Welcome to the Anthropocene, a time when humanity is profoundly impacting our planet -- its air, soil, oceans and myriad life forms. By both intention and neglect, unprecedented billions of Homo sapiens and our collective technologies are transforming Earth's planetary systems into something novel. At the same time, as University Professor Thomas Lovejoy has noted, "the world's actions today are producing an unacceptable environment for those who will be living at the century's end." How can science -- specifically the new field of sustainability science -- help us to address these challenges?

Goals

By the end of this seminar, students should be able to:

1. Describe the scope and focus of the field of sustainability science.
2. Provide scholarly examples of how sustainability science can be applied to real world problems.
3. Contribute to this field of research through an original piece of scholarly research, literature review or research proposal, presented to the class as a whole.

Approach

This course incorporates both classroom-based discourse and guest presenters. It will be organized by both the professor AND you though a series of collegial seminars and activities. As a result, the syllabus may be augmented and adjusted as student interests and expertise are revealed. To keep on track, please refer to the on-line schedule page presents (or links) to session plans and activities at least 1 week in advance.

Course Web Site(s)

You access link to our activities site here: http://evpp50509sp16.pbworks.com. Updated syllabus, all assignments (including deadlines), submissions and professor's (and others) presentations will be posted to this site.

Course Schedule


Texts and Materials

All texts and materials should either be accessible via our wiki site,
or else handed out in our prior class. Students should feel empowered to add to this list as they see fit to convey their discoveries and ideas.

Performance Assessment

Students scores for the course will be based on performance on the following activities:

1. 80% x the average of scores (0-4) for active participation in 5 (MS and ND students) or more scheduled sessions
2. 20% x 1 in-class presentation on your Sustainability Science scholarship topic (0-4 score; one half session)

If you are unable to attend a session in person, please inform your professor at least 1 week in advance to make alternative arrangements to (a) connect with us in real-time, (b) review a recorded archive, then provide written insights and perspectives (in real-time or via email before next scheduled session). If not in real-time, please discuss and reference at least 2 peer reviewed articles in your communique.

<table>
<thead>
<tr>
<th>Assignment and Rubric</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participation</td>
<td>Partially and passively attend</td>
<td>Fully attend, but passive</td>
<td>Attend and participate</td>
<td>A leader in contributing substantively and actively</td>
</tr>
<tr>
<td>2. In-Class Leadership</td>
<td>Delivered but irrelevant</td>
<td>Marginally on topic and informative</td>
<td>Informative and professional</td>
<td>Publish this! (i.e., highly pertinent, poignant to course goals, and professionally delivered)</td>
</tr>
</tbody>
</table>

**Participation:** Students are expected to participate actively in every session they attend. If you need to miss a session, please inform your professor in advance whenever feasible. Master's students who attend less than 5 scheduled sessions will be required to make supplemental contribution to the course products in order to receive full participation credit. (If that's likely for you, please discuss with your professor ASAP to make alternative arrangements.)

**Leadership:** Students should plan to present their scholarly work and/or lead a ~60 min scholarly discussion of their selected sustainability science topic for that day. Multiple students leading same topic may (optionally) collaborate on their leadership, for which time should then be additive (i.e., 2 students = 120 min.). Creative formats -- such as debates or substantively appropriate role-playing simulations and debriefs -- as long as scholarly substance is not compromised -- are warmly welcome!

Grading Procedure

The final grade is based on your performance out of the possible 100 points:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points (out of 4)</th>
<th>Points (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Exceptional/Passing</td>
<td>3.6001+</td>
<td>90.001 - 100</td>
</tr>
<tr>
<td>B - Satisfactory/Passing</td>
<td>3.2001 - 3.6</td>
<td>80.001 - 90</td>
</tr>
<tr>
<td>C - Unsatisfactory/Passing</td>
<td>2.8001 - 3.2</td>
<td>70.001 - 80</td>
</tr>
<tr>
<td>F - Unsatisfactory/Failing</td>
<td>0.0000 - 2.8</td>
<td>0 - 70</td>
</tr>
</tbody>
</table>

In the past, roughly half of the students in this sort of seminar received A's and half B's, however a few have also received a C. The professor is not required, but reserves the right to provide + or - to grades to provide further clarification regarding the quality of students' work.

Disability Accommodation

If you are a student with a disability and you need academic accommodations, please see Debbie Wyne and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through the DRC.

If you are unable to attend class in person, please make arrangements in advance [if possible], so that the professor can try to make accommodations for your participation via skype.

Honor Code

Adherence to the GMU Honor Code is expected of all students, specifically:

*Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.*

In all assignments and communications, plagiarism will not be tolerated. This applies equally to oral and written communications in the context of any evaluated (graded) course assignments. In presenting quotes, paraphrasing statements or logical arguments from others in any medium (on-line, oral or written), students should properly cite their source. Results of team work should only be attributed to those who directly contribute to the final product (even if more than those people were designated as being part of the team). Any or all members of a student team may be held accountable for any Honor Code violations in their shared work. Any public usage of original material from this course (e.g., presentations, images, etc.) without explicit permission of its creator shall be construed as stealing. As stated in the Honor Code, infractions may
result in invalidated credit for dishonorable work and lowered grade, including failure from the class, suspension or dismissal. Inquiries for clarification from the professor are welcome. Thank you in advance for your conscious attention to these issues.

**Absenteeism**

As adults with outside responsibilities, many of you may have to miss a class once during the semester. If you know this is likely to happen, please contact your professor as soon as possible to arrange means to ensure you can still learn the material and/or obtain full credit for any learning activities.

If there is any exceptional threat posed by **pandemic flu** this season, students who promptly inform the professor of their flu symptoms (see next underlined link hereafter) are then strongly urged to **stay at home**, per CDC direction [here](http://www.cdc.gov/flu/). Do **not come to class** until 24 hours after any \( \geq 100^\circ\text{F} \) fever passed without medication. Insofar as students adhere to the GMU Honor Code when declaring their flu-related need to work from home, they will be eligible to receive reasonable accommodation for their illness, as deemed appropriate by the professor.

**About the Instructor**

Dr. Dann Sklarew, Associate Professor, Dept. of Environmental Science and Policy (*ESP*)

and Associate Director, Potomac Environmental Research and Education Center (*PEREC*).

Office hours:
- Tues. and Fri. 3-4pm in Fairfax campus' David King Hall room 3018.
- Or by email-arranged appointment

E-mail: dsklarew@gmu.edu (best way to contact him)
Website: [http://mason.gmu.edu/~dsklarew](http://mason.gmu.edu/~dsklarew)

Skype: jendann
Phone number: (703) 993-2012 (leave message; better yet, try email first)