

HIST 103**Global Problems in Historical Context: Climate Change and History**

“Those who cannot remember the past are condemned to repeat it.” George Santayana (1863 - 1952)

“Hegel was right when he said that we learn from history is that man can never learn anything from history.” George Bernard Shaw (1856 - 1950)

Climate change is perhaps the greatest challenge humanity as a whole has ever faced. This course examines the impact of climate change on human societies from prehistory into the present and future with special attention to the effects of the Little Ice Age (1300- 1800). The first part of the course will examine the basics of the science of climate change and major climate shifts in geologic time; we will look briefly at two past examples of Earth’s history when earth had an exceptionally warm climate as possible models for the future. The second part will look closely at how the shift from the Medieval Warm Period to the Little Ice Age in Europe (1300-1800) interacted with other historical factors to affect human society in Europe. The third part will look at climate change in the present and future and the possibilities for avoiding the worst effects of “global weirdness.” In all sections of the course, we will use what we know about the past as a way to understand the present and the future.

REQUIRED READING:

Brian Fagan, *The Little Ice Age: How Climate Made History 1300-1850* (Basic Books, 2000)

Climate Central, *Global Weirdness* (Vintage Books, 2012)

Mark Lynas, *Six Degrees: Our Future on a Hotter Planet* (National Geographic, 2008)

Saci Lloyd, *The Carbon Diaries 2015*

Some additional readings on WebCampus

You are also responsible for lectures and videos shown in class

Recommended: Robert Henson, *The Thinking Person’s Guide to Climate Change* (American Meteorological Society, 2014)

GOALS AND OBJECTIVES OF THIS COURSE:

1. To understand the nature of climate change and its effects on human societies and the planet in the past, present and future from the perspectives of many different disciplines, including history, science, economics, psychology, and the social sciences. (UUOs I .Breadth of Learning, 4. Global/Multicultural, 5. Citizenship and Ethics)
2. To gain skills in critical thinking, the organization and analysis of information, and clarity of expression orally and in writing. Critical thinking does not mean that all opinions and information are equally valid; it does mean that all ideas and information should be assessed carefully and thoughtfully. (UUOs 2. Inquiry and critical thinking 3. Communication.)

COURSE REQUIREMENTS

This class requires extensive reading. Do not let yourself get behind. (Note that reading

assignments in the first few weeks will be generally shorter than assigned readings later in the course.) It is important to take notes on the readings before the class for which they are assigned. There will be two mid-terms (30% each) and a final (30%). Class participation and quizzes will be graded at 10%. (Note that 10% is equivalent to one grade level, or the difference between an A and a B). Class time will generally be a combination of lecture and discussion. During lectures, questions and comments are encouraged. During discussions, I expect not to do all the talking and I encourage you to talk to each other rather than to me. Please be sure to bring the appropriate book(s) with you to class, including assignments posted on WebCampus. Study questions will be provided for the exams. There will also be extra credit options. Detailed descriptions of the exams are given below. I will be happy to discuss your work with you individually over the course of the semester.

Summary of course requirements: Total: 100%

1. Exams will be both short-answer (about 2/3 of total points) and a brief essay (about 1/3 total points).
2. First mid-term, Feb. 24, 30% of final grade Second mid-term. March 19, 30% of final grade Final, May 12, 30% of final grade
3. Class participation and quizzes, 10% of final grade

Class attendance. You are expected to attend class unless excused for observances of a religious holiday or to represent UNLV at an official extracurricular activity. More than three unexcused absences will result in a lowering of your final grade by one letter grade. If circumstances such as unexpected job demands or health problems make it necessary for you to miss more than four consecutive weeks of class, you may be administratively dropped from the course. Please also refrain from leaving and returning to class during class unless it is absolutely necessary. If you must leave class early for a legitimate reason, I would appreciate it if you would let me know before class.

Make-up exams will be considerably harder than the original exam given on the assigned day.

Classroom decorum. The use of cell phones and other electronic devices in class is not allowed. You may use a laptop to take notes or an e-reader for assigned materials (however, this privilege may be revoked if it is abused or you may be asked to sit in the front of the room). Please do not do homework for other classes in this class. Please refrain from leaving the room while class is in session unless it is absolutely necessary for a personal, work or medical emergency. If you must leave class for such an emergency, you cannot return to class that day and you will be marked absent for that class until you provide me with documentation on the cause. If you must leave class early for a pre-arranged legitimate reason, please let me know before class. I and your classmates will do our parts by making classroom time substantive and enjoyable. That is, classroom time will assume that you have read the assigned reading for the day and are prepared for class. In class we will go beyond and above the assigned readings and ask and answer questions, making class time a “value-added” in-depth experience.

