GEOG 33500/71500 – International Pollution Issues
Fall 2015
Fridays, 11:10 AM to 2:00 PM – HN 1022

Instructor: Enrique Lanz Oca
Office: HN1032
Office Hours: Fridays, 9:00 – 11:00 AM or by appointment
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Course Description:
Issues related to international trans-boundary pollution are of increasing concern requiring regional and international cooperation. The course therefore will focus on the study of international trans-boundary pollution sources, transport pathways and contamination events that impact beyond a country’s borders. The broad field of environmental science will be discussed and will specifically identify areas which are of concern on a global scale as well as on national and local levels. National and international legal instruments to counteract degradation of the environment will also be discussed.

Course Objectives:
1. This course is designed to introduce students to global implications of anthropogenic activities that lead to production of critical substances resulting in detrimental changes to our environment.
2. Students will study the actions taken by the international community and by international organizations to find appropriate ways for conciliating divergent interests of the major industrialized countries and the developing world.
3. Students will be guided in forming an independent study on environmental concerns at the international level to enhance students’ perception of the important role of man’s responsibility towards a sustainable future.

Expected Learning Outcomes:
A. Course-Specific Learning Outcomes:
Students taking this course will be able to…
1. Think critically about the complexities of the planet Earth, especially the intersections between physical and human phenomena.
2. Analyze the planet as a complex structure and be able to comprehend the ways in which students’ immediate environments are connected to both the local and distant ecologies.
3. Examine preconceived notions about boundaries of all sorts, including social, political, and geographical ones. Consider the social construction of divisions between humans and non-humans.

These processes will be assessed through their participation in class discussion, essays, and Blackboard responses.
B. General Education Learning Outcomes:

1. Communication Skills Students will be able to write, read, listen and speak critically and effectively. Students’ ability to speak and listen effectively will be assessed through their participation in class discussions. Their ability to read critically will be assessed by their comments on course readings. Writing skills will be assessed through essays as well as regular responses on Blackboard covering lectures, readings, and class discussions.

2. Scientific Reasoning and Social and Behavioral Sciences- Students will be able to apply the concepts and methods of the natural and social sciences. Students’ ability to apply concepts and methods of sciences will be measured via class discussions, essays, and responses on Blackboard.

3. Information and Technology Literacy- Students will be able to collect, evaluate and interpret information and effectively use information technologies.

4. Values- Students will be able to make informed choices based on an understanding of personal values, human diversity, multicultural awareness and social responsibility.

Readings:
There will be no textbook. The course will include assigned readings that are available through articles, texts, and chapters. The reference information of these materials (e.g. website addresses) is located in a document called “Readings” on Blackboard in the section “Course Materials.” Students are also encouraged to seek related and current sources beyond cited materials.

Assignments:
Independent Case Study:
The major component of the course will lead to the development of a case study to be worked on independently by each student. A first draft of the research is due midway through the semester, a summary of the work presented in the last sessions of the course, and the final report to be turned in at the end of the semester will make up the bulk of the coursework. Students will be guided on formatting the results according to international standards of manuscript submission to a journal.

Participation:
The other component of the course is participation in our weekly in-class discussions. Participation is fundamental for success in this class and includes all of the following: class discussion, Blackboard posts, group activities, environmental fieldtrips, data-collection excursions, and attendance.

Evaluation Grades:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage of Final Grade</th>
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<tbody>
<tr>
<td>Proposal of the Independent Case Study</td>
<td>10%</td>
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<tr>
<td>Student Presentation Summary of Independent Case Study</td>
<td>20%</td>
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<tr>
<td>Final Draft Submission of Independent Case Study</td>
<td>60%</td>
</tr>
<tr>
<td>Participation in Class Discussion on Assigned Readings on Blackboard and</td>
<td>10%</td>
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<tr>
<td>other readings</td>
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Final letter grades will be assigned based on the CUNY grading policy that can be found in the online undergraduate catalog available at: http://catalog.hunter.cuny.edu/.

Course Policies:

Attendance:
I will take attendance at every class meeting. Students should arrive in class on time and stay for the entire session. If you will miss class for any reason, you should discuss this with me ahead of time. You are responsible for any material you may miss. Poor attendance and tardiness will be factored into the participation component of your grade.

Incompletes:
I do not give incompletes (IN) except under the most extraordinary and documented medical emergencies. No late assignments will be accepted. Without a valid medical excuse, students will receive a grade of zero (0) on any assignment missed. If, for a valid medical emergency, you do miss an assignment, you must contact me within 48 hours of the missed assignment and present acceptable documentary evidence for your absence.

