

**Instructor: Dr. Kate Svyatets**  
Email:  
svyatets@usc.edu

Office: SOS B15D  
Office Hours:  
Mon, Wed 11:30-12:30 p.m.  
(and by appointment)

**Economics for Natural Resources and the Environment (ENST 387)**

**Location: WPH 102**  
**3:30-4:50pm Mon, Wed**  
**Fall 2015, 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.

**Readings:**

1. 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/](http://wps.aw.com/aw_tietenberg_eep_6/)

2. Other readings will be posted on the Blackboard.

**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 9 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: **15 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. When you submit the paper, please give a hard copy to the instructor AND upload the paper on the Blackboard in “Assignments.”

## Grading

Midterm Exam	20%
Final Exam	25%
Research Paper	25%
Attendance/participation	10%
Short quizzes/Homework/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* <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct/>.

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/> or to the *Department of Public Safety* <http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us>. 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* <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage [sarc@usc.edu](http://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* <http://dornsife.usc.edu/ali>, 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.html](http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html) provides 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 <http://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 -- 8/24, 8/26**

Introduction. Course Objectives and Structure.

Tools of Economics: Concepts

Tietenberg & Lewis, Chapter 1 and 2 (pp. 15-23)

### **Week 2 -- 8/31, 9/2**

Tools of Economics: Concepts

Tietenberg & Lewis, Chapter 2 (pp. 24-33)

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

### **Week 3**

**9/7 – Labor Day, NO CLASS**

**9/9**

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 <http://search.proquest.com/docview/1476555740?accountid=14749>

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 <http://search.proquest.com/docview/1503372692?accountid=14749>

Environmental Methods

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

**Week 4 – 9/14, 9/16**

Environmental Methods (continued)

Tietenberg & Lewis, Chapter 4

Zucchini, 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.proquest.com/docview/1476467213?accountid=14749>

Property Rights and Environmental Problems

Tietenberg & Lewis, Chapter 4

**Week 5 – 9/21, 9/23**

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

The Population Problem

Tietenberg & Lewis, Chapter 6

**Week 6**

**9/28** – Review for the Midterm

**9/30, Wednesday – MIDTERM EXAM**

**Week 7 – 10/5, 10/7**

Natural Resource Economics. Carbon Offsets and Cap-and-Trade.

Tietenberg & Lewis, Chapter 7 and 16

“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/2148/](http://e360.yale.edu/feature/putting_a_price_on_carbon_an_emissions_cap_or_a_tax/2148/)

International Energy Administration. “Medium-Term Renewable Energy Market Report.” 2014

Nuclear Energy: Economic and Environmental Aspects

Guruswami, L. *International Environmental Law in a Nutshell*, pp. 618-635

**Week 8 – 10/12, 10/14**

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.

Water

Tietenberg & Lewis, Chapter 9

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

**Week 9 – 10/19, 10/21**

Land

Tietenberg & Lewis, Chapter 10

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

**Week 10 – 10/26, 10/28**

Agriculture

Tietenberg & Lewis, Chapter 11

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

**Week 11 – 11/2, 11/4**

Forest Habitat. Fisheries

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.

Tietenberg & Lewis, Chapter 13

Environmental Economics: An Overview.

Tietenberg & Lewis, Chapter 14

**Week 12 – 11/9, 11/11**

Air Pollution.

Tietenberg & Lewis, Chapter 15

Water Pollution.

Tietenberg & Lewis, Chapter 18

**Week 13 - 11/16, 11/18**

Transportation.

Tietenberg & Lewis, Chapter 17

Managing Waste.

Tietenberg & Lewis, Chapter 19

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

**Week 14**

**11/23**

Poverty and Development.

Tietenberg & Lewis, Chapter 20, 21

Paper presentations. Draft of the Research Paper to Be Completed

**11/25 — 11/28 Thanksgiving Break. NO CLASS**

**Week 15 - 11/30, 12/2**

Paper presentations (continued)

Conclusions. Review for the final exam. **Research Paper Due.**

**FINAL EXAM: Monday, December 14 from 2-4 p.m. in WPH 102**