

COURSE NAME; NUMBER; SEMESTER; MEETING DAYS, TIMES, AND PLACE.

Processes of human ecology
Course number 11:374:108
Spring 2019
Day and time TBD
Location TBD

CONTACT INFORMATION:

Instructor(s): Mary L. Nucci
Office Location: Cook Office Building 214
Phone: 848 932-9242
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Office Hours: By arrangement

COURSE WEBSITE, RESOURCES AND MATERIALS:

- All course materials will be available on Sakai or handed out in class.

COURSE DESCRIPTION:

The field of human ecology incorporates knowledge from both the social and the natural sciences. Having a fundamental understanding of the processes and drivers of human ecology, natural ecology, and the environment is important for personal choices and decision making. Using a combination of lectures, case studies (the social, legislative, regulatory and mass media communications that play a key role in influencing human interactions with the natural world) and social science experimentation, this course will focus on understanding the key background content of natural science processes, with an emphasis on interrelatedness and the interplay of social, cultural and physical environments.

LEARNING GOALS:

Course Learning Goals

1. Identify and discuss role of science evidence in social issues.
2. Compare competing evidence for scientific value.
3. Evaluate the use of scientific evidence in publicly available fora.
4. Extend basic science principles underlying issues in human ecology.

Core Curriculum Goals

Contemporary Challenges

- Analyze the degree to which forms of human difference shape a person's experiences of and perspectives on contemporary issues.

Social Analysis:

- Understand different theories about human culture, social identity, economic entities, political systems, and other forms of social organization.
- Employ tools of social scientific reasoning to study particular questions or situations, using appropriate assumptions, methods, evidence, and arguments.

ASSIGNMENTS/RESPONSIBILITIES & ASSESSMENT:

Activity	Assessment
CITI certification	Passing grade on CITI Human Subject Protections Basic Course (Social / Behavioral / Epidemiologic Research Investigators, Study Staff, or Students).
In class group activities	Rubric for guidelines for completion of in class activities.
Full semester research project	Rubric for guidelines for full semester group project which will use survey methodology and qualitative analysis. Final project presentation and associated paper will have a rubric for assessment.

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full policies and procedures are at <https://ods.rutgers.edu/>
Enter additional text here if you wish

ABSENCE POLICY

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me.

I will NOT accept late assignments unless you speak to me in person or by phone no later than 24 hours BEFORE the due date. NO email or text communications will be considered. I am here to help you learn the material in the class, so if you need extra time for a legitimate (e.g., illness, family emergency, religious observation) excused absence or reason I will work with you. However, note that repeated requests will not be allowed.

COURSE SCHEDULE:

Week	Course Learning Goals	Topic	Content	In class case study texts
1	1	Intro to class. What is science? Science in society: education, policy, decision making.	Science as fundamental to human ecology. Theories of science learning, communication. Scientific	Six Americas. Pew studies. Science and engineering indicators. C-SPAN videos of testimony of "experts." Systematic review approaches.
2	1,2,3,4	Ecology	Ecosystems.	Millennium Ecosystem Assessment. USFW Ecosystem Services website.
3	1,2,3,4	Biodiversity	Photosynthesis. Ecological energetics.	EPA bioengineered mosquito eradication trials https://www.usnews.com/news/national-news/articles/2017-11-08/epa-approves-bio-engineered-mosquitoes-to-combat-disease .
4	1,2,3,4	Climate change	Atmospheric chemistry. Climatology.	C-SPAN videos of discussions of House Committee on Space, Science and Technology
5	1,2,3,4	Energy part I: renewable energy	Meteorology. Solar science.	discussions on wind power legislation on nj coastline. NASA sun science. Solar science. Economies of scale.
6	1,2,3,4	Energy part II: oil, coal and gas	Geological cycles.	Fracking websites. S.334 - Fracturing Regulations are Effective in State Hands Act
7	1,2,3,4	Energy part III: nuclear power	Radiation science.	OSHA, EPA etc radiation guidelines. Radiation therapy. <i>Radium Girls</i> .
8	1,2,3,4	Water	Water cycles. Ocean currents.	Advocacy efforts to reduce plastics. 2018 microplastics ban legislation. Plastics/BPA: Consortium Linking Academic and Regulatory Insights on BPA Toxicity (CLARITY-BPA)
Spring Break				
9	1,2,3,4	Food part I: Food production	Genetics (GMO, CRISPR). Soil science.	S.499 SHIPP Act of 2017
10	1,2,3,4	Food part II: Food consumption	Metabolic pathways.	Farm bill. Senate Agricultural Committee hearings. C-SPAN hearings with Dr. Oz.
11	1,2,3,4	Human health part I: Infectious diseases	Immunology. Vaccines.	C-SPAN videos of discussions of House Committee on Space, Science and Technology and Congress on vaccination. Mommy blogs. Mommy scientist blogs.
12	1,2,3,4	Human health part II: Pollution	Cell structure and function. Chemicals. Dose-response. Biomagnification.	Department of Labor OSHA guidelines.
13	1,2,3,4	Sustainability economics	Social theories of needs, economics, sustainability	Social practice theory of sustainability. Needs theory: Maslow, Max-Neef.
14		Final project presentations		

FINAL EXAM/PAPER DATE AND TIME

The final project paper and presentation is due on the last day of class.

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

STUDENT WELLNESS SERVICES

Just In Case Web App <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.