In general, I will expect a lot of you in this course but I will give you many opportunities to demonstrate your thought and knowledge and to improve your work. Plan to spend about 2

hrs. In preparation for every hour of class time or about 6 hours a week. This is the national standard for college level courses. In addition, expect to spend about 10-20 hours preparing for each exam. Please be sure that you have budgeted your time this semester so that you can fulfill your academic obligations.

In addition to my office hours posed above, I am usually available after class and at other times during the week. If you would like to see me, please contact me by phone, e-mail or in person. I am always happy to meet with you.

E-mail. I am always happy to hear from you if you have questions. Email me at elspeth@unlv.nevada.edu (if you email me on WebCampus I may not get the email for several days). Please put HIST 103 in the subject line so that I do not delete your email as spam.

HOW TO DO WELL IN THIS COURSE

In order to do well on the exams and other graded activities it is ESSENTIAL that you:

1. Do the assigned reading as it is assigned.
2. Come to class, pay attention, and take notes.
3. Take notes on the assigned reading. Taking notes is more active learning than just highlighting. Taking notes ensures that you understand the material and embeds it in your brain.
4. Give yourself enough TIME to do the above. You should budget 2-3 hours per hour of class time or at least 6-9 hours a week for this class.

COURSE SCHEDULE

(The instructor may modify this schedule slightly during the semester or add very short readings that will be on WebCampus. Changes will be announced in class.)

Section I of the class covers the basics of the mechanisms of climate change and its effects in the past and present. Section 2 focuses on the impact of climate change on human societies in the past with a focus on the Little Ice Age in Europe. Section 3 looks at climate change and its global environmental and social effects in the present and as projected into the future.

SECTION I: EARTH'S HISTORY, THE BASICS OF CLIMATE CHANGE, MODELS FOR THE FUTURE

I. Introduction Jan 20 Introduction

Climate change as a disaster movie

Jan. 22 Some Basics

Assigned reading (DO BEFORE CLASS): *Global Weirdness*, introduction, 1-3, Henson, 292-3 (WebCampus)

Topics: Basic vocabulary and principles: weather vs. climate, overview of climate change in earth's history, why climate change is a problem for contemporary civilization, problems of scale, Centigrade and Fahrenheit, how science works, how we know about climate.

Class survey

Ted Talk: David Roberts “Climate Change is Simple” YouTube

Wk.2 Earth’s energy budget, mechanisms of natural climate change Jan. 27

Earth’s energy budget

Assigned reading (DO BEFORE CLASS): from Henson, 27-34 (WebCampus), start on reading for Jan. 29

Jan. 29 Natural causes of climate change Assigned readings: *Global Weirdness*, Ch. 4-9 From Henson, 257-274 (WebCampus)

Wk. 3 Climate Change today

Feb. 3 Anthropogenic (human-caused) causes of climate change

Assigned reading (DO BEFORE CLASS): *Global Weirdness*, Ch. 10-25

Feb. 5 Guest Lecturer: Dr. John Farley (UNLV Physics Department)

Assigned reading (DO BEFORE CLASS): articles by Dr. John Farley links posted on WebCampus

Wk. 4 Climate Change in the remote geologic past: models for the 22nd century? I Feb.10

The big picture: in geologic time, Earth has alternated between intense greenhouse and icehouse conditions, each accompanied by mass-extinction events Henson, 274-283 (WebCampus)

Feb.12 First example: the “mother of all extinctions” the Permian-Triassic extinction (251MYA) (90% of sea creatures, 66% of land animals go extinct)

Assigned reading (DO BEFORE CLASS): Lynas, “6 degrees”

Wk. 5 Climate Change in the remote geologic past: models for the 22nd century? II Feb. 17

Second example: The Paleocene-Eocene Thermal Maximum PETM (55 MYA) assigned reading (DO BEFORE CLASS): Lynas, “5 degrees”

Feb. 19 Catch-up and review: Years of Living Dangerously

SECTION 2: CLIMATE CHANGE AND HUMAN HISTORY

Wk. 6. First exam; Climate change and human history Feb. 24: FIRST EXAM

Feb. 26 The dawn of humanity

Pleistocene, the Ice Age and the evolution of humans (no readings for this class)

Wk. 7. Holocene and human history, fire and farming, ancient societies; the medieval warm period

March 3 Holocene and human history, fire and farming, climate change and ancient societies

