

California State University, Los Angeles
Department of Biological Sciences
BIOL 4200: Global Change, Summer 2018

Course Information

INSTRUCTOR INFORMATION

Instructor: Dr. Paul Narguizian

Office Location: ASCB 323C

Telephone: 818.343.2054

Email: pnargui@calstatela.edu

Office Hours: PLEASE EMAIL ME TO SET AN APPOINTMENT DAY & TIME

Class Days/Time: Online

Prerequisites: BIOL 1200

COURSE DESCRIPTION

This class is an introduction to the emerging discipline of Earth System Science, which considers interlinked physical and biological processes. We will examine the major transformations occurring on the Earth, the causes of these changes (both anthropogenic and natural), and their likely consequences for Earth's biological systems. The impacts of global change on specific systems, including fisheries, forests, agriculture, as well as impacts on ecosystem processes, biodiversity, biological productivity, and sustainability will be considered. An important aspect of this rapidly developing field of science is the ability to evaluate the validity of scientific claims as a basis for sound policy decisions. Thus, the course will emphasize critical thinking by asking you to carefully consider the nature of the scientific evidence discussed, and the integrity of public statements on this topic.

COURSE OBJECTIVES/OUTCOMES

Upon successful completion of this course, students will be able to:

1. Be able to describe the relationship between human activities and climate change.
2. Analyze and compare carbon-producing resources.
3. Assess the impact of human activities and carbon production on the environment.
4. Propose solutions to climate change issues.
5. Collect, interpret and present information.
6. Communicate about strategies to confront climate change to a variety of audiences, including other students and the local community.

Specific Learning Objectives for BIOL 4200

1. Examine the relationship between the nature of science (NOS) and interpreting climate change.
2. Formulate the causes of climate change.
3. Assess the impact of changes in radiative forcing and the carbon cycle on the climate system.
4. Classify the causes and effect of climate change using models.
5. Interpret how past climate informs us and the present climate system works.
6. Translate the potential consequences of climate change.

Required Course Materials:

A textbook is not required for this course. ALL reading materials, articles, multimedia, and videos will be provided by the instructor.

Other Readings

Additional readings, videos, etc. may be posted online in Moodle for you to review.

SEMESTER CONVERSION

As you are aware, CSULA will be converting to semesters during fall, 2016. If you will be here during the conversion, you will need to complete an Individualized Advisement Plan (IAP). Please see your academic advisor to complete your plan.

Course Structure

This course is conducted entirely online. You will participate in the course using Cal State LA learning management system called [MOODLE](https://moodle.calstatela.edu) [https://moodle.calstatela.edu].

Computer Requirements

You will need to have access to Word to complete written assignments.

You will need to have an up-to-date browser, operating system and some additional software on your computer to take this class. Check [the ITS Helpdesk Student Resources page](#) for instructions. Some of the documents in this course will be available to you in PDF form. You will need download and install [Adobe Acrobat Reader software](#) on your computer.

Assignments and Grading Policy

Assessments are based on a detailed grading rubric developed for this course:

Grading Criteria / Points Possible:

Course Grading: Final grades will be based on the following combination of assignments:

300 points – 6 Discussion Forum Posts @ 50 points each

100 points – 5 Individual Homework Assignments @ 20 points each

100 points – 5 Quizzes @ 20 points each

100 points – 1 Comprehensive Final Exam

Total Course = 600 points

Grading Scale: You will receive a single grade for the lecture and lab portions of the course. Letter grades will be determined based on the grading scale below.

<u>Grade</u>	<u>Minimum Percent</u>	<u>Total points (out of 600 possible)</u>
A	92	549-600
A-	90	537-548
B+	88	495-536
B	82	483-494
B-	80	477-482
C+	78	465-476
C	72	429-464
C-	70	417-428
D+	68	405-416
D	62	369-374
D-	60	357-368
F	<60	<356

4. Policy: Everything submitted as an assignment, project, or discussion post must be original work. References to resource materials are expected and proper citation is required. Assignments are due on the dates specified. Late submissions will be penalized 10%. Revised assignments that incorporate your instructor's feedback will be accepted until the course ends.

Rubrics

I will be using Rubrics in all of the assignments in order to provide you with specific and descriptive criteria to evaluate your work. **Please submit all assignments in MS Word format (using a .doc. or .docx file extension).**

Grades

You can view your grades using the *GRADES* button in the course navigation links. Please check your grades regularly to make certain that I have received all your assignments. If you have a question about a grade, email me at pnargui@calstatela.edu. Please do not post your personal concerns in a discussion forum.

Course Communication

Interaction with Instructor

The Instructor will make every effort to communicate frequently with students through announcements and postings within the Moodle site. Post any questions or comments you have about the course content and/or requirements in the *Announcements* forum. Questions of a more personal nature can be sent to the Instructor via email to pnargui@calstatela.edu.

As a student, you should expect to receive assignment feedback and responses to postings within 48 hours. The Instructor will post an announcement alerting the students if he or she will be unavailable for more than a day.

Email Policy

I will respond to a received email no later than close of work on the next day. I will post an announcement alerting you if I will be unavailable for more than a day. It is your responsibility to check your email daily for updates and announcements. Excessive emails impact both the professor and the student. Please make sure you have a legitimate reason for emailing.

I will email you about:

- Questions arising from difficulty in understanding course content.
- Requests for feedback on a graded assignment.
- Private issues.

I will not respond to email about:

- Questions that are answered in the course information.
- Lacks a subject line clearly stating the purpose of the email.
- Raises an inappropriate question.

Questions:

In online courses it is normal to have many questions about things that relate to the course, such as clarification about assignments, course materials, or assessments. Please post these in the *Frequently Asked Questions* forum.

