

Course: BIOL 5030, Ecosystem Services and Ecology

Fall 2016

When & Where: Wednesdays 6:00 – 9:00 pm, N210

Instructor: Dr. Ann Kohlhaas

Office location, hours & phone: N275, Mon & Wed 1:30- 3pm and by appt.,  
667-3695

Course book: Bouma, J., and P. van Beukering (eds.) 2015. Ecosystem services:  
from concept to practice. Cambridge University Press, Cambridge, United  
Kingdom.

Other readings may be assigned as appropriate.

Tentative Schedule:

<u>Date</u>	<u>Topic</u>	<u>Reading</u>
Aug 24	Introduction to Course and Ecosystem Services	1
Aug 31	Role of biodiversity	2
Sept 7	Traits-based approach to quantifying ecosystem services	3
Sept 14	Mapping ecosystem services	4
Sept 21	Economic values	5
Sept 28	Economic valuation methods	6
Oct 5	Trade-offs and decision-support tools (Paper Prelim due)	7
Oct 12	NO CLASSES	
Oct 19	Market-based instruments	8
Oct 26	Payments for ecosystem services	9
Nov 2	Global governance	10
Nov 9	Public-private partnerships	11
Nov 16	Local governance	12
Nov 23	Papers due	

Nov 30 Malheur Presentations  
Aesthetic Values  
Student Presentations

Dec 7 Student Presentations

Course Description: "Examination of services provided by healthy ecosystems, how services are affected by ecological degradation, and the ecological parameters that must be considered in developing and maintaining healthy ecosystems."

Purpose: In fulfilling the course description as provided above, it is our purpose to better understand the value of our ecosystems, and how these valuations are made and governed.

Expectations: The target audience for this course is graduate students with a strong biology background including ecology and the desire to become professional ecologists. Thus, you are expected to come in with an understanding of basic ecology (review, if necessary). During the course, you are expected to come prepared for each day's topic, participate in discussions, and even present some of the course materials. You will also write one paper and formally present it.

Grading:

Grading will be based on weekly quizzes, presentations and participation. As graduate students, you are expected to actively participate in the class, always be prepared for the day's material, and even present some of the material.

You need to read and be familiar with each week's reading before coming to class.

The first 10-20 minutes of class will be a quiz on the objectives of the assigned chapter and possibly even some material from the prior class.

Quizzes (11 x 10 pts.)	110
Chapter presentations (3 x 10 pts.)	30
Malheur presentation	20
Paper with presentation	50
<u>Participation</u>	<u>10</u>
Total	220

Only letter grades will be assigned. No +/- grades will be assigned. Final grades will be assigned based on the percent of possible point earned.

Thus: A = 90+ %, B = 80 – 89.5 %, C = 70 - 79.5 %, D = 60 – 69.5 %, F < 59.5 %.

Paper: The paper will be on an ecosystem services topic of your choosing. It must include at least five scientific articles from refereed journals. These five required references must be very relevant to the topic and not “peripheral” references. The paper should be 8 -12 pages in length and double-spaced. The literature cited section and any figures and tables do not count in the page requirement. The topic and references must be preapproved by your instructor.

- “Paper Prelim” is due on Oct. 5. This prelim should consist of the topic, an introductory paragraph (@ 1 page), and a list of the literature (formatted as in a Literature Cited section) you intend to use. Late Paper Prelims will lose 5 pts/week.
- Paper will be due on Nov. 23 by 6 pm as a hard copy. It can be turned in anytime before then. Late Papers lose 10 pts./day.
- Presentations will be on the papers and done in PowerPoint. Presentations will be scheduled on Nov. 30 and Dec. 7.

Presentation: Your major presentation will be at the end of the semester and will be on your paper. The presentation will be done using PowerPoint and should last @ 20 minutes.

Participation: You are expected to attend and participate in all classes throughout the semester.