BIOE 103CS - Environmental Science and Society - Spring 2014

Course website: www.montana.edu/kalinowski

Instructor

Dr. Steven Kalinowski 311B Lewis Hall Ph. 994-3232

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Text: *Environment: The science behind the stories*; Brennan & Withgott (4th edition)

Lectures: MWF 2:10 – 3:00, Reid 201

Office hours Mon 9:00 – 10:00, Wed 11:00 – 12:00, or by appointment

Grading. There will be five midterm exams, daily exercises, and a final exam. Your final grade will be calculated as a weighted average using the following breakdown.

Midterm exams60%Final exam20%Daily exercises20%Extra creditup to 4%

In addition, all students must be able to describe the "Keeling Curve" to pass this course. Students not able to describe what the Keeling Curve shows and why there is a trend on the graph will fail this course.

The instructor reserves the right to adjust the grading policy if circumstances require.

Exams. The lowest midterm exam score for each student will be dropped (exams not taken will count as a zero). All students must take the final. Students are expected to take the exams on the dates indicated. In exceptional circumstances, alternative times can be arranged. Please e-mail the instructor to request an alternative exam time.

Daily exercises There will be graded assignments many class periods in the form of homework, quizzes, or classroom exercises. These will not be accepted late, nor will "make-up" assignments be accepted. However, grades from two of these exercises will be dropped. Homework can be turned in at Dr. Kalinowski's mail box in the Ecology Department (Lewis Hall 310, closed noon – 1PM).

Course Goals

- 1. Be able to distinguish between scientific and non-scientific questions.
- 2. Be able to evaluate science as a non-scientist.
- 3. Be able to use scientific reasoning to test hypotheses.
- 4. Be able to describe some of the major ways humans have altered the natural world.

Academic misconduct Students violating MSU's Academic misconduct code will receive a failing grade and a referral to the Dean. See http://www2.montana.edu/policy/student-conduct/cg400.html for details.

BIOE 103CS Exam dates. Lecture topics are tentative.

Date	Topic	Chapter
Jan 8	Introduction to this course	1
Jan 10	Introduction to global warming	18
Jan 13	Scientific methods	1
Jan 15	Chemistry of life	2
Jan 17	Chemistry of life	2
Jan 20	Holiday: no class	
Jan 22	History of the earth	3
Jan 24	Evolution	3
Jan 27	Natural selection	3
Jan 29	Exam 1	
Jan 31	Population growth	3
Feb 3	Population growth	3
Feb 5	Biomes & Climate	4
Feb 7	Nitrogen cycle	5
Feb 10	Carbon cycle	5
Feb 12	Human population growth	8
Feb 14	Human population growth	8
Feb 17	Holiday	5
Feb 19	Exam 2	
Feb 21	Soil conservation	9
Feb 24	Agriculture & Biotechnology	10
Feb 26	Biological diversity & Extinction	11
Feb 28	Conservation biology	11
Mar 3	Case studies: Montana Wildlife	
Mar 5	Forestry and Wilderness	12
Mar 7	Urban environment	13
Mar 10-14	Spring Break	
Mar 17	Exam 3	
Mar 19	Environmental health	14
Mar 21	Environmental health	14
Mar 24	Case Study: Asbestosis in Libby, MT	11
Mar 26	Freshwater	15
Mar 28	Oceans	16
Mar 31	Air pollution	17
Apr 2	Fossil Fuels	19
Apr 4	Exam 4	19
Apr 7	Case Study: Arctic National Wildlife Refuge	19
Apr 9	Nuclear energy	20
Apr 11	Renewable energy	21
	Climate	17
Apr 14		18
Apr 16	Global climate change: science	18
Apr 18	Holiday	10
Apr 21	Global climate change: policy	18
Apr 23	Sustainability and the future	24
Apr 25	Exam 5	
Apr 29	Final exam: 8:00am - 9:50 (same place as class)	