

## GEOS 130: Introduction to Environmental Science

Syllabus

Fall 2016

Dr. Kristen Kaczynski

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Office Hours: Mondays 10-noon & Wednesdays 1-2pm.

**Prerequisites:** None

**Course Time and Room:** Lecture: M/W 9-9:50am in Ayres Hall 106

**Lab Activity:** Held in Physical Sciences 236. Course teaching assistants are:

Jay Smart ([jmart3@mail.csuchico.edu](mailto:jmart3@mail.csuchico.edu)): T 11:00-12:50pm; T 2:00-3:50pm

Allen LaGrange ([alagrang@mail.csuchico.edu](mailto:alagrang@mail.csuchico.edu)): M 11:00-12:50pm; 2:00-3:50pm

John Kelley ([jkelley18@mail.csuchico.edu](mailto:jkelley18@mail.csuchico.edu)): T 9:00-10:50am; W 11:00-12:50pm

Lexi Thornton ([athornton8@mail.csuchico.edu](mailto:athornton8@mail.csuchico.edu)): W 2:00-3:50pm; W 4:00-5:50pm

**Course Overview:** This course provides an analysis of present and long-term global and local environmental problems, coverage of scientific concepts needed to understand human society and its environmental interactions, and an examination of sustainable practices and other solutions. This is an approved General Education course.

**Learning Objectives:** Following completion of this course, you should be able to:

1. Recognize the basic laws of matter and energy that govern the environment.
2. Identify the impacts of humans on natural systems.
3. Explain the process of global climate change, including proposed causes, impacts, and solutions.
4. Describe the utility of science in addressing environmental problems.
5. Develop critical thinking skills needed to make complex scientific and social choices related to the environment.

**Text:** Essentials of Environmental Science. by Andrew Friedland, Rick Relyea and David Courard-Hauri. W.H. Freeman and Company. 2<sup>nd</sup> edition.

**Laboratory Manual:** There will be NO lab manual for this course. Instead, each week the lab assignment will be posted on Blackboard. It is YOUR RESPONSIBILITY to print the lab EACH WEEK. If you do not have a printout copy of the lab, you will not receive credit for the lab. Teaching assistants will only grade lab printouts, NOT labs written on loose leaf.

**Deadlines:** Deadlines will be strictly enforced and no late work will be accepted, unless prior arrangements had been made with the instructor.

### **Assignments and Exams:**

In class participation	5%
Blackboard reading quizzes	5%
Current Events assignments	12%
Resource Use Project	8%

Midterm Exam	15%
Final Exam	20%
Lab Exercises	<u>35%</u>
	100%

**Tentative Grades:**

A	A-	B+	B	B-	C+	C	C-	D+	D	F
93	90	87	83	80	77	73	70	67	60	<60

**Quizzes:** You are expected to assume responsibility of some learning of new material on your own. Class time is meant to reinforce concepts and provide examples from real-world scenarios. Preparing for class includes completing the assigned readings. Therefore, there will be (nearly) weekly quizzes on the readings for you to take on Blackboard Learn. They are due Wednesday by 8am and are open book/open note. They will be ~5 multiple choice (or similar type questions).

**Clickers:** We will be using clickers in almost every lecture session this semester. I will ask questions throughout lecture to make sure we are all on the same page with the material. You will receive participation points for answering the questions. You will not be graded on your answers, all answers will be worth the same number of points (typically two points for each lecture). You must be present and answer all questions during lecture to receive your participation points for that day. Because of the size of the class, I will not accept hand written responses to clicker questions – it is imperative to bring your clicker with you to class every day. You can miss up to three lectures and will still receive full credit for participation. We will start using clickers on Monday August 29.

