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ENSP 399, Section 0301

Special Topics in Environmental Science and Policy: Physical, Ecological, and Societal Climate Change Indicators to Support Mitigation and Adaptation Decisions Fall 2013

Friday 1:00-4:00 p.m.
Symons Hall, Room 0209

Instructor: Dr. Melissa A. Kenney

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Office Hours: By appointment

Course Description:

Join an exciting research project at the interface of science and policy! One of the initiatives of the interagency U.S. Global Change Research Program (USGCRP), National Climate Assessment (NCA) is to vision an end-to-end system that considers physical, environmental, and societal indicators of climatic change, impacts, vulnerabilities, and responses. This is a multi-year project that includes 150+ scientists and decision-makers who are vetting candidate indicators, developing documentation for the chosen indicators, and writing manuscripts for inclusion in a special issue of a high profile journal. This semester there will be opportunities to develop the documentation and communication, in collaboration with federal agency scientists, for indicators that will be included in a pilot system on the web in Spring 2014 and learn about science policy coordination through working with a technical team.

This is not a traditional course; it is a multidisciplinary research experience to work on a current, active research program at the intersection of science and policy. It requires the students to work collaboratively as a research team to develop the requested research products. It is intended that scientists and policymakers will use the research that you have developed as part of this class. Thus, for your work to be useful and for you to receive a good grade, it has to be professional and of high enough quality that it would be considered for use as part of the indicator system.

Instructor Permission:

Instructor permission is required to enroll in the course. Please submit a cover letter describing your interests in this project and a current resume to Dr. Melissa Kenney at kenney@umd.edu.

Learning Outcomes as a Scholarship-in-Practice course in the Gen Ed program:

By the end of this course, students will be able to:

- Demonstrate an ability to select, critically evaluate, and apply relevant areas of scholarship – by developing policy memos to describe the indicators research program to federal decision-makers and to make recommendations for the presentation, visually and via text, of a particular indicator that is being considered in the indicator system.
- Articulate the processes required to bring about a successful outcome from planning, modeling, and preparing, to critiquing, revising, and perfecting – by developing a plan and back-up plan to assure the successful delivery of the research products by the deadline.
- Demonstrate an ability to critique existing applications of scholarship in order to learn from past successes and failures – by preparing an annotated bibliography of scholarly sources,

government papers, and other authoritative and credible sources that supports the development of documentation and summaries for the public for the indicator.

- Demonstrate an ability to collaborate in order to bring about a successful outcome – by successfully participating as a team assigned to investigate and develop a recommendation of the presentation and communication of a few global change indicators for decision-makers.
- Recognize how an application of scholarship affects or is affected by political, social, cultural, economic and ethical dimensions – by articulating in the communication of indicators visualizations and supporting text the utility for decision-making that occurs within these multiple dimensions.
- Produce an original analysis, project, creative work, performance, or other scholarly work that reflects a body of knowledge relevant to the course – by preparing documentation and communication products on indicators that, if of sufficient quality, can be used by the U.S. Global Change Research Program (USGCRP) in the prototype National Climate Indicator System.
- Effectively communicate the application of scholarship – by successfully preparing policy memos and delivering a formal presentation of the recommendations developed in your research report to your classmates using PowerPoint.

Required Course Materials:

There is no required textbook for the course. Consistent with ongoing research projects, we will use scholarly documents that can be obtained through the UMD library system.

Information about the research program include:

- Information about the Indicator System is available at: <http://www.globalchange.gov/what-we-do/assessment/indicators-system>
- Reports and documents that have been created for the development of the system are available at: <https://www.dropbox.com/sh/m9vv8d9xylpghni/5-3xILLnwk>
- Course documents: <https://www.dropbox.com/sh/929omufhwwgiko7/ibCjvjaonI>

E-mail List:

An e-mail list will be set up for this class through Google Groups. Please note that I will communicate with the class through e-mail listserv regarding any class cancellations, changes in meeting times, or room changes.

Course Requirements:

There are no required courses; however, excellent writing, critical thinking skills, and a desire to conduct research are essential to be successful.

