

Ecological Anthropology

The history of human civilization through a biological lens

Biology 829

Summer 2018

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Required Texts:

These can be purchased from any bookstore; both are also available for Kindle w/o illustrations or page numbers.

Guns, Germs, and Steel by Jared Diamond referred to as “GGS” in class materials, look for edition with new afterword “The Modern World”. This is shown on the cover of the book.

ISBN 10: 0393317552 or ISBN-13: 978-0393317558

Collapse by Jared Diamond referred to as “Col” in class materials, 2011 revised edition

ISBN 10: 0143036556 or ISBN -13: 978-0143036555.

Class Objectives:

1. Understand Diamond’s hypothesis that the role of biogeography and island biogeography in the evolution of human societies, including origination of technologies, effects of trade, and importance of agriculture.
2. Investigate circumstances that may have caused human in some places on Earth to achieve greater populations and faster technical progress than others.
3. Explore the importance of critical human innovations including crop domestication, livestock domestication, and writing.
4. Trace the geographic spread of deadly human diseases, knowledge, culture, language, as well as domesticated plants and animals during the last 15,000 years.

Introduction:

Jared Diamond’s book *Guns, Germs, and Steel* (GSS) has filled what I see as a critical gap in human history. That period is between the evolutionary origin of our species approximately 150,000 years ago, and the end of the pre-historic (pre-writing) period. This time frame has historically been the realm of anthropologists. While historians have typically dealt with times when written records exist, the “historic” period, Diamond focuses on the “prehistoric”, an area that usually falls to archeologists. One of Diamond’s basic themes is that while trying to explain the current unequal distribution of wealth and technology in the world, one cannot begin at the

Roman Empire or even the kingdom of Ur and trace the history of the world from there. Diamond attempts to make connections between the biology, specifically between the evolution of plants and animals and the biogeography of the Earth, and the trajectories of human civilizations.

While *GGS* is a stunning book in scope and detail, winning a Pulitzer prize and becoming a #1 best seller on Amazon, Diamond himself remarkably does have a second bite at the apple! In his following book he turns his mind to the next not-so-obvious question: how and why do some societies disappear from the world, while others do not? In the second book of this course, Diamond's *Collapse*, the causes behind the fall of civilizations are examined. This topic may be of particular interest for the world today as this knowledge could have implications for today.

This class will examine the hypotheses, evidence, and assertions of Diamond in his books *GGS* and its sequel *Collapse*.

Class Structure:

This is a summer class worth 2 credit hours. It is a reading class based on two books. As opposed to the technical nature of two of the other courses I teach, Geographic Information Systems and Biostatistics this class will be a reading and discussion course. I am constantly impressed with the motivation and integrity of the students in the Distance Master's program. To that end – I do not feel that this course needs a research paper (in the classical sense) requiring outside literature to be read. There will be a paper assignment towards the end of course based on the assigned readings. Outside literature is always helpful, but I do not expect people to go read 20 outside papers in order to complete the paper. The paper should, though, be written at the graduate level. To me this means that it is original, free of spelling, grammar, and formatting errors, with a clear and logical organization. The paper should have a thesis and contain a progression of logical, supported (by the reading material or outside material), steps leading to a conclusion that pertains to the thesis. This idea of logical argument is often overlooked in writing! Too often people spend pages simply summarizing facts from the books. Please do not do this.

I hope most of your contribution to the course will be discussion of specific passages, data, concepts, and hypotheses given by Diamond. The idea here is to discuss the readings themselves: so a balance between retelling the book and wild speculation. I will provide feedback that tries to balance the two extremes. This course does have quizzes to provide motivation to keep up with the reading. The only other graded elements are discussion board participation and the research paper.

I would recommend spending some time on the reading and class every day. The schedule is short in the summer and there is a lot of reading to do. I require 2 significant posts per week for full participation credit. By significant post, I mean an original, extended, thoughtful, insight or question on the reading – again not just a summary.

One important point here, please note that Diamond did not do a lot of the research he cites, rather he pulls together the work of others for his books. He is using information from the work of other people. I wish he cited more directly in the text, but I suggest people read the literature cited sections in the back of both of Diamond's books to see the work Diamond is drawing from. When discussing Diamond recall that a particular fact or hypotheses in the books may have come not from Diamond, but from someone Diamond researched.

