

Instructions and scheduling recommendations for participation in the Sustainability Science Fall 2010 Seminar – Cambridge Group edition

Participation in the Sustainability Seminar is designed to broaden our own understanding of the key concepts, case studies, and points of debate within Sustainability Science. Participation in the course will take many forms, some of which are required, and some of which are optional. Opportunities for participation are listed below (required elements are starred*). All participants in IGA 904 are considered “students” (except Bill and Nancy). Most opportunities for participation are consistent for all students in the course. For the two class sessions in which our Cambridge Group has responsibility to lead the ‘response’, there will be some general requirements plus some distinct requirements for those students taking the course for credit. (Marked with an ** below).

- * Attending class sessions weekly
- * Completing the *Required* readings. (These are always one or more chapters from the draft Sustainability Science book). Choosing among and completing the *Supplemental* readings, drawing from the Sustainability Science Reader or the materials posted by the moderator and student response group responsible for the session.
- * Commenting on the NCEAS website with topics of your own or in response to topics posed by others in ADVANCE of each Monday session.
- Follow-up commentary on topics raised during the Monday session, posted to the NCEAS site within 2-3 days (preferably by Wednesday after the session).
- For the two sessions (**October 4th** and **November 15th**) that the Cambridge Group is responsible for leading, participation ramps up:
 - ** **Two weeks** in advance of the session, a lead team of students taking the class for credit will be designated as the responsible contact points for the Cambridge group’s planning and presentations. This team in turn must divide lead responsibilities for each of the ** tasks give below. It should post on the Cambridge group google site the name and email of the individual(s) with lead responsibility for each item.
 - ** The lead team should contact the designated *moderator* for the session (a faculty leader from another school) to coordinate the session. This should happen at the latest **10 days before** the session. The coordination may – but need not – involve coordinated selection of themes for discussion, supplementary readings, etc. The lead team may want to give the moderator access to the Cambridge google group to facilitate this.
 - * All students will offer suggestions for supplementary readings (1-3 per person) this happens by Friday morning 10 days before the session).
 - * All students will offer suggestions for key discussion topics (1-3 per person) this happens by Friday morning 10 days before the session.
 - ****By Monday one week ahead of Cambridge-led discussion** the lead team of session leaders will send out an internal draft (to the Seminar google group) including the chosen readings, their chosen discussion topics (~3), and a draft of commentary on the assigned chapter.
 - Class participants will then have two days to respond with follow up edits or comments.
 - ****By Wednesday one week before the Cambridge-led discussion** the lead team will post the final commentary, readings, and discussion topics to the NCEAS site.

- ****By Monday of the session** the lead tem and other class participants they recruit will be prepared to present a live discussion to the collective class. (Any visual aids must be submitted to the UMN hosts by noon of the presentation day).
- **** By Monday** one week *after* the session, the lead group should submit to the NCEAS site a final write up summarizing discussions and suggestions advanced at the session. This document is the seminar's 'document of record' for the session. It should not include everything said, but should try to highlight the most resonant and important themes in a couple of pages. Annex material can be appended.

Here are the sessions for which the Cambridge Group is responsible. The readings from the Book and Reader are listed and will shortly be posted on the NCEAS web page.

Session 4: October 4

The human-environment system: A conceptual framework

Billie Turner presenter; **Elizabeth King** moderator/discussant; **Harvard** students

Required reading(s) from the Sustainability Science **Book** (*chapter and title*):

[1_3_HE_system_vS1.doc](#)

Supplementary readings from the Sustainability Science **Reader** (*section in Reader, short title, citation; For copies see web site under 'Readings/Sust Sci Reader'*):

1.4.2.2 Syndromes [Ludeke et al., 2004]

2.4.4.1 Structure [Schaldach & Priess, 2008]

Session 10: November 15

Emergent properties of coupled human-environment systems

Bill Turner presenter; **Jim Heffernan** moderator/discussant; **Harvard** students

Required reading(s) from the Sustainability Science **Book** (*chapter and title*):

3.1 Emergent properties of coupled human-environment systems vS1.doc

Supplementary readings from the Sustainability Science **Reader** (*section in Reader, short title, citation; For copies see web site under 'Readings/Sust Sci Reader'*):

1.4.2.3 Major Dynamical Patterns [Holling, 2001]

2.3.2.2 Limits, Boundaries, Thresholds, & Tipping Points [Lenton et al., 2008]

2.4.4.3 Complex and Cross-Scale [Cumming & Collier, 2005]