Grades:

For this semester, grading will be a combination of the quality of your work and the improvement that you have shown throughout the semester. I expect that your assignments would be of the same quality that you would give to an employer, which means that proofreading and seeking assistance from the Learning Assistance Service, if needed, are expected. Sloppy formatting and grammar are unacceptable and will affect your grade.

Work of high enough quality that would allow a professional technical editor to polish it for use in the indicator system, is the quality of work that I expect from you. Such work will earn you an A. Research that does not meet that standard can be revised and resubmitted until that bar is met or until the end of the semester deadline. Please see me if you have any questions.

Information about professional development activities:

Upon request, I will review your resume and cover letter and provide you a critique from an employer's perspective.

Information on the research activities:

Unlike courses and traditional coursework, research is not a linear activity. As a result, part of this semester as we develop your research projects will be to explore interesting findings; thus, it is impossible to fully describe all the assignments and research activities that emerge because of the nature of research. However, similar to a well-run research program, we have defined sets of tasks and deliverables to assure that we produce work that has the potential to be useful for inclusion as part of the National Climate Indicator System. Research activity assignments include:

1. Developing policy memos (e.g., 3 Things Memo) on the indicator system to managers within agencies;
2. Research scientific journal articles on indicator topics and write annotated bibliographies;
3. Develop options for different ways to present indicators, develop a group presentation to present those options to receive comments; and
4. Choose an approach and develop the scientific documentation using the template provided and a 1-3 page document with the graphic and text for a chosen decision-maker audience.

Throughout the semester you will work both individually and collaboratively with your classmates. I expect that all documents and presentations will be of professional quality. However, if for some reason this bar was not met, depending on whether the activity was individual or group, you will be able to revise the documents until it is of professional quality.

The final exam is

Late Policy:

All papers and assignments are due on the designated date. You are given one reprieve for illness, family, religious, or personal reasons. You do not need to supply me with the reason for the late assignment. Beyond this one time reprieve, unless you see me in advance of the due date and obtain an approved excuse, late assignments will not be accepted. Late group activities and assignments will not be accepted except in very rare circumstances and are subject to instructor permission.

Unless stated otherwise, assignments are due on Thursday by COB (close of business – which is 5 pm).

Attendance and Absences:

We will work as a research team through out the semester so it is critical that you attend all class sessions. Because I am not located on campus, this is the one time a week that you can guarantee that you can get expert advice on your research project. I understand there are occasionally situations that arise that require you to be somewhere other than class; it is essential that you inform me of these conflicts or situations as soon as you know to allow your classmates to prepare for your absence.

In general: In accordance with University policy, students are expected to attend classes regularly, and on-time. An absence will only be considered “excused” under the circumstances described by the University’s attendance policy, available at:

<http://www.umd.edu/catalog/index.cfm/show/content.section/c/27/ss/1584/s/1540>.

In summary, it is the policy of the University to excuse the absences of students that result from the

following causes: illness of the student, or illness of a dependent as defined by Board of Regents policy on family and medical leave; religious observance (where the nature of the observance prevents the student from being present during the class period); participation in university activities at the request of University authorities; and compelling circumstance beyond the student's control.

Students claiming an excused absence must (1) apply in writing and (2) furnish documentary support for their assertion that absence resulted from one of these causes.

Illness: The University will accept as an excused absence a self-signed note from a student who has missed a single lecture, recitation, or laboratory, attesting to the date of the illness. The note must also contain an acknowledgement by the student that the information is true and correct and that providing false information is prohibited under Code of Student Conduct. The student is also obligated to make a reasonable attempt to inform the instructor of his/her illness in advance.

For non-consecutive, medically necessitated absences from more than a single lecture or team meeting, I will follow the same policy. If absences become frequent, I will require further documentation from the Health Center or an outside health care provider.

A student experiencing a prolonged absence from class or a student who will be absent for a major scheduled grading event is required to provide written documentation of the illness from the Health Center or from an outside health care provider. In cases where written verification is provided, the Health Center or outside health care provider shall verify dates of treatment and indicate the time frame that the student was unable to meet academic responsibilities. No diagnostic information shall be given. For further information on this policy, please see <http://www.president.umd.edu/policies/v100g.html>.

