Greetings from the Environmental Management II Instructors and Teaching Assistants:

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This week's lecture presentation from Harvard Hall is now online in streaming audio-video format with synchronized slides. Follow the links below to view the current lecture and assignments.

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W E E K 10

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ATMOSPHERIC ACIDITY
Professor Petros E. Koutrakis, Ph.D.

Coal burning power plant emissions lead to the production of sulfurous smog and acid rain events that in insolated cases can be as acidic as lemon juice. Acid air was first recognized as a problem as early as 1692 in Robert Boyle's book 'History of the Air'. Agnus Smith in 1872 was the first to perform a chemical analysis and coined the term 'Acid Rain'. It took over a hundred years for acid rain to become a national and international issue. Since then research in the US and Europe has steadily increased. The United States National Park Service maintains an Air Quality Monitoring Network that tracks, weather information, pollutant levels (SO2, NOx, Ozone, etc.) and acid deposition across the US. Sulfur from natural sources accounts for 59% of the total while anthropogenic sources of sulfur have grown to 41%. Of all US SO2 emissions, 69% comes from electric utilities burning fossil fuels. Transportation accounts for most of the NOx emissions, a major contributor to acid rain.

There are two major forms of acidic deposition, wet and dry. Local weather conditions determine how acid air will affect the land. In relatively wet New England, dry deposition accounts for twice as much acidity as wet precipitation. In dry western states, that ratio can be several times higher. The effects on lakes, crops and forests can be catastrophic. Damage to cultural resources such as the marble Parthenon in Greece, are being eroded by the effects of acid rain and fogs. Visibility is reduced and the acid air can irritate and damage our lungs. Strict emissions controls and new technologies offer possibilities for reduction of atmospheric acidity in the US.
Video Lecture, Assignments, and Readings for Week 10
http://lab.dce.harvard.edu/extension/environment/week10em2_new.html

Weekly Feedback Assignment (All Students)
http://lab.dce.harvard.edu/extension/environment/distance-students/feedback-frameset.html

NEXT CLASS -- April 10, 2002

GREENHOUSE EFFECT
Professor Petros E. Koutrakis, Ph.D.

Key Links:

Environmental Management II Course Website (Home Page)
<http://lab.dce.harvard.edu/extension/environment/em2.html>

General Help Information
<http://lab.dce.harvard.edu/extension/environment/HelpResources.html>

Personalized Help via Email from Teaching Assistant
<http://lab.dce.harvard.edu/extension/environment/E126ask-the-TA.html>

Help with Passwords
<http://lab.dce.harvard.edu/extension/environment/passwords.html>

Syllabus
<http://lab.dce.harvard.edu/extension/environment/syllabus2.pdf>

Current Week's Lecture
<http://lab.dce.harvard.edu/extension/environment/autoselect.html>

Upcoming Lectures (Video Index)
<http://lab.dce.harvard.edu/extension/environment/video-lectures-em2.html>

Environment News:

THE HARVARD ENVIRONMENT NETWORK BULLETIN
A weekly calendar of environmental events for the greater Boston community
<http://environment.harvard.edu/lists/archives/hen%2Dl/index.html>

EPA GREENBYTES NEWSLETTER
<http://www.epa.gov/ne/ra/gb/index.html>

SEMINARS
A guide to environmental research, education and outreach at Harvard University
<http://environment.harvard.edu/envath/seminars.html>
CONFERENCES
<http://environment.harvard.edu/lists/archives/envconfs%2Dl/index.html>
An electronic mail discussion list for environmental event, conference, and
publication opportunity announcements

JOB OPPORTUNITIES
An electronic mail discussion list for environmental job and educational
opportunity announcements
<http://environment.harvard.edu/lists/archives/envjobs%2Dl/index.html>

Software for Viewing Lectures and Assignments:
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Internet Explorer (5.5):
<http://www.microsoft.com/windows/ie/>

Realplayer 8 (Basic):
<http://www.real.com/player/index.html>

Adobe Acrobat Reader:

Back Issues of the Course Newsletter
<http://lab.dce.harvard.edu/extension/environment/newsletter.html>

Password Access for Registered Students:
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Passwords are required to access streaming audio-video lecture
presentations beginning with week 03.

Registered Harvard students of Environmental Management are authorized to
view the materials during the current semester. After selecting the
appropriate video link, a popup window (see above) will prompt you to enter
a user name and password.

For USER NAME, enter your Harvard University ID (HUID) number. It is
typically an 8-digit number that begins with '001'. This number was
assigned to you by the Registrar and appears on your registration
confirmation. All students should have received this
information by mail. (This letter has information about the computer
accounts which are available to registered students.) If are a Harvard
employee, please note that the HUID # is NOT the same as your employee
number. It is also not the same as any Harvar
d PIN you might have, such as the one used for DCEWEB.

For PASSWORD, enter your last name (all lowercase letters). Only eight (8)
characters are allowed, so if your name is longer (i.e. Washington), use
only the first 8 letters (washingt).

If you have not received, or cannot locate, your HUID you can contact the
Registrar's office.

Harvard Registrar (DCE)
51 Brattle Street
Cambridge, MA 02138
(617) 495-4024

Harvard Extension School Distance Education Program

COURSE NEWSLETTER FOR ENVR E-102 CRN-21783
Environmental Management II
Petros E. Koutrakis, Ph.D., and John D. Spengler, Ph.D.

Classes meet at Harvard Wednesdays 7:35pm-9:30pm
Harvard Hall 104 - Harvard Yard
Streaming Media Presentation online by the next Monday

Environmental Management I & II Web Sites
http://lab.dce.harvard.edu/environment/

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Course web site questions

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[NOTE: Environmental Management uses the List Server designated 'NSCIE126' for both Fall and Spring term classes. This Newsletter was prepared for students of Environmental Management II, ENVR E-102, CRN 21783.]

For subscribe/unsusbscribe instructions, see:
<http://lab.dce.harvard.edu/extension/environment/ListServer.html>