Discussion Forums:

Each week begins on Monday morning. You will be required to post one original thread on Moodle by **Thursday at 11:55pm** and respond to one other. You have until **11:55pm on Sunday** evening to complete the discussions on the assignment for that week. Within 48 hours of a discussion's end, I will review all student responses and post a response as part of *Announcements*.

You will be assessed on the content, appropriateness, length, and how well the post is written (grammar and punctuation). See the rubric below. I expect at least 2-3 thoughtful and well written paragraphs. You may find it useful to write your post on Word, which can assist with spellcheck, and then cut and paste it into Moodle. The points earned by each student will be posted to the online gradebook no later than one week after the discussion ends.

All students have the right to express their own opinions and every other student must respect this right. Any student posting a comment disrespectful of this right will be asked to leave the discussion, and a grade of 0 will be recorded.

Three suggestions to help you be successful:

1. Base your discussion posts on an authoritative source.
2. Get to the point! The longer posts seem to generate the least enthusiasm among the other learners. If needed, chunk your posts into multiple, reader-friendly posts.
3. Get some initial ideas into the discussion within the first few days of the discussions. Then, continue to add throughout the week.

Netiquette

When posting on the discussion boards and chat rooms it is important to understand how to interact with one another online, *netiquette*. You can read more about the rules of netiquette at [15 Rules of Netiquette for Online Discussion Boards](#)

Virtual Office Hours

Once a week I will be available for virtual office using **Adobe Connect Meeting Room**. The link will be available in our Moodle course for easy access.

Turnaround/Feedback

During the week (M-F) I will check *Frequently Asked Questions* and monitor the discussion board several times a day. If you have a concern and send me an email message, you can expect a response within two days.

Helpful Student Resources

Technical Resources

Information on CSULA technical support resources for students: [Technical Support](#)

Student Support Services

Information on CSULA student support resources for students: [Student Services](#)

Academic Support Services

Information on CSULA academic support resources for students: [Academic Support](#)

Moodle Mentor Site

Information for students on how to be a successful online student and how to use Moodle: [Moodle Mentor](#) (Moodle Tutorials)

Course & University Policies

Student Handbook

Information on student rights and responsibilities, academic honesty, standards of conduct, etc., can be found in Schedule of Classes for the current quarter visit the Cal State LA [Schedule of Classes Information](#) under Policies and Procedures.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Students should be aware of the current deadlines and penalties for adding and dropping classes by visiting the [GET home page](#). (Registrar news and information)

Americans with Disabilities Act (ADA)

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. For more information visit the [Office for Students with Disabilities](#) home page. <http://web.calstatela.edu/univ/osd/atlc.php>.

Academic Honesty/Student Conduct

This link contains the Cal State LA Policies and Procedures on Academic Honesty: <http://ecatalog.calstatela.edu/content.php?catoid=12&navoid=842>

Academic Honesty: Many incidents of plagiarism result from students' lack of understanding about what constitutes plagiarism. However, you are expected to familiarize yourself with Cal State L.A.'s policy on plagiarism. All work you submit must be your own scholarly and creative efforts. Cal State L.A. plagiarism as follows: "At Cal State L. A., plagiarism is defined as the act of using ideas, words, or work of another person or persons as if they were one's own, without giving proper credit to the original sources."

Student Conduct: <http://ecatalog.calstatela.edu/content.php?catoid=12&navoid=843>

Course Outline/Schedule of Assignments

Schedule

Week	Topic	Assignments/Activities:
1	How Does Climate Work?	<ul style="list-style-type: none"> • Complete the Orientation at the Welcome Center and all its associated activities. • Review Week 1: Overview and Schedule • Complete all items in the Read/Watch section: Week 1: Readings and Multimedia and Watch all Videos • Post & Discuss in forum: Climate Change and Controversy • Complete the Energy Budget Activity • Complete Video quiz: W1: Nature of Science and Climate Change • Review Week 1: Wrap-up
2	What Causes Climates to Change?	<ul style="list-style-type: none"> • Review Week 2: Overview and Schedule • Complete all items in the Read/Watch Week 2: Readings and Multimedia and Watch all Videos • Post to Discussion Forum: The Importance of Drivers. • Complete assignment: Drivers Over Time Activity. • Complete Video quiz: W2: Climate Drivers. • Review Week 2: Wrap-up
3	How Does the Climate System Respond to Input?	<ul style="list-style-type: none"> • Review Week 3: Overview and Schedule • Complete all items in the Read/Watch section: Week 3: Readings and Multimedia and Watch all Videos • Post to Discussion Forum: Relationships in the Climate System. • Complete assignment: Ocean Acidification. • Complete Video quiz: W3: Global Climate Modeling Quiz • Review Week 3: Wrap-up
4	How Do We Bring Together Modeling, Theory, and Observation to Understand Cause and Effect?	<ul style="list-style-type: none"> • Review Week 4: Overview and Schedule • Complete Week 4: Readings and Multimedia • Post to Discussion Forum: Climate Modeling. • Complete Video quiz: W4: Classifying the Causes and Effect of Climate Change Quiz • Review Week 4: Wrap-up
5	What Can We Learn From the Past? and What are the Potential Consequences, Risks, and Uncertainties of Climate Change?	<ul style="list-style-type: none"> • Review Week 5: Overview & Schedule • Complete Week 5: Readings and Multimedia • Post to Discussion Forum: The Implications of Understanding Past Climate Change. • Complete Assignment: Using an Empirical Climate Model Activity. • Complete video quiz: W5: How past climate informs us and the present climate system works

	Are We Ready for the Future?	<ul style="list-style-type: none">• Review: Weeks 1-4• Respond to the Discussion Post entitled: Are We Ready for the Future?• Complete the Comprehensive Final Exam• Review Week 5: Wrap-up
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