Classroom Electronics Use
I permit the use of laptops and tablets ONLY for the purpose of taking notes during lecture and discussion. All other personal electronics should be turned off or set to silent before entering the classroom. Absolutely no texting is allowed during class. Any use of electronics beyond their permitted use is a disruption to the class and will be treated accordingly.

Hunter College Statement on Academic Integrity:
Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures. Plagiarism, dishonesty, or cheating in any portion of the work required for this course will be punished to the full extent allowed according to Hunter College.

Being in college requires discipline, collegiality, and overall honesty. Although knowledge is an accumulation of ideas from different people and epochs that you can use, you have to do so under certain conditions. If you are going to use another’s ideas you have to identify their names and works. If you don’t, it is called ‘plagiarism,’ and that is illegal. Plagiarism is the presentation of someone else’s ideas, words or artistic, scientific, or technical work as one’s own. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations of the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism. Students who are unsure how and when to provide documentation are advised to consult with their instructors.

ADA Policy:
In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of Accessability, located in Room E1214 B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772-4857 or (212) 650-3230.

**Schedule of Topics and Assignments**

*Except for changes that substantially affect implementation of the evaluation statement, this syllabus is a guide for the course and is subject to revision by the instructor. Any chances will be announced in advance.

**Course Contents and Calendar:**

**Week 1 (Aug. 28)**

**Week 2 (Sept. 4)**

**Week 3 (Sept. 11)**

**Week 4 (Oct. 2)**

**PAPER PROPOSALS AND EVALUATION OF THE PROJECTS**
Week 5 (Oct. 9)  Hydrospheric Cycles 1: Evapotranspiration, sublimation, condensation and beyond: The ideology of a Planetary Machinery. Water management. Contamination and pollution and its connections to the water cycle. A basic understanding of the oceans as a planetary flow. The Law of the Sea (UNCLOS) and the main polluting and contaminating sources in the oceans: sewage disposal, dumping, agricultural and industrial byproducts, plastic and liquid borderlines, toxic chemicals, and oceanic acidification.


TOUR AROUND THE CITY SATURDAY, OCTOBER 24th.

Week 8 (Oct. 30)  Energies and mining pollution/contamination 1: coal mining, exploitation, transportation, and consumption. The “Clean Coal” and carbon capture fanfares, oil (Canadian-oil tar sand, fracking), and gas. The trans-border oil pipelines and trains and their pollution potential. U.S. and fossil fuels: Pollution and the energy independence ideology. The Aznalcóllar case: The trans-border corporative pollution.

Week 9 (Nov. 6)  Energies and mining pollution/contamination 2: Nuclear energy: fission, fusion processes (ITER project), radioactivity, mining, and radon gas. From Three Mile Island to Fukusima through Chernobyl. Radioactive intercontinental flows: SOMAIR, Areva, inside the reactor, and the Yucca mountain. Trans-border oceanic incognita: radioactive dumping sites in the Kara Sea, Atlantic Ocean and Fukusima-Pacific Ocean. What about renewable energies?

Week 10 (Nov. 13)  Genetics, pollution/contamination and borders. Exotic and invasive species: What it means to be invasive? Invasive of what? The Trans-
bordergenic corporative strategy: Montasanto, others, and the expansion of GMOs. Fishery and wild salmon and the ecosystem: the Pacific Northwest case. Ships’ residual water and the extension of non-native organisms. What about humans?

Week 11 (Nov. 20)  What is garbage/rubbish/trash/basura? Trans-local, regional, national, and planetary garbage: New York City: From Fresh Kills landfill to mining areas. Electronic rubbish. What is virtual garbage?: E-mails, rejected information, and viruses. What about spams?

Week 12 (Dec. 4)  Virtual and Subtle Pollution/Contaminations: Sound/noise, magnetic, light, visual, and thermal pollutions. Space pollutions/contaminations?: from the satellite junk to the future asteroid mining. What about the moon?

Week 13 (Dec. 11)  **PRESENTATION OF THE PROJECTS 1.**

Week 14 (Dec. 18)  **PRESENTATION OF THE PROJECTS 2, FINAL PAPERS DATE LINE, AND FINAL DISCUSSION.**

**NO CLASSES**
September 18
September 25, College follows a Tuesday schedule
November 27, Thanksgiving