

SYLLABUS

ENVR S-101 Environmental Management (CRN 32382)

Harvard University 2015 Summer School Term
Section Meeting Wednesdays 6:30-9:30 pm (US Eastern Time)
53 Church Street Computer Lab, room L01

INSTRUCTORS: Joseph G. Allen, George D. Buckley and John D. Spengler

COURSE DESCRIPTION

This course surveys the scientific principles of environmental issues and environmental management practices, with attention to the health of both humans and the ecosystem. Fundamental and emerging topics related to air and water pollution, water use and management, aquatic ecosystems, energy and climate change, biodiversity, toxic substances in the environment, solid waste management, and regulatory strategies for risk assessment and environmental management are examined.

This special summer course uses the prerecorded videos from the Fall 2014 ENVR E-101 course combined with a weekly live section meeting and live chat. Several fall lectures will be covered each week during summer term. Local students meet at 53 Church St. Computer Lab, Cambridge, around the corner from Harvard Extension School offices.

REQUIRED TEXTBOOK

Botkin, Daniel B., and Edward A. Keller
Environmental Science: Earth as a Living Planet, 9th Edition (or 8th)
New York: John Wiley and Sons, 2014.

WRITING GUIDE

Turabian, Kate L.
A Manual for Writers of Research Papers, Theses, and Dissertations, 7th Edition
Chicago: University Of Chicago Press, 2007.

PAPER GUIDELINES

The papers require a title page with your name, HUID and email at the top right hand of the page and the paper topic centered. Pages are numbered center bottom of content (not title) pages. Use the Turabian text as a writing guide. Papers may have up to four 4x6 inch images, charts, maps etc., which must be well cited. Papers are written in Times New Roman 12-point font, double-spaced with one inch margins. Detailed references and citations are required. See website for page lengths of individual assignments.

LECTURE SCHEDULE

Week	Lecture Topics / Pre-recorded Video from Fall Semester	Readings, Assignments
1 6/24	Course Intro (JD Spengler) Intro (GD Buckley) All Things Considered (JD Spengler) Environmental Health and Environmental Toxicology (JG Allen) Ecology of Estuaries and Marshes (GD Buckley)	Ch. 1, 2, 5, 8, 18.6 Wetlands Introduce yourself online; Join discussion of Climate25
2 7/1	The Indoor Environment (JG Allen) Hazardous Waste Management (CD Zevitas)	Ch. 21 pp 539-546 Ch. 23 pp 596-605 Paper #1 due July 1
3 7/8	Water Resource Management (GD Buckley) Drinking Water and Public Health (GD Buckley) Pollutagens (GD Buckley) Pharmaceuticals and Personal Care Products (J Shine)	Ch. 18, 19
4 7/15	Air Pollution Sources (JD Spengler) Air Pollution Health Effects (JD Spengler) Health Co-Benefits of Carbon Standards (JJ Buonocore) Power Plant Standards Could Save Lives (JJ Buonocore)	Ch. 20, 21, 22 Paper #2 due July 15
5 7/22	Leighton Fundamentals of Ecology (M Leighton) Superfund Redevelopment (WC Denman) Environmental Justice & Environmental Law (MK Scammell)	Ch. 3, 6 EPA web sites Paper #3 due July 22
6 7/29	Envir. Impact Assessment For Sustainable Programs (J Hunt) Energy and the Environment (Z Zevitas)	Ch. 14; web sites Grad Paper #4 due July 29
7 8/5	Hydraulic Fracking (J Shine) Our Earth (GD Buckley)	Ch. 24 Final Paper Due August 5

COURSE REQUIREMENTS

1. Read assigned readings for each week
2. View posted videos each week (2-3).
3. Participate in-person or online in the weekly section meeting and discussions.
4. Submit written assignments to the drop box by 11:59 PM on the date due (Late papers submitted within 7 days of due date have 5 points deducted; Papers submitted more than 1 week late will score 0).
5. Submit the Final Paper in lieu of a Final Exam by 11:59 PM, US Eastern Time, on August 5 (no late papers accepted)
6. Be very diligent in avoiding plagiarism:
Follow carefully the guidelines posted by the Harvard Summer School and Extension School and those in the Turabian writing manual.

For the most up-to-date information, refer to the course website:

<https://canvas.harvard.edu/courses/3503>