Academic Accommodations:

If you have a documented disability, please contact Disability Support Services in 0126 Shoemaker Hall to obtain accommodation request forms that you give me (and your other instructors) as proof of your eligibility for accommodations. The rules for eligibility and the types of accommodations a student may request can be reviewed on the DSS website at <http://www.counseling.umd.edu/DSS>. Please submit your paperwork to me as soon as possible, and well before any due date or exam to ensure that any accommodation needs can be satisfied.

Learning Assistance:

If you are experiencing difficulties in keeping up with the academic demands of this course, contact the Learning Assistance Service, 2202 Shoemaker Building, 301-314-7693. Their educational counselors can help with time management, reading techniques, math learning skills, note-taking and exam preparation skills. All services are free to UMD students.

Religious Observances:

The University System of Maryland policy provides that students should not be penalized because of observances of their religious beliefs. Students shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances. *It is the responsibility of the student to inform the instructor of any intended absences for religious observances in advance.* Notice should be provided as soon as possible.

Code of Academic Integrity:

Academic dishonesty (such as cheating on exams, plagiarism from the internet or other students, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents and forging signatures) is unacceptable and will result in referral to

the Student Honor Council, after which a determination of a violation could result in a failing grade in the course and a note on your transcript indicating a violation of the rules of academic integrity. The University's Code of Academic Integrity sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student, you are responsible for upholding these standards in this course:

1. No cheating (“intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise”);
2. No fabrication (“intentional and unauthorized falsification or invention of any information or citation in an academic exercise”);
3. No facilitating academic dishonesty (“intentionally or knowingly helping or attempting to help another to violate any provision of this Code”);
4. No plagiarism (“intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise”).

Please see me if anything about these rules is unclear, and for more information on the Code of Academic Integrity or the Student Honor Council, visit www.shc.umd.edu.

Copyright Protection for Class Materials:

Commercial firms have been paying students to take notes and collect course materials, which are then copied and sold. Course materials that exist in a tangible medium, such as written or recorded lectures, Power Point presentations, handouts and tests, are copyright protected. Students **may not** copy and distribute such materials except for personal use and with the instructor's permission.

Course Evaluation:

Your participation in the evaluation of courses and teachers through CourseEvalUM is a responsibility you hold as a student member of our academic community. Your feedback is confidential and important to the improvement of teaching and learning at the University, as well as to the tenure and promotion process for professors. CourseEvalUM can be accessed at this website: www.courseevalum.umd.edu. By completing all of your evaluations each semester, you will have the privilege of accessing the evaluation reports for the thousands of courses offered at UM during the semester.

Class Schedule:

Date	Class Topic/Focus	Assignments
9/6/13	Introduction to National Climate Indicator System	Read background document and develop 3 Things Memo individually and 2 minute presentation
9/13/13	Additional Background on USGCRP and Indicator System; Collaboratively Revise 3 Things Memos	Revise 3 Things Memo as a Team and group presentation
9/20/13	Health Indicators Call; Comments on 3 Things Memo	Take Notes on Health Indicators Call, Identify Errors in 3 Things Memo and Revise
9/27/13	First Indicators Research Project (group project)	Annotated Bibliography on Heat Mortality Morbidity Indicators
10/4/13	Plan process for developing Indicators Research Project	
10/11/13	Research Meeting	
10/18/13	Presentation on options for Indicators Presentation	
10/25/13	Research Meeting	Technical Documentation for Indicators System
11/1/13	Present Indicators Recommendation for Heat Mortality Morbidity; Discussion of Next Indicators (1 credit – 1 indicator; 2 credits – 2 indicators or 1 complex indicator)	Indicators Due Thursday COB including Technical Documentation, Graphic, and 1-3 page Text for Website
11/8/13	Research Meeting	List of References Considered with 1 sentence summary and 1 sentence of potential relevance to this project
11/15/13	Presentation on options for Indicators Presentation	Recommendation of Presentation
11/22/13	Research Meeting	Technical Background
12/6/13	Present Indicators Recommendations	Indicators Due Thursday COB including Technical Documentation, Graphic, and 1-3 page Text for Website
12/13/13	Concluding Discussion; Class Preparation for Final Exam	Revisions of previous work
12/17/13	Final Exam 1:30-3:30 (2 or 3 credits only)	