Anthropology 334 Origins of Agriculture

Department of Anthropology Southern Illinois University Edwardsville Spring 2013

Instructor: Dr. Julie Zimmermann Holt

Office: Peck 0402 Phone: 650-2157

E-mail: juholt@siue.edu

Class: MWF 11-11:50, Peck 0413

Office hours: MWF 1-2, or by appointment.

Course Description: This course presents the latest evidence on the origins of agriculture, including both archaeological and genetic evidence. We will first discuss pertinent issues such as how we define domestication and other relevant terms such as horticulture, agriculture, cultivation, and animal husbandry. We will discuss natural selection vs. artificial selection. We will discuss the nature of genetic evidence, as well as behavioral studies of modern plants and animals. We will discuss archaeological techniques of identifying varying degrees of plant and animal manipulation, with an introduction to the archaeological sub-fields of paleoethnobotany and zooarchaeology. Locations of independent agricultural "invention" to be discussed include the Near East, East Asia, Africa, South America, Mesoamerica, and eastern North America. We will also examine the mechanisms (namely migration and diffusion) by which agriculture spread from these areas of "invention" to other areas, such as Europe and the southwestern U.S.

This course is of interest to any student interested in agriculture or the history of human-plant-animal interactions, and no prerequisites are necessary.

Course readings: There are five required texts for this course, all of which are available at textbook rental. These are:

Documenting Domestication: New Genetic and Archaeological Paradigms (2006), edited by Melinda A. Zeder, Daniel G. Bradley, Eve Emshwiller, and Bruce D. Smith *The Origins of Agriculture: An International Perspective* (2006), edited by C. Wesley Cowan and Patty Jo Watson

Last Hunters-First Farmers: New Perspectives on the Prehistoric Transition to Agriculture (1995), edited by T. Douglas Price and Anne Birgitte Gebauer Guns, Germs, and Steel: The Fates of Human Societies (1999), by Jared Diamond First Farmers (2005), by Peter Bellwood

Course requirements: You are expected to attend class and participate in class discussions; you are also required to do a presentation for class. You will write three essays and a critical book

review. There will be a midterm and a final exam. The final grade will be broken down as follows:

Class attendance and participation: 10% (10 points)

Class presentation: 15% (15 points)

Essays: 15% (15 points)

Critical book review: 20% (20 points) Midterm exam: 20% (20 points) Final exam: 20% (20 points)

Class attendance and participation: Keep up with the readings and be ready and excited to talk about them. Have the readings for each day read *before* class, take notes, and jot down any questions you may have. I know on some weeks there is too much to read: read what you find most interesting. Attendance will be tracked via sign-up sheets; perfect attendance is worth 10 points. Absences may be excused with a doctor's note or court papers. Each unexcused absence will result in the deduction of half a point from your attendance grade. *If you miss four class periods in a row, I reserve the right to notify the dean of students and withdraw you from the course. If you decide to withdraw from the course, make sure you do it before Week 13.*

Class presentation: You will give an in-class presentation worth 15 points. This grade will be primarily based on content (what you know about your topic), but you will also be graded on the effectiveness of your presentation. You should prepare a power point to last around 10 minutes; other visual aids can boost your grade (for example, you could pass around domesticated plants from your area). To prepare for your presentation, you are expected to read the materials assigned for class, but you are also expected to do additional readings and research on your chosen topic. In particular, I want you to look for more recently published evidence regarding your topic (e.g., work published in the past decade). You must turn in an essay (2-3 pages typed) summarizing your presentation with an attached bibliography. I will pass around a sign-up sheet with topics and a schedule for presentations. A sample evaluation sheet can be found below. You must be ready to present on the day you are scheduled! If you are not, you will receive a 50% deduction (7.5 points) for presenting the following class period, and 100% thereafter. Only students with doctor's notes or other verified absences will be allowed to present late without point deductions.

Essays: You will write three essays; each essay is worth 5 points. Essays will be 2-3 pages (absolutely no more and no less!). They will be based on class readings; an assignment sheet for each will be handed out in class. If your essay is not handed in on time, 20% (1 point) will be deducted for each day it is late.

