” and “remediation”, the LA case.

Feb 26-
Mar 1

Ch 9: *Climate Crisis:* the science behind understanding anthropogenic change. Causes and impacts of the crisis

Discussion: adapting the built environment (“resilience”) the goal of “net-zero at the building level.

Mar 4-
Mar 8

Climate Crisis continued: Impacts and various public policy pathways to address the crisis.

Midterm Exam online

~~Mar 11-~~
~~Mar 15~~

no class Spring Break

March 13: fieldtrip to LA Kretz clean cement

Mar 18-
Mar 22

Ch 10: *Air Pollution*

Deadline for Midterm

Mar 25-
~~Mar 29~~

no class Friday Woodbury University Enrichment Days

Prepare individual presentations, research, and additional materials

Apr 1-
Apr 5

Ch 11: *Water: Resources and Pollution*

Field Trip Tillman wastewater treatment plant

Apr 8-
Apr 12

Ch 11: *Water, continued: Los Angeles*

Fieldtrip: Burbank Water and Power

Apr 15-
Apr 19

Ch 13: *Energy—transportation and household/business consumption*

Discussion: design and retrofitting for climate adaptation

Apr 22-
Apr 26

Ch 15: *Economics and Urbanization*

Presentations: Individual projects (ppt)

Apr 29=
May 3

Ch 14: *Solid and Hazardous Waste, MSW, landfills, recycling,*

Fieldtrip: Burbank landfill and recycling

May 6-
May 10

Ch 16: *Environmental Policy and Sustainability*

Final Exam online

Discussions: These involve selecting from posted readings in Moodle and using these to shape a short set of points that both summarize and critique. All are online in Moodle and are evaluated according to the criteria above.

Field Trips: These are planned and not firm yet but involve 3-4 hours on Friday mornings.

Exams and Projects:

The midterm exam is an essay on the climate crisis, its causes and best set of solutions. Upload to Moodle by the deadline.

Individual projects are uploaded as PPT or equivalent and combine the visual content with the narration. They can be recorded and posted as a video with the screen presenting the content. |

Midterm and Final Exams are done online and are relatively short with a series of discussion points to be addressed in Moodle in text boxes or uploaded PDF files.

- Moodle discussion and text replies to discussions 500 points
- Midterm exam essay 600 points
- Attendance and field trips 150 points
- Individual project and presentation 300 points
- Final Exam and Extra Credit, (100 points each)