Graded Elements:

Assessment	Points Each	Point Totals
Three Quizzes	15	45
Discussion, 6 weeks (no grades 1 st or last week)	10	60
Final Paper thesis, outline	20	20
Final Paper	50	50
Total		175

Grading Scale:

A +	99-100%	B +	88-89%	C +	78-79%	D +	68-69%
A	92-98%	B	82-87%	C	72-77%	D	62-67%
A -	90-91%	B -	80-81%	C -	70-71%	D -	60-61%
F	below 60%						

Class Mechanics:

The quizzes will be multiple choice and available in Canvas – please allow time to do these, especially the first time, if you are not familiar with these.

Participation will be the backbone of the class, please think about them when writing – they are not equivalent to texts or Twitter posts. I will read all your postings and evaluate them based on: a) content b) sophistication of understanding concerning the reading material c) use of language to make complete, concise points and d) how well posts build on the discussion in general, that is how a post advances discussion in relation to points made in other posts, and if you are doing more than repeating points made in the reading. Credit will be given on the number of readings and posting you do in the discussion board as well as quality of your posts. You should contribute 2 original, substantive posts each week as well as view many of the posts on each discussion board. Finally, your participation will be graded relative to that of others. In other words if you post and view much less than other students, you may get less credit.

Special Circumstances UNK Policies

Withdraw (W) and Incomplete (I) Grades:

Until the conclusion of the 10th week of the semester, you may withdraw from any class and receive a grade of "W." This grade does not count toward your grade point average and merely indicates that you withdrew from (or "dropped") the class. No instructor can withdraw a student from the roster; that is, if you stop coming to class the instructor cannot withdraw you from the class. The instructor will be forced to assign you a failing ("F") grade for the class. Withdrawing from a class involves filling out a simple form that the instructor and student both sign and returning this form to the registrar's office by the withdraw deadline.

Under very unusual circumstances, a grade of incomplete ("I") may be issued. An incomplete is not a substitute for a "W" (withdraw), and it is not a substitute for a poor or failing grade. An incomplete is issued if circumstances beyond the student's control prevent the student from completing the required work for the class by the end of the semester (example: student is hospitalized during final exam week). If you qualify for an incomplete grade, it is expected that you will receive this grade in all your classes. An incomplete grade will give you an extension to complete outstanding work only; it is not an opportunity to "start over" in the class. All outstanding work must be completed within one year or the "I" grade automatically converts to a failing ("F") grade. An incomplete grade will be considered only during the final six weeks of the semester, after the deadline for receiving a "W" has passed.

Students with Disabilities or Those Who are Pregnant

Students with disabilities or those who are pregnant are encouraged to contact me for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities or those who are pregnant. To receive accommodation services for a disability, students must be registered with UNK Disabilities Services Coordinator, David Brandt, in the Academic Success Office, 163 Memorial Student Affairs Building, 308-865-8214 or by email unkdso@unk.edu. For those needing accommodation due to pregnancy, you need to visit with Student Health. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

Local Domestic Violence, Sexual Assault Advocacy Agency 308-237-2599

Campus Police (or Security) 308-865-8911

Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

If you have questions regarding the information in this email please contact Mary Chinnock Petroski, Human Resources Director (petroskimj@unk.edu or phone 8655).

Syllabus for Ecological Anthropology – Summer 2018

Readings from: Guns, Germs, and Steel (GGS) and Collapse (Col) by Jared Diamond

Week	Lectures	Assignments	Readings
1 May 21	01, 02		GGs: Prologue, 1 to 8
2 May 28	03	Quiz 1	GGs 9 to 13
3 June 4	04		GGs 14 to 19
4 June 11	05	Quiz 2	GSS Epilogue, Japanese, and Afterword Col: Prologue, Chp 1
5 June 18	06	Paper thesis & outline due July 2 nd 5:00pm Central	Col: 2 to 6
6 June 25	07	Quiz 3	Col: 7 to 11
7 July 2	08		Col: 12 -15
8 July 9	09	Final Paper Due July 10 th 5:00pm Central	Col: 16, review, Final due

Orientation to Albrecht Canvas Use Version 2.01 Spring 2018

UNK Biology Department

Introduction:

The UNK Biology Distance Master's program has many faculty participating. Part of the experience and challenge of the program is that, as in other professional situations, faculty are different from each other. Faculty have different lecture styles, different discussion board expectations, different grading priorities, and even different methods to deliver class material. I realize this might be confusing for people, but hopefully the various methods will demonstrate what works and what does not for you in your own careers. Please read this section as I try to clarify how I use Canvas in this class.

