**Instructor: Dr. Kate Svyatets** 

Email:

svyatets@usc.edu

Office: SOS B15D Office Hours: Tuesday 2-3:50 p.m. (and by appointment)

# Economics for Natural Resources and the Environment (ENST 387) Mon, Wed 3:30-4:50pm Location: ZHS 163 Fall 2014, 4 units

**Course overview**: This class will introduce students to the basic precepts of environmental and resource economics, with an eye toward the increasing influence of resource economics policy responses to environmental problems. The theoretical basis is then applied to such aspects as traditional and "green" energy, the energy-water nexus, air quality, and environmental management, with an emphasis on resource sustainability and conservation. This course is built both on lectures and on student discussion and debate. Students are expected to study the required text assignment before lectures. Students will be also asked to prepare short presentations on major issues discussed in the course.

**Course policy**: Attendance is required. Please be on time. Texting, surfing social media (Facebook, etc.), chatting are not allowed. Laptops/iPads may be used only for lecture notes and class-related activities.

**Textbook:** Tietenberg & Lewis. 2010. Environmental Economics and Policy, 6th edition. ISBN: 9780321599490.

The textbook has useful resources online: self-assessment quizzes, web-links (helpful for your papers)

http://wps.aw.com/aw tietenberg eep 6/

# **Course learning outcomes:**

- 1. Be able to use critically the many sources of information about environmental policies to solve empirical problems.
- 2. Be able to use theoretical perspectives to identify and explain domestic and global environmental problems and the linkages among them.
- 3. Demonstrate the habit of accessing sources of environmental knowledge and the skill to critically interpret, assess and apply evidence.

**Research paper**: In addition to midterm and final exams, another requirement is an original research paper of **minimum 10 pages** (including bibliography, double-spaced). This will be on a topic of the student's choice, refined in collaboration with the instructor and reflecting the student's research interests. Please use a 12-point font; 1-inch margins; double-spaced. Required number of sources: **20 per paper**. The instructor will provide additional guidelines on the required diversity of sources. Each student will present his/her major research points in class (8-minute presentation). When you submit the paper, you need to give a hard copy to the instructor AND to upload the paper on the Blackboard in "Assignments."

# **Grading**

Midterm Exam	20%
Final Exam	25%
Research Paper	25%
Attendance/participation	10%
Short quizzes/Presentations in class	20%

# Statement on Academic Conduct and Support Systems

## **Academic Conduct**

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards*<a href="https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/">https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/</a>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <a href="https://policy.usc.edu/scientific-misconduct/">http://policy.usc.edu/scientific-misconduct/</a>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ the Department of **Public** or to http://capsnet.usc.edu/department/department-public-safety/online-forms/contactus. This is important for the safety whole USC community. Another member of the university community - such as a friend, classmate, advisor, or faculty member - can help initiate the report, or can initiate the report on behalf of another person. *The Center* for Women and Men <a href="http://www.usc.edu/student-affairs/cwm/">http://www.usc.edu/student-affairs/cwm/</a> provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

# **Support Systems**

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <a href="http://dornsife.usc.edu/ali">http://dornsife.usc.edu/ali</a>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* 

http://sait.usc.edu/academicsupport/centerprograms/dsp/home\_index.htmlprovides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information http://emergency.usc.edu/* will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

## **GRADING AND CORRECTION OF GRADES**

Excerpts for this section have been taken from the University Grading Handbook, located at htttp://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) "should only be assigned in unique or unusual situations... for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) "is assigned when work is not completed because of documented illness or other 'emergency' occurring after the twelfth week of the semester (or 12<sup>th</sup> week equivalency for any course scheduled for less than 15 weeks)."

## **Course Schedule:**

Week 1

8/25 Introduction. Course Objectives and Structure.

8/27 Tools of Economics: Concepts

Tietenberg & Lewis, Chapter 1 and 2 (pp. 15-23) of the main textbook
Michael Finnegan, "In Santa Barbara County, oil firms and environmentalists square off
Santa Barbara County oil," Los Angeles Times 08/18/2014
<a href="http://www.latimes.com/local/politics/la-me-santa-barbara-fracking-20140818-story.html#page=1">http://www.latimes.com/local/politics/la-me-santa-barbara-fracking-20140818-story.html#page=1</a>

Week 2 9/1 Labor Day – no class

9/3 Tools of Economics: Concepts
Tietenberg & Lewis, Chapter 2 (pp. 24-33)

"Appalachian Fall." The Economist (Online) Sep 25 2013ProQuest. Web. 3 Oct. 2013.

