Topics in Environmental Health ECON 3610

Section: T07

Winter 2019
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Office Hours: Tuesdays 2:00 to 3:00.

Awareness of environmental problems and their impacts on our life have increased remarkably in the past 20 years. The environment affects our health in a variety of ways. The interaction between human health and the environment has been extensively studied and environmental risks have been proven to significantly impact human health, either directly by exposing people to harmful agents, or indirectly, by disrupting life-sustaining ecosystems. Environmental health economists generally assess the cost of negative impacts of environmental factors on human life. The ultimate goal of this course is to understand the general environmental economics principles and their applications in real life.

This course is a topic-based course which means that we are going to explore particular parts of the literature in this area in greater detail. Most of the topics reflect current state of art. We will cover 10 topics. I will assign several of readings for each topic. These are mainly journal articles. We will spent most of the class time working through the articles and discussing their strengths and weaknesses.

Textbook:

• There is no formal textbook for the course; for students interested in broad coverage, the following basic texts are recommended as additional resources:

Barry Field and Martha Field. Environmental Economics: An Introduction, 5th edition (paperback). McGraw-Hill/Irwin. Previous editions of this textbook are acceptable.

Evaluation:

•	Midterm	25%
•	Presentation	25%
•	In-Class Debate	25%
•	Term Paper	25%

- Absence from any exam or presentation, or late submission of paper due to illness, must be justified; otherwise, a penalty will be imposed. The Faculty reserves the right to accept or reject the reason offered. Reasons such as travel, employment, and misreading the examination schedule are not usually accepted.
- Midterm will be on March 19th. There will be no make-up for midterm, except in cases of medical reasons.
- Each week students will present one of the readings (typically those marked with asterisks, but there may be some adjustment) and expose its significance. Presentations will be assigned by lottery each week (e.g. on January 13 we will draw names of presenters for January 20). Everyone will present at least once (depends on the number of enrolled students). You will get written feedback on your presentation.

Scaling:

The grading scale is as follows:

A+ ≥95%	A ≥85%	B+ ≥80%	B ≥75%
C+ ≥70%	C ≥65%	D+ ≥55%	F<50%

^{*} Course grades are subject to departmental review.

In-Class Debate:

Every session we will have an in-class debate on a current environmental topic and specifically the subject that is taught during that week.

Presentation

Oral presentation is a key in most professional settings and is an important element of this course. A presentation should last 30 minutes. You will be expected to regulate time yourself. You should bring slides (a simple PDF) of your presentation on an USB key. The presentation should identify: (a) the research question in the paper (b) the key novelty and (c) main insights. You are also encouraged to be critical. In addition, you should finish your talk by presenting an idea of a research project inspired by the paper (in other words, suggest another paper that could be written). You will be marked on (a) clarity of presentation, (b) ability to distil the key elements (c) quality of research idea.

Term Paper

Choose 3 NBER technical papers published since January 2014 in the Environment and Energy series (available at http://www.nber.org/papersbyprog/EEE_archive.html). The papers should be related to each other by theme. You should finalize your papers with me on February 28. Your task is to: Summarize the methods and contributions of the three

^{*} Students appealing any term work whether it is an informal or formal must appeal their term work within 10 working days of receiving their mark.

papers, how they fit together and complement each other. Be critical in your summaries and identify limitations of the analysis. Use between 1500 and 2000 words and DO NOT PLAGIARIZE. During the two sessions in the first week of April, we will go through the first draft of your paper. You need to hand in a copy of your final draft to me on April 16th.

Course coverage:

- Topic 1: Introduction and Review of Basic Economic Concepts.
- Topic 2: The Economics of Environmental Quality
- Topic 3: Economics Valuation Techniques
- Topic 4: Green Behavior
- Topic 5: Heat (short-term health effects)
- Topic 6: Heat (short-term non-health effects)
- Topic 7: Heat (long-term effects)
- Topic 8: Pollution (short-term health effects)
- Topic 9: Pollution (short-term non-health effects)
- Topic 10: Pollution (long-term effects)
- Topic 11: Water Quality
- Topic 12: Natural Disaster

Readings:

Topic 1: Introduction

Topic 2: The Economics of Environmental Quality

1. Chapter 5 of Barry Field and Martha Field. Environmental Economics: An Introduction, 5th edition (paperback). McGraw-Hill/Irwin