Assigned reading (DO BEFORE CLASS): on WebCampus TBA

March 5 The Medieval Warm period

Assigned reading (DO BEFORE CLASS): Fagen, preface, chapter 1 and 3

Wk. 8 the Little Ice Age

March 10 the Great Famine, an era of storms, the Black Death Assigned reading (DO BEFORE CLASS): Fagan, Ch. 2, 4

March 12 The Little Ice Age deepens in the 16th century: wars and witch hunts (mid-

semester) MID-TERM GRADES DUE

Assigned reading (DO BEFORE CLASS): Fagan, ch.5-7

Wk. 9 the Little Ice Age and Society

March 17 Climate change and society: the French Revolution Assigned reading (DO

BEFORE CLASS): Fagan, Ch. 8-9 March 19 Climate change and society: The Nineteenth Century Assigned reading (DO BEFORE CLASS): Fagan, Ch. 10-11

SECTION 3: CLIMATE CHANGE IN THE ANTHROPOCENE

Wk. 10 Climate Change in the Present

March 24 SECOND EXAM

March 26

Years of Living Dangerously

Wk. 11 SPRING BREAK March 30-April 4

Wk. 12 Climate Change in the Anthropocene

April 7 Effects in the present: melting ice, sea level, ecosystems, storms

Assigned reading (DO BEFORE CLASS): *Global Weirdness*, Ch. 26-39; Lynas, “One Degree”

April 9 What’s likely to happen in the future: storms, sea level, and health of humans, animals, and ecosystems?

Assigned reading (DO BEFORE CLASS): *Global Weirdness*, Ch. 40-48; Lynas, “Two Degrees”

Wk. 13 Climate Change in the Anthropocene

April 14 What’s likely to happen in the future: water, food?

Assigned reading (DO BEFORE CLASS): *Global Weirdness*, Ch. 49-51; Lynas, “Two Degrees”

April 16 What could happen in the future?

Assigned reading (DO BEFORE CLASS): Lynas, “Three Degrees,” and “Four Degrees” and review chapters on five and six degrees

Wk. 14 Climate Change in the Anthropocene

April 21 What Can Be Done?

Assigned reading (DO BEFORE CLASS): *Global Weirdness*, Ch. 52-60; Fagan, Ch. 12; Lynas, “Choosing Our Future”

April 23 What Must Be Done?

From Naomi Klein, *This Changes Everything* (WebCampus)

Wk. 15 Climate Change in the Anthropocene

April 28 Another look at the future

Assigned reading (DO BEFORE CLASS): Lloyd, *The Carbon Diaries 2015*, and pp. 1- 180

April 30 Another look at the future

Assigned reading (DO BEFORE CLASS): *The Carbon Diaries 2015*, pp. 180-330.

Wk. 16. Where are we now?

May 5 TBA

May 7 TBA

FINAL EXAM: May 12, 10:10-12:10.

QUIZZES. There will be an unspecified number of pop quizzes during the semester. These will be given during the last 10 minutes or so of the class and will be on the material gone over in that day's class. If you are present and engaged in class, this is an easy way to raise your grade.

PARTICIPATION

Participation grades are valued according to the following standards:

A Present and able to offer constructive, to the point comments and questions

B Present and alert

C Present but not engaged

D Present but skating close to violation of class decorum standards

F More than three unexcused absences, violation of class decorum standards

Extra credit options

For extra credit, you may do up to two short (3-4 pages) projects. A list of possible projects will be given out later in the semester. Each grade for your project will be averaged with your lowest grade on a mid-term. In no case will extra credit work result in a lowered grade. A separate sheet will be given out with the requirements and grading rubrics for projects.

IN-CLASS EXAMS

The goal of the in-class exams is to help you organize, understand and remember the material.

There will be three in-class exams that combine short answer questions (66%) and an essay (33%), the first on Feb. 24, the second on March 19 and the third at the time of the final, May 12, 10:10 am. These will consist of short-answer questions, including identification of important concepts, names, events, and terms, etc. and a short (1-2 page) essay. A study guide will be given out ahead of time. **DO NOT WAIT UNTIL THE STUDY GUIDE IS GIVEN OUT TO BEGIN PREPARING FOR THE EXAM.** The final may be cumulative.

Format of the essay section. The essay section will require writing a short (1-2 page) answer to one or more questions. The questions will be provided about a week before the exam and some choice will be available. You will be graded on how well you analyze course readings as well as your knowledge of factual material.

To do well in the essay part of the exam, you must:

- 1) understand the important ideas or points made in the readings and lectures
- 2) be able to explain these ideas and how they relate to one another
- 3) Be able to compare the ideas in one reading with the ideas in another.