Please contact me with any questions about Canvas, the class materials or grading. Also note that the UNK e-Campus website does provide both Video Tutorials and Atomic Learning Tutorials on using Canvas, email, and MS Word see [this page](#).

A note about Expectations:

I approach this program with the goal of providing, as closely as possible, the level of experience I was fortunate enough to experience in my graduate career at some very good universities. This means that generally my expectations are high. By this I mean at least six hours of study time per week, a high degree of mastery of even complex material, and the persistence to do outside research and ask questions as needed. I will do my best to find, present, and interpret material I think is important and appropriate for the subject area of classes. I will also do my best to explain how the process of science works including experimental design, statistical testing, writing, and thought processes. I will also work to be as available as possible, and turn around posts, emails, and graded work as quickly as I can. For graded work this means 2 weeks or less.

It is my hope and expectation that everyone in this program is here because they enjoy biology and wish to become more knowledgeable about the subject and more proficient at teaching or researching.

Here is a quick checklist of points that may help you succeed in the course, based on my experience as a graduate student and professor:

1. **Have you prepared for class?** Have you read the material, not just once but twice? Have you looked up authors, concepts, or words you were not familiar with during the reading? Do you understand how this reading fits into the discipline in general, and why it was assigned? On primary literature papers have you noticed the author, date, and author's institution of the paper in addition to the data, statistical tests, and concepts in the paper?
2. Before asking an entire class what a word means **have you tried to look it up?** Did you try to find the word from appropriate, professional, recognized sources? Have you used the assignment itself, an index book section (if present), or another biology text you own? Wikipedia is also a good place to start, but not a good place to end.
3. Is the work you are turning in **reflective of you** as the professional you are working towards? Have you looked at it for mistakes? Do you have all the important concepts covered in your work? Is the organization of the paper clear and useful? Have you put in thought and work on the figures and tables to make them clear, professional, and are they referenced correctly? Has the work been proofread for grammatical, factual, spelling, and formatting errors? Do you know that the formatting correct?

Canvas:

The main portal for the class work in the UNK Biology Distance Master's program is the learning management system (LMS) Canvas. Being familiar with the LMS is helpful for success in the program. Here are the components are the ones I use the most:

1. "Files":

- a. This is where I place Powerpoint, pdf, and video files that are the lectures for classes.
- b. These files should be **downloaded** (not streamed) for printing out or viewing. This means a right click, not a left click on most computers.
- c. The video files are in MP4 format, this can be viewed by many video players.
- d. Some of these files are large and should be downloaded on fast internet connections.
- e. I may post other papers here as well as book sections or links to other sites, these are class materials and should be read and have notes made on them.
- f. It is fine to download all files available at any time during the semester. There are no restrictions on what devices you use or how many times you use them. Please note these files are UNK files created by me in terms of authorship.

2. "Discussions":

- a. This section of the LMS is how you will communicate with me and each other in the class.
- b. In my classes Discussions are an important part of the class experience, there are lot of points associated with participation on Discussion Board
- c. Typically, each discussion board is opened Monday around 9:00 am Central Time, and closed Sunday night around 10:00 pm Central Time (I reserve the right to change these times).
- d. Because discussions are important, posts will be graded.
 - i. I expect at least **two** substantial postings each week and not both on Sunday night. Except for Biology 824 that requires **3** posts!
 - ii. *The quality of your contribution.* This is a somewhat subjective category, but the more thoughtful your comments the better the quality of discussion will be for the entire class. Your comments should be at least a few sentences. Conciseness and clarity are necessary to keep the reading load for the class to a reasonable level, i.e.: page long postings are discouraged. Your comments should be supported with information, file attachments or web sites, and should be relevant to the current topic of discussion. References are encouraged.
 - iii. *How well you interact as classmates.* Your responses should demonstrate that you are aware of the discussion that has been taking place. Go beyond stating "I agree" with someone with someone by stating your reasoning. Posts that say just "I agree" in one form or another will not be counted as posts for the week.
 - iv. *Be polite and professional* be polite and constructive in your responses to other students and me.