**Current Events:** Each student will be expected to collect 4 news articles during the course of the semester which illustrate "real life" examples of points covered in class. For each article you will type a one paragraph description explaining the relevance of the article to the ideas we are covering in class on environmental science. Do not simply summarize the article. Make sure you write about how the article relates to topics covered in class. Electronic versions of newspapers are encouraged. Some examples: Sacramento Bee, New York Times, Los Angeles Times, Kansas City Star, Huffington Post, NPR, your hometown newspaper...etc. The news article must be a news story, NOT an opinion piece. If you have any questions about whether or not the article is appropriate, just ask. Attach the article along with the typed paragraph. You will not get credit if you don't include the article with your paragraph. I will accept PDFs or Word documents of the assignment. Please do not upload as a .pages file. Because this is a "current events" assignment, all articles should be from 2016 – even better if they are from Fall 2016! The point of this assignment is to demonstrate that environmental science is part of our everyday lives. It is not the isolated domain of academics; it's relevant!

**At the top of each assignment, please use this heading:**

Title of article:

Date when article was written:

News source:

If this is missing at the top of your assignment, you will get points deducted.

**Resource Use Project:** This project is an opportunity for you to realize the impacts of your lifestyle to the environment.

You will choose from between energy, water, or food consumption or waste production and record the appropriate information from that category for a seven day continuous period. These are due to me by **Friday November 11 at 11:59pm** uploaded to blackboard; you can, however, submit it earlier than that. I will post the assignment on Blackboard and more info will be given in the beginning of the semester.

**Lab Activities:** The two-hour activity is an essential part of this course where you gain hands on experience related to concepts we will discuss during lecture. These activities are mandatory and you must have a serious and compelling reason for your absence.

## Important Dates:

Assignment/Exam	Date
Current Events assignment #1 due	9/9 by 11:59pm (uploaded to Blackboard)
Midterm Exam	10/3
Current Events assignment #2 due	10/14 by 11:59pm (uploaded to Blackboard)
Current Events assignment #3 due	11/4 by 11:59pm (uploaded to Blackboard)
Resource Use project due	11/11 by 11:59pm (uploaded to Blackboard)
Current Events assignment #4 due	12/2 by 11:59pm (uploaded to Blackboard)
Final Exam	TBD after Census Date (9/16/2016)

**Etiquette:** Remember that the classroom is a professional environment. Cell phones, iPods, etc. must be turned off or silenced while in class. Please don't be a distraction to the students who are here to learn. Catch up with your friends before or after class, not during.

**Email Policy:** I check my email a couple times a day and will respond to your email within 48 hours. I do not regularly check my email on weekends so if you email me on a Friday, don't expect a response until Monday.

## **Study Suggestions:**

- Attend class. Research shows that students with regular attendance receive (on average) one full letter grade higher than those who do not attend regularly.
- Take notes! You are responsible for the material presented and discussed in class, regardless of whether or not it is on the PowerPoint.
- We all learn differently. Find study methods that work best for you, and practice them.
- Meet with me if you are struggling. I'm here to help, and I love to talk about environmental science.

## **MISCELLANEOUS CLASS INFORMATION**

### **Dropping the Course**

If you decide this is not the course for you, you are responsible for dropping it. During the first two weeks of the course dropping may be done without the instructor's permission. **After the third week, you will need a "serious and compelling" reason to drop. Your request must be approved by the Department and the College** (Failing the course or incompatibility with the instructor is not serious or compelling.) The Department of Geological and Environmental Sciences and the College of Natural Sciences strictly enforce this policy.

### **Policies Regarding Exams and Quizzes**

Online reading quizzes and in class exams cannot be taken late, and the final exam cannot be rescheduled without a serious and compelling reason. Vacation plans do not qualify as acceptable excuses. Exams will cover material from lectures, the textbook, and lab activities and will emphasize material in the preceding segment of the class.

**Academic Integrity:** Students are expected to be familiar with the University's Academic Integrity Policy. Your own commitment to learning, as evidenced by your enrollment at California State University, Chico, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Judicial Affairs. The policy on academic integrity and other resources related to student conduct can be found on the Student Judicial Affairs web site (<http://www.csuchico.edu/sjd/integrity.shtml>).

