

LA12: Environmental Science for Sustainable Development – Fall 2019 - draft

Some topics/dates subject to change. See *bcourses* for updated syllabus and assigned readings/films each week.

Week	Date	Lecture	Instructor	Section
Week 1	Th Aug 29	Course overview/population/footprint	Kondolf	<i>No lab meeting, environmental science autobiography</i>
EARTH, ENERGY, AND CLIMATE				
Week 2	Tu Sep 03	A dynamic earth	Kondolf	<i>Campus Overview, 'Inconvenient Truth' (watch on your own)</i>
	Th Sep 05	Energy basics	Kondolf	
Week 3	Tu Sep 10	Fossil fuels, air pollution, climate change	Kondolf	<i>Carbon Cycle, Ecological Footprint, Discuss 'Inconvenient Truth', 'Under the Dome' (watch on your own)</i>
	Th Sep 12	Renewables: energy generation	Brockway	
Week 4	Tu Sep 17	Nuclear energy	Peterson	<i>Measure airborne particulates; Start discussion 'Under the Dome'</i>
	Th Sep 19	Intro to life cycle assessment	Dzombak	
Week 5	Tu Sep 24	Urban forestry, micro-climate, air quality	McBride	<i>Urban forestry lab; Reading response due</i>
	Th Sep 26	Renewable transportn, <i>response to films</i>	Lipman/Kondf	
WATER				
Week 6	Tu Oct 01	Hydrologic cycle and the waterscape	Kondolf	<i>Strawberry Ck walking tour</i>
	Th Oct 03	Water supply over time	Kondolf	
Week 7	Tu Oct 08	Midterm Exam		<i>Film: Symphony of soil</i>
	Th Oct 10	Strawberry Ck: making of an urban creek	Charbonneau	
Week 8	Tu Oct 15	Aquatic insects and water quality	Mendez	<i>Aquatic life in Strawberry Creek</i>
	Th Oct 17	Industrial agriculture, alternatives	Wilson	
Week 9	Tu Oct 22	Stormwater management	Kondolf	<i>Stormwater management tour</i>
	Th Oct 24	Rivers of the Anthropocene	Kondolf	
ECOSYSTEMS, FOOD, HEALTH				
Week 10	Tu Oct 29	Water supply and public health		<i>Urban garden field visit</i>
	Th Oct 31	Sustainable Fisheries	Kondolf	
Week 11	Tu Nov 05	Soil resources		<i>Teams form, write project proposals. Reading response due</i>
	Th Nov 07	Ecosystems and conservation		
SUSTAINABILITY STRATEGIES				
Week 12	Tu Nov 12	Energy-efficient cool-climate cities	Jones	<i>Group work for final project</i>
	Th Nov 14	Sustainable floodplains	Kondolf	
Week 13	Tu Nov 19	Sustainable transportation		<i>Building sustainability tour</i>
	Th Nov 21	Sustainable buildings		
Week 14	Tu Nov 26	Waste		<i>No lab this wk; Reading response due Draft project report due Mon Nov 25</i>
	Th Nov 28	--- Thanksgiving Holiday ---		
Week 15	Tu Dec 03	Sustainable SF Bay	Kondolf	<i>Oral presentations of research projects</i>
	Th Dec 05	Course conclusion	Kondolf	
	Sa Dec 07	<i>Optional: River Restoration Symposium</i>		
Exam wk	Tu Dec 17	Final project due		<i>Optional review sessions TBA</i>
	Fr Dec 20	<i>Final exam 8a-11a</i>		