3. "Assignments":

- a. Many, if not all, the assignments in the class will appear here, so please find this area of the LMS
- b. There are two types of assignments I use most:
 - i. Quizzes: these are timed tests, typically multiple-choice questions that are available for a limited amount of time. The time frame is usually open at Friday at 5:00 pm on the week they are assigned and closing on the following Monday at 10:00 pm Central Time. These tests must be completed online within their time limit (e.g. 30 minutes) once started.


- ii. Papers: I create assignments that are links through which you can upload documents. This system has the distinct advantage over email in that papers go directly to a 'space' that is specific to one person for one assignment. Users will see a paper icon in the Gradebook for the assignment when you have uploaded the document.
 - 1. This function also can be set to be available for a limited amount of time. See the syllabus or assignment description (or document detailing the assignment in the assignment description) for due dates. Typically, I post the assignments at least 1 week ahead of the deadline.

4. "Grades":

- a. This is the area of Canvas where grades are recorded and displayed, these are the actual grades I use, so check your grades often.
- b. Note the symbols in the gradebook. The responsibility is yours to make sure assignments are in on time, uploaded correctly, and that the correct file is uploaded. If the wrong file is uploaded, or the file is late, penalty of at least 10% will be assessed.
 - i. Empty assignment: this means no file has been uploaded, or test taken according to Canvas. You **do not** want to see this if you have taken a test or uploaded a file.

Pre-problem set (optional)
Out of 0
-
-
-

- ii. Paper icon: this means that Canvas has received a file, or that a test has been taken. A file that is uploaded may still be corrupt, or a person could still have uploaded the wrong file, but whatever it is, Canvas has it. This means I have to grade the assignment before you will see a grade. Any paper, and any test with subjective questions (such as fill-in, short answer) will have this symbol until graded.

Pre-problem set (optional)
Out of 0
-


- iii. Graded assignment: this is the grade for the assignment. It is what will be used in grade calculation.

Plagiarism Certificate
Out of 10
10
10

- iv. Other symbols: I think there may be a failed upload symbol that looks like a broken paper icon, but I have not seen this icon recently and I am not sure how Canvas shows failed uploads. If you see something other than the images shown above please contact me immediately.

5. “Announcements”:

- a. These are pieces of information I post that I think will help people with the class or a particular assignment as a semester progresses. Please read these when I post them.
- b. I will post class information here, such as changes to the syllabus or answering a question that is coming up repeatedly.

6. Other Features:

- a. There are other features of LMS that I use from time to time so please look around at the program.

7. Scientific Writing (**last but not least!**)

- a. I have included documents in Files/Scientific Writing folder to help with scientific writing. I hope to see the highest level of professional writing in assigned papers.
- b. I encourage everyone to work on improving their writing skills, as I continue to work on mine. Everyone in the program should have at least a few papers from primary journals from other classes or your own reading.
 - i. If not, get a few from the UNK library collection that you have access to as a UNK student on subjects you are interested in.
 - ii. Recent papers from a major journal should be read for style, voice, formatting. Such examples will show you how to build sentences, tables, figures, paragraphs, references, and abstracts. Everything you need to know is there.
- c. Also, you can always ask for feedback on sample writing before large assignments are due!
- d. Changing writing style or formatting seems easy for some students but hard for others. Not writing in scientific style or not formatting papers (or problem sets) correctly can cost a person a large number of points on assignments in a course. Please do your best with writing. This is why I have provided reference material and encourage people to read current literature articles for structure as well as content.

Dr. Albrecht Class Policies

Version 1.9 Spring 2018

Introduction:

Every institution has its rules and policies and UNK and the Biology Department have them too. Because of the distance education environment, the degree of communication between student and faculty can be difficult, and misunderstandings do happen. Please keep in mind “talking” over the computer is not the same as face to face – several types of communication are lost. There is nothing quite like a conversation after class or in a hallway. Please be patient and allow more time than you might otherwise to get the solution you need. Here are my policies that will be in place for this class in addition to those of UNK and the Biology Department.

