

Course	GEOS 300W: <i>Earth System Science</i> (Spring semester, 2020) (W is for approved writing course.)
Syllabus version #	2 (1/24/2020)
Course Goal	To understand fundamental Earth system processes and interactions, with emphasis on climate change and scientific writing.
Instructor	Dr. Shane D. Mayor
Lectures	Mon., Weds, and Fri. from 9:00–9:50 AM in PHSC 130
Office hours	Mondays from 1:30 - 4:30 PM or by appointment (Please e-mail first. If not in office, look in lab: PHSC 128.)
Office	PHSC 117
Mailbox	Department of Geological and Environmental Sciences office (PHSC 217)
Phone	530–898–6337
E-mail	sdmayor@csuchico.edu
Class webpage	http://physics.csuchico.edu/~sdmayor/teaching/GEOS300_S20/index.html
Required Book	<i>Earth System Science</i> , 3rd Edition (©2010, Pearson Education, Inc.) by Lee R. Kump, James F. Kasting, and Robert G. Crane. Link . It is on 2-hour reserve at the library.
Course Description	This is a lecture-based writing course without labs. The pedagogical methods are centered around lectures, reading, and writing. There may be some calculations that require plugging values into relatively simple equations. The structure of topics covered is based on the required book. It is highly advisable to take notes in class since lectures may explain at levels beyond the book. It is critical to procure and read the book. Exams and quizzes will be multiple choice. In addition, students will be required to read journal articles and write and revise an essay that is related to Earth system science.
Prerequisites	Completion of GE Written Communication (A2) requirement; CHEM 107 or CHEM 111; PHYS 202A or PHYS 204A or PHYS 341.
Blackboard	The instructor periodically communicates to the entire class via e-mail through Blackboard. You will be required to submit writing assignments through Blackboard TurnItIn. Some teaching materials may be posted on Blackboard. Your scores will be kept on Blackboard.
Attendance	A sign-in sheet will be circulated at the beginning of most lectures when a quiz or exam is not scheduled. Students must sign the sign-in sheet for attendance credit. A significant portion of your final score will be based upon attendance. Up to three exemptions will be granted. Please inform the instructor by e-mail BEFORE class if you cannot attend due to illness or for any other reasons. Missed exams cannot be made up unless the instructor has agreed before the exam date and the student has a serious and compelling reason.

Late assignments	Scores on assignments received late will be reduced by 20% of the assignment value per day. For example, a 100-point essay completed perfectly will receive only 80 out of 100 points in the 24 hours following the due date; 60 out of 100 points in the 24 - 48 hours after the due date, and so on.
Course Grade	The course grade may be based on a number of factors such as attendance, homework, quizzes, exams, writing assignments, and in-class exercises such as peer-review. See Tables 1 and 2.
Dropping	You may drop (or add) without obtaining permission until Friday, January 31. From February 1 to February 14, you must obtain permission from the instructor to drop. After Friday, February 14, you will need a serious and compelling reason to drop and your request must be approved by the Department Chair and the College Dean. Students adding after classes have started are responsible for obtaining a syllabus and lecture notes and making up any missed quizzes and assignments.
Etiquette	<p>Please do not eat in lecture. The noises and smells may be a distraction for your peers. Plan your day so that you have adequate nourishment before class.</p> <p>Please come to class on time. Walking in several minutes late is a distraction for everyone. We understand if it happens rarely due to extraordinary circumstances, but chronic lateness projects lack of maturity and respect and may be taken into account for your course grade.</p> <p>Please silence mobile phones and avoid texting during lectures.</p> <p>Please do not chat with your neighbor during lecture. It is very distracting for others in the course who are trying to listen to the instructor.</p> <p>Use of phones is strictly prohibited during quizzes and exams.</p>
Plagiarism	Plagiarism is a serious violation of academic integrity and when detected will result in a failing grade for the course and an incident report submitted to the Office of Student Judicial Affairs. For more information on plagiarism, please see the university's Academic Integrity webpage . If you still have a question about what plagiarism is and how to avoid it, please contact the instructor by e-mail or visit during office hours.
Disabilities	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 the instructor as soon as possible, or see me during office hours. Please also contact the 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.

Table 1: Course letter grades will be assigned according to the following scale.

A	>92.5	C+	77.5 - 80.0
A-	90.0 - 92.5	C	72.5 - 77.5
B+	87.5 - 90.0	C-	70.0 - 72.5
B	82.5 - 87.5	D+	67.5 - 70.0
B-	80.0 - 82.5	D	62.5 - 67.5

Table 2: Breakdown of course grade based on Spring 2019 course. This semester’s will be a little different.

