

**Climate Change Ecology  
Geography 430  
Spring 2019  
M/W/F 10:30-11:20 am  
JEB 221**

**I. Course Information**

In addition to this syllabus, the main source of course information is the BbLearn course web site.

Instructor

Dr. Jeffrey Hicke  
McClure Hall 307C  
208-885-6240  
jhicke@uidaho.edu  
Office hours: Tuesdays, 2:00-3:00 pm; Wednesdays, 11:30 am-12:30 pm; or by appointment

Readings

Text: *Climate Change Biology* by Lee Hannah, 2015 (second edition), available from UI bookstore.

Additional readings may be assigned and will be available on the BbLearn course web site.

Goals

Climate change is happening now and is expected to continue in the future. Warming, droughts, flooding, sea level rise, and ocean acidification have effects on the ecosystems of the world, including plant and animal functioning, species ranges, ecosystem processes such as wildfire, and ecosystem services such as agriculture and water quality and quantity. Ecosystems also influence future climate through carbon and other greenhouse gas emissions and modification of surface properties such as albedo. In this class, we will explore the drivers of impacts to plants and animals as well as the capacity for ecosystems to mitigate future climate change. We will discuss both past changes and future projections, and cover Idaho, the western United States, and the world.

Course goals and student learning objectives: At the end of the course, students will understand

- 1) the mechanisms by which climate change affects plants, animals, and ecosystems;
- 2) the historical (past) impacts of climate change;
- 3) the future impacts of climate change given projections; and
- 4) the effects ecosystems have on future climate change (mitigation).

Prerequisites: Physical geography; global climate change; ecology; environmental science; or permission of instructor

## II. Grading

Grades will be assigned based on the following:

Homework	25%
Exam 1	25%
Exam 2	25%
Final exam	25%

Homework: There will be several homework assignments to give you experience with important concepts. See web site for assignments and due dates. Late assignments will have 10% of the points (one letter grade) deducted for each day late. If you have questions about an assignment, please contact me.

Exams: Exam 2 is not cumulative; the final is cumulative.

Grades will be assigned based on a curve. Splits among grades will be determined at the end of the semester, but I expect that that top 15-20% will receive As, and between 1/3 and 1/2 of the class will get As and Bs. Note that although unusual, it's possible that students receiving higher than a 90 will not receive an A.

Strategies for doing well in this course:

1. Attend class
2. Before class, print out course notes outline and PPT slides, then mark up/annotate during class
3. Study in an organized way (review notes, identify most important concepts)
4. Complete all homework assignments (will help with exams)
5. Take advantage of extra credit opportunities
6. Visit me with any questions

### III. Tentative schedule (subject to change based on progress)

Weeks	Topics	Readings
1-5	introduction, climate science, basic ecology, species range shifts	Chapters 1-5, supplemental
<b>week of February 18 (<i>subject to change</i>)</b>	<b>Exam 1</b>	
6-11	phenology, ecosystem/habitat change, methods for predicting future impacts	Chapter 6-11, supplemental
<b>week of April 3 (<i>subject to change</i>)</b>	<b>Exam 2</b>	
12-17	feedbacks to climate change/mitigation, adaptation	Chapters 12-18, supplemental
<b>Tuesday, May 7, 10:15 am-12:15 pm</b>	<b>Final (same room)</b>	

### IV. Course policies

#### Classes and attendance

You are responsible for the assigned reading and for knowing the due dates for all assignments and exams. I will be emailing the class regularly; please ensure you check your uidaho email account. Class attendance is not required but highly encouraged.

#### Classroom culture and civility

Please keep your cell phone put away while in class. Laptops are permitted for note-taking only. If you choose to use a laptop, please sit in the back two rows to avoid distracting your classmates. If you find yourself distracted by others' use of phones or laptops, please let me know.

Please be respectful of others in the classroom. Please do not talk or whisper in class as this is distracting to me and other students. Use appropriate language; allow others to talk; be courteous and civil.

#### Exams/homework assignments

You are welcome to ask for a regrade of an exam or homework assignment. Please do so within one week of the exam's or assignment's due date.

I allow makeup exams in only the most extreme situations (e.g., dire sickness), and I require written verification in any situation (e.g., note from doctor). Early exams will only be

accommodated for “once in a lifetime” events (subject to approval), and requests must be made four weeks in advance.

### Academic honesty

Academic honesty is covered in the Article II of UI Student Code of Conduct (<http://www.uidaho.edu/DOS/judicialaffairs/studentcodeofconduct>). Cheating or plagiarism will not be tolerated. Your work must be your own. Do not copy or plagiarize the work of others. If you are caught, you will receive no credit for that work, whether it is a homework assignment, an exam, or a project, and you will be referred to the Dean of Students for further disciplinary action. Depending on the seriousness of the plagiarism or cheating offense, you could be expelled from the university.

### Reasonable Accommodations

Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through Disability Support Services, located in the Idaho Commons Building, Room 306, in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course. Contact DSS at 208-885-6307, email [dss@uidaho.edu](mailto:dss@uidaho.edu), or go to [www.uidaho.edu/dss](http://www.uidaho.edu/dss).

### Concealed Carry of Firearms (recommended text from UI)

The University of Idaho bans firearms from its property with only limited exceptions. One exception applies to persons who hold a valid Idaho enhanced concealed carry license, provided those firearms remain concealed at all times. If an enhanced concealed carry license holder’s firearm is displayed, other than in necessary self-defense, it is a violation of University policy. Please contact local law enforcement (call 911) to report firearms on University property.