Topic 3: Economics Valuation Techniques

- 1. Remoundou, K., & Koundouri, P. (2009). Environmental effects on public health: An economic perspective. International journal of environmental research and public health, 6(8), 2160-2178.
- 2. Chapter 7 of Barry Field and Martha Field. Environmental Economics: An Introduction, 5th edition (paperback). McGraw-Hill/Irwin

Topic 4: Green Behavior

- 1. Frey, B. (1992) "Tertium Datur: Pricing, Regulating and Intrinsic Motivation" Kyklos
- Ariely, D., A. Bracha and S. Meier (2009) "Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Pro-socially" American Economic Review.*

Topic 4: Heat (short-term health effects)

- 1. Heyes, A and S.Saberian 2018. "Hot Days and Ability to Work." *Working paper.* Will be circulated.
- 2. Deschenes, Olivier, Michael Greenstone, and Jonathan Guryan. 2009. "Climate Change and Birth Weight." *American Economic Review*, 99 (2): 211-17.*

Topic 5: Heat (short-term non health effects)

- 1. Heyes, A. and S. Saberian, 2017. "Temperature and Decision-making: Evidence from 206, 000 Court Cases". Forthcoming <u>American Economic Journal: Applied.</u>
- 2. Baylis, P. 2015. "Temperature and Temperament: Evidence from a Billion Tweets" Energy Institute at Hass working paper # 265, Berkeley.*

Topic 6: Heat (long-run effects)

- 1. Ranson, M. (2014). Crime, weather, and climate change. *Journal of environmental economics and management*, *67*(3), 274-302.
- 2. Carleton, T. A. (2017). Crop-damaging temperatures increase suicide rates in India. *Proceedings of the National Academy of Sciences*, *114*(33), 8746-8751.*

Topic 7: Pollution (short-term health effects)

- 1. Heyes, A & Zhu. M. Air Pollution as a Cause of Sleeplessness: Social Media Evidence from a Panel of Chinese Cities. Working paper. Will be circulated.
- 2. Moretti, E., & Neidell, M. (2011). Pollution, health, and avoidance behavior evidence from the ports of Los Angeles. *Journal of human Resources*, 46(1), 154-175.*

Topic 8: Pollution (short-term non-health effects)

- 1. Heyes, A., Neidell, M., & Saberian, S. (2016). *The effect of air pollution on investor behavior: Evidence from the S&P 500*(No. w22753). National Bureau of Economic Research.
- 2. Archsmith, J., Heyes, A., & Saberian, S. (2018). Air quality and error quantity: Pollution and performance in a high-skilled, quality-focused occupation. *Journal of the Association of Environmental and Resource Economists*, 5(4), 827-863.*

Topic 9: Pollution (long-term effects)

- 1. Bishop, K. C., Ketchman, J. D., & Kuminoff, N. V. Hazed and Confused: Air Pollution, Dementia, and Financial Decision Making. Working paper.
- 2. Bharadwaj P, GibsonM, Graff Zivin J, Neilson C. 2013. Gray matters: pollution and human capital formation. Unpubl. Manuscr., Univ. Calif., San Diego.*

Topic 10: Water Quality

- 1. Glied, S., & Neidell, M. (2010). The economic value of teeth. *Journal of Human Resources*, 45(2), 468-496.
- 2. Currie, J., Graff Zivin, J., Meckel, K., Neidell, M., & Schlenker, W. (2013). Something in the water: contaminated drinking water and infant health. *Canadian Journal of Economics/Revue canadienne d'économique*, 46(3), 791-810.*

Topic 11: Natural Disaster

- 1. Nobles, J., Frankenberg, E., & Thomas, D. (2015). The effects of mortality on fertility: population dynamics after a natural disaster. *Demography*, *52*(1), 15-38.
- 2. Boustan, L. P., Kahn, M. E., Rhode, P. W., & Yanguas, M. L. (2017). The effect of natural disasters on economic activity in us counties: A century of data (No. w23410). National Bureau of Economic Research.*

Office Hours

You do not need to book an appointment to see me during my office hours.

Email communication

- I will answer all my emails within 48 hours (excluding weekends).
- Your emails should contain your first and last name, student number and course code. I am unable to respond to emails that do not have this information.