## **OVERALL GUIDANCE**

It is absolutely imperative that you work consistently on the class. Do not skip lecture, or wait to complete readings until the last minute before each exam. If you are having difficulty with any aspect of the course, PLEASE contact the instructor as soon as possible rather than wait until days or weeks go by and you fall behind.

### **The Student Learning Center**

In addition to your classmates, the Student Learning Center provides an opportunity to talk with writing assistants about the work you are doing for this and other classes. They are located on the third floor of the Student Services Building (SSC 340). You can reach them by phone, 530-898-6839, or by email: [slc@csuchico.edu](mailto:slc@csuchico.edu)

### **Americans with Disabilities Act**

If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Please also contact Accessibility Resource Center (ARC) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations.

#### **[Accessibility Resource Center](#)**

530-898-5959

Student Services Center 170

[arcdept@csuchico.edu](mailto:arcdept@csuchico.edu)

### **Non-Discrimination Policy**

According to the *University Catalog* the Cal State does not discriminate on the basis of sex, sexual orientation, disability, race, color, or national origin. The CSU complies with both the Rehabilitation Act of 1973, and Title VI of the Civil Rights Act of 1964, as amended by the American Disabilities Act (1990). If you have a disability and need reasonable accommodation for equal access to education and services at CSU, Chico, please talk with me or call Disability Support Services (x5959). For other concerns about discrimination or harassment, please talk with me, your advisor, or department chair, or Student Judicial Affairs (x6897).

The students, faculty, administrators, and staff of CSU, Chico are committed to a culture of honesty in which members of the community accept responsibility to uphold academic integrity in all they say, write, and create. I expect all students to fully embrace such academic integrity. For more details please consult <http://www.csuchico.edu/prs/EMs/2004/04-036.shtml>

If you have special needs (e.g., disability, diversity) please contact me. I will do my best to accommodate your needs or direct you to help, while keeping the issue confidential.

Wk	Date	Topic	Reading	Assignment	Lab Activity
	Aug				
1	22, 24	introduction to the course & syllabus; Scientific observation	Ch 1		Scientific Observation
2	29, 31	Energy, Matter & Change	Ch 2		Solar Radiation
	Sept				
3	5, 7	Labor Day, Ecosystem Ecology/Biomes	Ch 3	<b>Current Events #1 due by 9/9 11:59pm uploaded to BB</b>	On your own - calculate your ecological footprint
4	12, 14	Ecosystem Ecology/Biomes	Ch 3		Trees lab
5	19, 21	Biodiversity & Community Ecology	Ch 4		Biodiversity assessment
6	26, 28	Human Population Growth	Ch 5		Human Population Growth
	Oct				
7	3, 5	Midterm Exam on 3rd & Geological Processes, Soils	Ch 6	<b>Midterm Exam 10/3</b>	Rivers of Salt
8	10, 12	Land Resources	Ch 7	<b>Current Events #2 due by 10/14 11:59pm</b>	Evaluating Ecological Footprints
9	17, 19	Water Resources	Ch 9		Water Quality
10	24, 26	Renewable and non-renewable energy	Ch 8		Kill a watt
	Nov				
11	31, 2	Air pollution	Ch 10	<b>Current Events #3 due by 11/4 11:59pm</b>	Air Quality
12	7, 9	Waste Production	Ch 11	<b>Resource Use project due by 11/11 11:59pm</b>	CSU Chico Energy Use
13	14, 16	Human Health Risk	Ch 12		Local Environmental Risk
14		<i>Thanksgiving Break</i>			
15	28, 30	Climate Change	Ch 14	<b>Current Events #4 due by 12/2 11:59pm</b>	Greenhouse Effect
	Dec				
16	5, 7	Conservation of Biodiversity	Ch 13		TBD

Final Exam TDB after census date