GRADING RUBRIC FOR THE ESSAY PART OF THE EXAM

A - an essay that shows thought, demonstrates excellent knowledge of the readings, demonstrates clear analysis of the readings, demonstrates appropriate coverage of the readings, is reasonably well-written

B - an essay that shows some thought, demonstrates good knowledge of the readings, demonstrates some analysis of the readings, demonstrates appropriate coverage of the readings and is readable

C - an essay that recounts correct information but does not analyze, demonstrates some knowledge of the readings, demonstrates some coverage of the readings

D - an essay that includes factual and other errors, demonstrates little knowledge of the readings, demonstrates poor coverage of the readings

F - an essay that includes many errors, demonstrates little or no knowledge of the readings, demonstrates no coverage of the readings, is so poorly written that I cannot understand it

Rules for exams. You will need to bring a “blue-book” exam booklet and a pen or pencil to the exam. Exams can only be made up in exceptional circumstances. Make-up exams will be considerably harder than the original exam and must be taken no longer than two weeks after the date of the original exam. In order to take a make-up exam, you must arrange the make-up with me no later than ONE week after the date of the original exam. Requests for a make-up made later than one week after the date of the original exam will not be honored except under extraordinary circumstances.

Plagiarism. The use of someone else’s words or ideas without proper attribution, or plagiarism, is a serious offence that will result in failure of the course and a reporting of the incident to the appropriate UNLV authorities. We will discuss proper attribution in class and I will be happy to discuss particular problems with you individually. Other forms of cheating may also result in failure of the course.

GENERAL TIPS ON HOW TO DO WELL IN THIS COURSE

1. Come to class regularly. There is a strong correlation between low attendance and low grades. If there is a reason why it might be difficult for you to attend class regularly, please let me know. If you must miss class, please let me know ahead of time if possible and as soon after the missed class as you can. Thanks.
2. Keep up with the reading. REMEMBER THAT THERE IS A LOT OF READING IN THIS CLASS. Getting behind is discouraging and makes class time incomprehensible. Avoid at all costs. However, come to class even if you haven’t done the reading for that day.
3. Take notes on the reading regularly. Taking written notes on the reading ensures that you are absorbing what you have read. It also alerts you to ideas and concepts that you don’t understand so that you can take the time to ask questions and figure it out. Moreover, the exams in this course require you to integrate large amounts of material. This task will be enormously facilitated if you take notes as you go along rather than leaving it all to the last minute.
4. Think about the material. Expect to take a critical approach to the material presented. What is the thesis or main idea of each of the readings? Do you tend to agree or disagree? Why? How would you compare the ideas and content presented in one reading to other readings? (Practicing these skills of critical thinking, organization and oral and

written expression will help you in all your course work and in your present or future career plans).

5. Ask questions. Questions let me know you are involved and I welcome them. I am always happy to answer questions about procedures, course material or other subjects in class or privately. Don't forget to ask questions of other people in the class as well.
6. Be prepared to put in the time necessary to do the work. You wouldn't expect to do well in a sport without practicing. Similarly, you need to put in the time to do well in coursework. Expect to work about 2 hours for each hour of class time and to put in 10-15 hours preparing for the exams.
7. Take an active role in your own education. Taking a course is not like buying a product which you expect to return or put in a closet if it does not meet your preconceived expectations. It is more like an agreement to explore and interact with a new world of knowledge and skills which may turn out to be quite different from what you expect- and, perhaps, the more different it is, the more you may get out of it. The more you actively participate in the course, by reading, thinking, talking, and responding, the more you will learn. And the more fun you will have.

ADDITIONAL INFORMATION

Academic Misconduct—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at:

<https://www.unlv.edu/studentconduct/student-conduct>.

Copyright—The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)—The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Religious Holidays Policy—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Transparency in Learning and Teaching—The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information: <https://www.unlv.edu/provost/teachingandlearning>
<https://www.unlv.edu/provost/transparency>

Incomplete Grades—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student’s control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Tutoring and Coaching—The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit <http://www.unlv.edu/asc> or call [702-895-3177](tel:702-895-3177). The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of the SSC (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TEB second floor.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student’s Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>.

Rebelmail—By policy, faculty and staff should e-mail students’ Rebelmail accounts only. Rebelmail is UNLV’s official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students’ e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable.

Final Examinations—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at:

<http://www.unlv.edu/registrar/calendars>.

Library: Students may consult with a librarian on research needs. For this class, the Subject Librarian is (https://www.library.unlv.edu/contact/librarians_by_subject). UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>.