	Points	Percentage of grade
Comprehensive final exam	200	25
2 mid-term exams (100 pts each)	200	25
4 writing assignments	225	28
7 quizzes	84	11
In-class exercises	50	6
Attendance	32	4
Total	791	100

Term Writing Project

This is an upper-division writing course. You are expected to write in [scientific style](#) and support your statements with [citations and references](#). The best writing about science usually results from having time to reflect on your document and the subject, receive feedback from others, and revise the document many times. The following set of assignments is intended to help you maintain incremental progress throughout the semester and develop a final paper that you can be proud of.

The purpose of the paper is to explain to someone (who is not a specialist in Earth system science) how some aspect of the Earth system works based on what you have learned in the course and perhaps more importantly through your reading of peer-reviewed publications. If the lectures do not cover the particular subject that you are interested in, you are encouraged to define one that interests you, read that part of the book and relevant articles of interest. A set of possible articles to choose from will be posted on Blackboard.

Writing assignment #1: Due on or about Fri., Jan. 31. Worth 10 points.

Decide on who you will be writing for. In other words, identify a person who you could send your final essay to and hope that it has some value or impact on their understanding of some aspect of Earth system science. It could be a colleague, supervisor, sponsor, or civil servant such as a congress person, governor, etc. For assignment #1, be prepared to submit the name of the person, their occupation or relationship to you, and a short (200 - 250 word) explanation of why you have chosen them.

Writing assignment #2: Due on or about Fri., Feb. 14. Worth 25 points.

Identify 3 peer-reviewed journal articles that are related to the subject that you want to write about. Read as much of the articles as you can. The chosen articles should be related to the subject that you want to write about. For assignment #2, be prepared to submit a list of the three articles and a short (200 - 250 word) explanation of why you have chosen them and how they are related.

Writing assignment #3: Due on or about Fri., Mar. 13. Worth 50 points.

Write and submit a first draft of your essay to the person you selected in Assignment #1. You should cite the papers listed in assignment #2 and include a professionally formatted reference list (a bibliography). Limit essays to 1000 words, double spaced, 12 point font. The 1000 words does not include your name, title, or bibliographic references.

Writing assignment #4: Due on or about Fri., Apr. 10. Worth 50 points.

Based on feedback and any new ideas you have for improvement, submit a revision of your essay.

Writing assignment #5: Due on or about Fri., May 8. Worth 100 points.

Submit the final essay.

Extra credit: Typeset any assignment in \LaTeX and receive **up to** an extra 10% of the assignment’s value. Students must remind instructor by e-mail that they did it in \LaTeX in case the instructor misses it.

GEOS 300W, *Earth System Science*, Spring 2020, List of meeting dates and **tentative** schedule.

Weds.	22	Jan.	Review syllabus. Begin Chapter 1: Global Change
Fri.	24	Jan.	
Mon.	27	Jan.	
Weds.	29	Jan.	
Fri.	31	Jan.	Last day to add or drop without permission from the instructor.
Mon.	3	Feb.	
Weds.	5	Feb.	
Fri.	7	Feb.	
Mon.	10	Feb.	
Weds.	12	Feb.	
Fri.	14	Feb.	No adding or dropping after this date without Chair's and Dean's approval.
Mon.	17	Feb.	
Weds.	19	Feb.	
Fri.	21	Feb.	Exam #1 (Chapters 1-3)
Mon.	24	Feb.	
Weds.	26	Feb..	
Fri.	28	Feb.	
Mon.	2	Mar.	
Weds.	4	Mar.	
Fri.	6	Mar.	
Mon.	9	Mar.	
Weds.	11	Mar.	
Fri.	13	Mar.	
Mon.	16	Mar.	Spring break. No classes.
Weds.	18	Mar.	Spring break. No classes.
Fri.	20	Mar.	Spring break. No classes.
Mon.	23	Mar.	
Weds.	25	Mar.	
Fri.	27	Mar.	Exam #2 (Chapters 4-5)
Mon.	30	Mar.	
Weds.	1	Apr.	
Fri.	3	Apr.	
Mon.	6	Apr.	
Weds.	8	Apr.	
Fri.	10	Apr.	
Mon.	13	Apr.	
Weds.	15	Apr.	
Fri.	17	Apr.	
Mon.	20	Apr.	
Weds.	22	Apr.	
Fri.	24	Apr.	
Mon.	27	Apr.	
Weds.	29	Apr.	
Fri.	1	May	
Mon.	4	May	Review week
Weds.	6	May	Review week
Fri.	8	May	Review week
Mon.-Fri.	11 - 15	May	Final Exam week. Final comprehensive exam date and time TBD.