Policies:

1. **Paper formatting:** all work turned should have the following formatting.
 - a. Size 12 font, 1” margins all around the page, page numbers present, no right justification for the text
 - b. Header information on the first page: name, class, date, assignment at least.
 - c. All text double-spaced with proper English spelling and grammar used. The writing should be simple, clear, scientific writing style. At the least this means: subject-verb-direct object structured sentences.
 - d. Tables must be labeled at the top and have captions that explain them.
 - e. Figures must be labeled at the bottom and have captions that explain them. No titles within the phase (graph) space which is the Excel default unfortunately.
 - f. All work turned in should have correct references. All citations must be “(author year)” format in the text (including figures and tables if they are adapted from existing work) with a full citation at the end of the paper. Papers should be listed alphabetically by last name of first author.
 - i. Citations **are** needed if textbook or lecture material is used (especially when quoted!). This is both the legal necessity and good practice for work beyond class.
 - ii. Full citations should be in a “References” section at the end of each paper and follow these formats, reverse indented and alphabetical by author.
 - iii. Each text citation should have a full citation in the Literature Cited section and each citation in the Literature Cited section must have at least one text citation.
 - g. **Failure of any of these policies will result in letter grade reductions.** For those of use familiar with rubrics, these are level one issues.
2. **Citation Style Examples:** further information here: <http://www.scientificstyleandformat.org/Tools/SSF-Citation-Quick-Guide.html>

a. Books:

Darling D. 2001. Life Everywhere: The maverick science of astrobiology. Basic Books. New York.
206 pp.

b. Computer Programs:

Microsoft. 2010. Microsoft Excel Version 14.06112.5000. Redland, WA.

c. Journal Articles:

Chekalyuk A C, and M Hafez. 2008. Advanced laser fluorometry of natural aquatic environments. *Limnological Oceanographic Methods* 6: 591-609.

d. Websites:

Food and Agriculture Organization of the United Nations. 2006. Livestock impacts on the environment. URL: <http://www.fao.org/ag/magazine/0612sp1.htm>. Accessed Feb 26, 2014.

3. Plagiarism and Cheating:

- a. See the [UNK Student Handbook](#) for UNK policy statement on plagiarism
- b. I consider plagiarism a scourge and a stain on science and detrimental to the progress of humanity. Penalties include zeros on questions, or entire tests, or failing the class outright in addition to letters in the permanent files here at UNK
- c. Citation information for APA style is given at the UNK eCampus website [here](#).
- d. A quick rule: **more than 3 words in a row from any source must be referenced**
- e. Do not communicate with outside experts to answer tests. This includes non-UNK websites. Assignments are meant to assess your knowledge, not that of others, or “answers-provided” websites.
- f. Work individually unless directed into groups. Your work should be your own, and any personal pronouns used in your writing (which should be few in any case) should reflect this, i.e. no ‘we’ in assignments you work on by yourself!

4. Late work/technical difficulties:

- a. Late work will be subject to the following grade reductions:
 - i. 10% reduction of grade for any work submitted after stated deadline
 - ii. A further 10% grade reduction for each 24-hour period past the stated deadline
- b. I understand that online classes demand attention to deadlines. However, this graduate program is *not* a self-paced one. This program is structured to academic terms and time frames (such as breaks) as the brick and mortar University of Nebraska system. In general people in the program show great dedication and hope this tradition continues.
- c. Technical difficulties are part of the reality of the online world. Given that truism, do NOT wait to submit assignments until the last minute or hour of a deadline. Both you and I cannot be responsible for failures of power, computers, computer networks, or even Canvas. Do not procrastinate; *turn assignments in early*, so there is time to resubmit if there are any problems.
- d. Important: please install and run some sort of anti-virus and anti-malware software on your computer. This is for all of us in the class, so that viruses are not spread through the class. Finally, a utilities program will help your computer run well by fixing registry files and defragmenting and optimizing hard drives:
 - i. Microsoft Windows Defender (free):
 - ii. other maintenance software such as Glary Utilities (free)

5. Online etiquette:

- a. **Please be respectful of others in the class, even me.** It is easy to be more confrontational via electronic post than in person. I understand conversations may become heated, and irony, even sarcasm may be attempted at times be used to make a point; however, such attempts are often not understood via posts. Please try to remain clear and kind at all times.
- b. Posts I deem as offensive or inflammatory towards others or me will be removed from the discussion boards. If this becomes a continuing problem, grade reductions may result. I will keep copies of such posts.