Vartabedian, R. (2014, Mar 23). Energy boom may augur a new export era; industry wants to lift U.S. government curbs, but skeptics note economic risks. *Los Angeles Times* Retrieved from

http://search.proquest.com/docview/1509254305?accountid=14749

## Week 3

9/8 Tools of Economics: Concepts (continued)
Tietenberg & Lewis, Chapter 3 (pp. 34-45)

Cart, J. (2014, Jan 12). Solar power's outlook not as sunny; projects stall amid uncertainty about the future of big tax breaks and utilities' willingness to buy the pricier electricity. Los Angeles Times Retrieved from <a href="http://search.proquest.com/docview/1476555740?accountid=14749">http://search.proquest.com/docview/1476555740?accountid=14749</a>

Cart, J. (2014, Mar 02). Ballet of mirrors and sunlight; new ivanpah facility may be the last of its kind to be built in the U.S. Los Angeles Times Retrieved from <a href="http://search.proquest.com/docview/1503372692?accountid=14749">http://search.proquest.com/docview/1503372692?accountid=14749</a>

# 9/10 Environmental Methods

Tietenberg & Lewis, Chapter 3 (pp. 44-63)

Michael Shear, Jackie Calmes "Obama Says He'll Evaluate Pipeline Project Depending on Pollution," the New York Times, July 27, 2013

# Week 4

9/15 Environmental Methods (continued)

Tietenberg & Lewis, Chapter 4

Eve Bachrach , "Huge LA River Restoration Report Recommends \$453MM Plan," Curbed Los Angeles, September 13th, 2013

Zucchino, D., & Muskal, M. (2014, Jan 11). Chemical spill imperils W. virginia water; people in 9 counties are told to avoid local sources, and officials declare an emergency. *Los Angeles Times* Retrieved from http://search.proguest.com/docview/1476467213?accountid=14749

# 9/17 Property Rights and Environmental Problems

Tietenberg & Lewis, Chapter 4

Gretchen Morgenson, Robert Gebeloff, "Wall St. Exploits Ethanol Credits, and Prices Spike," the New York Times, September 14, 2013

Holland, G. (2014, Jan 19). CALIFORNIA; an income hit for recyclers; certain containers previously accepted at a higher redemption value are no longer eligible, hurting some who were already just scraping by. Los Angeles Times Retrieved from http://search.proquest.com/docview/1485711031?accountid=14749

# Week 5.

9/22 Sustainable Development

Tietenberg & Lewis, Chapter 5

Winston, Andrew. *Green Recovery: Get Lean, Get Smart, and Emerge from the Downturn on Top.* Harvard Business Press, Boston, MA, 2009, Chapter 2

# 9/24 The Population Problem

Tietenberg & Lewis, Chapter 6

#### Week 6

9/29 Natural Resource Economics.

Tietenberg & Lewis, Chapter 7 and 16

# 10/1 Midterm Exam

## Week 7

10/6 Carbon Offsets and Cap-and-Trade.

"Putting a Price on Carbon: An Emissions Cap or a Tax?" Yale Environment 360, e360.yale.edu/feature/putting\_a\_price\_on\_carbon\_an\_emissions\_cap\_or\_a\_tax/21 48/

International Energy Administration. "Medium-Term Renewable Energy Market Report." 2014

# 10/8 Nuclear Energy: Economic and Environmental Aspects

Guruswami, L. International Environmental Law in a Nutshell, pp. 618-635 IAEA, Nuclear Safety Review, 2013

http://www.iaea.org/About/Policy/GC/GC57/GC57InfDocuments/English/gc57inf-3\_en.pdf

## Week 8

10/13 Energy-Water Nexus

Tietenberg & Lewis, Chapter 8

Gold, Russell, and Daniel Gilbert. "U.S. is Overtaking Russia as Largest Oil-and-Gas Producer." Wall Street Journal (Online) Oct 03 2013. ProQuest. Web.

# 10/15 Water

Tietenberg & Lewis, Chapter 9

Kevin DeGood, "Clean Water Infrastructure: The Cost of Inaction," Center for American Progress, October 30, 2013

## Week 9

10/20 Land

Tietenberg & Lewis, Chapter 10

Ann Raimes and Maria Jerskey, *Universal Keys for Writers*, 2009, pp. 740-765

## 10/22 Agriculture

Tietenberg & Lewis, Chapter 11

McKinsey Global Institute, "Resource Revolution: Tracking Global Commodity Markets," 2013 – chapter 4. Agriculture.

## Week 10

10/27 Poverty and Development.

Tietenberg & Lewis, Chapter 20, 21

# 10/29 Fisheries

Tietenberg & Lewis, Chapter 13

# Week 11

# 11/3 Forest Habitat

Tietenberg & Lewis, Chapter 12

Todd Gartner *et al,* "Natural Infrastructure: Investing in Forested Landscapes for Source Water Protection in the United States," World Resources Institute, 2013.

# 11/5 Environmental Economics: An Overview.

Tietenberg & Lewis, Chapter 14

## Week 12

11/10 Air and Water Pollution

Tietenberg & Lewis, Chapter 15, 18

# 11/12 Transportation. Managing Waste.

Tietenberg & Lewis, Chapter 17 and 19

Pietro Nivola, "...Fuel Economy...", in Barry Rabe, Greenhouse Governance, pp. 158-180

## Week 13

11/17 Paper presentations. Draft of the Research Paper To Be Completed.

11/19 Paper presentations (continued)

# Week 14

11/24 Paper presentations (continued). **Research Paper Due.** 

11/26 – 11/29 Thanksgiving Break – no class

## Week 15

12/1 Paper presentations (continued)

12/3 Conclusions. Review for the final exam.

Final Exam: Monday, December 15 2-4 p.m., ZHS 163