Recommendations:

- Do your best to attend each and every class ON TIME.
- Prepare for each session in advance by pre-reading the relevant chapter.
- Ask questions in class.
- No electronic devices (including recording devices) are allowed in the class.
- You are required to turn off your cell phone in class. No texting, talking on the phone, playing games, listening to the music, or web-browsing.
- You cannot use cell phone as a calculator during the tests.
- You are not allowed to take pictures of slides or record lectures in anyway without my permission.

Academic Integrity

Academic Integrity University policy on academic integrity will be enforced. A full description of academic integrity matters, including plagiarism and cheating, can be found in Section 8 of the General Academic Regulations and Requirements of the University of Manitoba. Ignorance of the regulations and policies regarding academic integrity is not a valid excuse for violating them.

Penalties for Academic Dishonesty

The minimum penalty for plagiarism on a written assignment is F on the paper and may result in a grade of F-DISC (discipline) for the course. This notation appears on the student's transcript. For the most serious acts of plagiarism, such as the purchase of an essay and repeat violations, this penalty can also include suspension from the Faculty of Arts for a period of up to one year. The Faculty also reserves the right to submit student work that is suspected of being plagiarized to Internet sites designed to detect plagiarism. The minimum penalty in Arts for academic dishonesty on a test or final examination is F for the test/examination and a grade of F-DISC for the course, plus a one-year suspension from the Faculty of Arts. The F grade and disciplinary notation appears on the student's transcript. For more serious acts of academic dishonesty on a test or examination, such as repeat violations, this penalty can also include suspension for a period of up to five years from the Faculty of Arts.

Students Accessibility Services

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services

http://umanitoba.ca/student/saa/accessibility/

520 University Centre 204 474 7423

Student accessibility@umanitoba.ca

Additional Information

Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout ECON1010.. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet.

For more information, please visit the Academic Learning Centre website at: http://umanitoba.ca/student/academiclearning/

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person.

A complete list of liaison librarians can be found by subject: http://bit.ly/UtJobB4. In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: http://bit.ly/1sXe6RA. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage: www.umanitoba.ca/libraries.

Student Support For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781. Student Counselling Centre Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with

relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. Student Counselling Centre: http://umanitoba.ca/student/counselling/index.html
474 University Centre or \$207

Medical Services (204) 474-8592

Student Support Case Management

Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team. Student Support Intake Assistant http://umanitoba.ca/student/case-manager/index.html
520 University Centre (204) 474-7423

University Health Service

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation. University Health Service http://umanitoba.ca/student/health/

104 University Centre, Fort Garry Campus (204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness

Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault. Health and Wellness Educator http://umanitoba.ca/student/healthwellness/welcome.html

Katie.Kutryk@umanitoba.ca

469 University Centre

(204) 295-9032

Live Well @ UofM

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site: http://umanitoba.ca/student/livewell/index.html

Your rights and responsibilities

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school. The Academic Calendar http://umanitoba.ca/student/records/academiccalendar.html

is one important source of information. View the sections University Policies and Procedures and General Academic Regulations. While all of the information contained in these two sections is important, the following information is highlighted.

- If you have questions about your grades, talk to your instructor. There is a process for work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form http://umanitoba.ca/registrar/
- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the Academic Integrity regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support http://umanitoba.ca/academicintegrity/ View the Student Academic Misconduct procedure for more information.
- The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected conduct yourself in an appropriate respectful manner. Policies governing behavior include the: Respectful Work and Learning Environment http://umanitoba.ca/admin/governance/governing documents/community/230 .html Student Discipline http://umanitoba.ca/admin/governance/governing documents/students/studen t discipli ne.html and, Violent or Threatening http://umanitoba.ca/admin/governance/governing documents/community/669 .html
- If you experience Sexual Assault or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The Sexual Assault policy may be found at: http://umanitoba.ca/admin/governance/governing_documents/community/230. http://umanitoba.ca/student/sexual-assault/

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site http://umanitoba.ca/faculties/ Contact an Academic Advisor within our

faculty/college or school for questions about your academic program and regulations http://umanitoba.ca/academic-advisors/

Student Advocacy Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns. http://umanitoba.ca/student/advocacy/

520 University Centre 204 474 7423 student advocacy@umanitoba.ca