

EEB 533B: SUSTAINABILITY SCIENCE
Mondays 3:30-5:30 pm Lewis Library Room 349

HOW THE COURSE WILL WORK:

1. We will meet on Mondays, 3:30 - 5:30 pm, for a weekly videoconference session.

Prior to each session:

- Key reading posted at least a week in advance.
- Supplementary readings posted at least 3 days in advance.

Each session will have:

- 20-30 min. lecture on that week's book chapter/topic
- 10-15 min. commentary by the moderator
- 10-15 min. presentation by one university student group
- Remainder: Q & A

2. We will meet at one other time during the week (TBD) to discuss.

We need to pick this by consensus, preferably before Sept 20.

Let's keep our fingers crossed that we all have a common time.

3. Students should engage in active, topic-specific discussions via the course website.

- The National Center for Ecological Analysis and Synthesis (NCEAS) is sponsoring this course. They've set up a website for us.
- Each session will have general and topic-specific discussions among all participants. Also, please post any and all feedback on the book draft!
- Your participation will help make the discussion vibrant!

4. Princeton students will be preparing and presenting commentary on 2 sessions:

- ✓ **September 27**
- ✓ **October 25**

Each student will sign up to contribute to one or the other session (or both!!)

Your commentary week is your main responsibility to the class.

5. (Optional) Join cross-campus focus groups to work on review papers, syntheses, and other collaborative products.

- Other schools are requiring and/or keen to develop substantive products from this course.
- Though the website, you can explore and join self-organizing working groups that will emerge to work on different topics and products.

PREPARING THE STUDENT COMMENTARY:

The week before the session:

- You'll receive the lecturer's & moderator's notes/presentations a week in advance.
- Read some supplementary articles (in and beyond the "Reader").
- Choose 2 articles to post as supplementary reading for the other students.
- Conferring with your week's moderator, come up with 3 important issues/topics you think people will want to discuss on the website.
 - Each needs a shorthand name, and a few-sentence description of the issue.
 - Discussion folders will be thusly labeled, and the few-sentences will be the first posting in the thread.
 - Discussion folders should be set up by the Friday prior to the session.
- Prepare a 10-15 minute commentary or discussion of the book chapter, the lecture, and the moderator's response.
 - The book authors are keen to get constructive feedback on the chapter.
 - You can choose whether to be editorial or not in your commentary.
 - For example, commentary can focus on 1+ of your discussion topics.
 - Feel free to confer with me or your moderator as you plan.

During the session:

You will present your commentary in 15 minutes or less.
I recommend having an outline in powerpoint.

After the session:

1. Write a quick summary (1-3 pages), highlighting key points from:

- lecturer,
 - moderator,
 - student commentary,
 - and any other interesting bits
 - Example: http://blog.lib.umn.edu/sustain/sustainability_science/2009/11/
- **Quick summary should be posted on website by the following Monday**

2. Write an inclusive summary (3-5 pages),

- Include quick summary highlights.
 - Include interesting developments from web discussion topics.
 - Include interesting linkages with other sessions and discussion topics.
The key is to read through and distill the follow-up discussions from your session!
- **Inclusive summary should be posted on website before Winter Break**

SCHEDULE OF MONDAY SESSIONS IN LEWIS 349: Video sessions 4:00-5 pm

September 13 Introductions and organization (Princeton missing)

September 20

Sustainable development and sustainability science

Bill Clark presenter; **Heffernan/Ogden** moderator; **MN** students

September 27

Long-term trends and transitions in nature and society

Bob Kates presenter; **Ann Kinzig** moderator; **Princeton** students

October 4

The human-environment system: A conceptual framework

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

October 11 (Harvard on holiday break)

The environmental services that flow from natural capital

Steve Carpenter presenter; **Patty Balvanera** moderator; **MN** students

October 18

Divergent vs. convergent development models

Ivette Perfecto (U. Michigan), **Cavender-Bares** moderator; **CIEco** students

October 25

Human well-being, natural capital and sustainable development

Partha Dasgupta presenter, **Steve Polasky** moderator, **Princeton** students

November 1 (Princeton missing)

Worked examples of concepts in human-environment systems

Elizabeth King presenter; **Billie Turner** moderator; **FIU** students

November 8

Institutions for managing human-environment systems

Elinor Ostrom presenter; **Bill Clark** moderator; **ASU** students

November 15

Emergent properties of coupled human-environment systems

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

November 22

Managing for sustainability

Pam Matson presenter; **Billie Turner** moderator; **FIU** students

November 29

Metrics for sustainable development

Steve Polasky presenter; **Luis García Barrios & Omar Masera** moderator;
ASU/Cornell students

December 6

Grand challenges and core questions of sustainability science

Robert Kates presenter; **Bill Clark** moderator; Open discussion