Critical book review: You will write a critical review of *First Farmers* by Peter Bellwood; instructions will be handed out separately. The review will be 6-8 pages typed. If your paper is not handed in on time, 20% (4 points) will be deducted for each day it is late.

Midterm and final exams: The midterm will be taken in class and the final will be taking during finals week; each is worth 20 points and will consist of matching, short answer, and/or essay questions. The exams will be based on readings, lectures, class discussions, and films. The final

will be cumulative.

Final course grades: 100-90% = A, 89-80% = B, 79-70% = C, 69-60% = D, <60% = F.

Course policies: Students with disabilities will be happily accommodated, but students must show me their ID CARD from Disability Support Services. If you are taking an exam at DSS, please give me your completed DSS test release form during the class period prior to the exam.

Academic misconduct will not be tolerated. As stated in the SIUE Student Academic Code, the minimum penalty for academic misconduct beyond failure for an assignment and/or for a course is disciplinary probation. Falsifying attendance records is considered cheating. Students caught cheating, plagiarizing, or falsifying attendance sheets will receive an F for the course and will be reported to the offices of the Dean of the College of Arts and Sciences and the Provost of the University.

Classroom behavior: Punctuality is preferred, but I would rather you came late to class than not at all. If you arrive late, please seat yourself quietly. Please put trash and recycling in the appropriate receptacles. Laughing at my jokes is good, participating in class discussions is great, but please refrain from unnecessary private conversations. Please turn off your cell phones and other electronic devices during class. Use of laptops is also prohibited unless you have obtained permission from me in advance. If you "need" a laptop to take notes, then I will request that you show me the notes that you have typed after every class. Please do take notes! Spiral notebooks work wonderfully for this and are cheap.

FINALLY, PLEASE NOTE: This syllabus, assignments, sample exam questions, etc. will be made available on **Blackboard** (http://bb.siue.edu).

SAMPLE PRESENTATION EVALUATION

Anth 334 Presentation Evaluation

Presenter:			
Topic:			
	No	Somewhat .	Yes
Was presentation well organized and clear?	0	1.5	3
Did presenter appear knowledgeable about topic?	0	1.5	3
Did presenter answer questions satisfactorily?	0	1.5	3
Did visual aids complement the presentation?	0	1.5	3
Comments/suggestions:			

You must also write an essay (2-3 pages) summarizing your presentation. Essays are due on the day of presentation. The essay is worth an additional 3 points and will be graded on information content and quality of writing. Don't forget to attach your bibliography to the essay. Your presentation should be based on at least *three* sources, *in addition to* sources already assigned for class. Your objective should be to find more recent information on your topic (e.g., something published since 2000). At least one of your "new" sources should be published in print, preferably in a peer-reviewed journal. Please turn in to me copies of new sources you have gathered along with your essay and bibliography.

REMINDER: You must be ready to present on the day you are scheduled!!! If you are not, you will receive a 50% deduction (7.5 points) for presenting the following class period, and 100% thereafter. Only students with doctor's notes or other verified absences will be allowed to present late without point deductions.

Week 1 Introduction 1/7-11 Who cares about the origins of agriculture? Why would anyone ever want to be a farmer? Read Diamond, pp. 13-17, ch. 4-6. Week 2 Defining terms (domestication, horticulture, agriculture) 1/14-18 What's the difference between natural and artificial selection? Why are some plants/animals domesticated and others not? Why are some regions centers of domestication and others not? How is farming spread? Read Diamond, ch. 7-10. Read Price and Gebauer ch. 1 Read Cowan and Watson ch. 1. **ESSAY #1 DUE WEDNESDAY** Week 3 MONDAY NO CLASS 1/21-25 Anthropology and archaeology Paleoethnobotany and zooarchaeology Identifying plant/animal control vs. domestication in the archaeological record Plant and animal sciences: genetics and behavior Read Zeder et al. ch. 1, 2, 8, 13, 18. Student presentation: symbiotic relationships between species (Wed) Student presentation: experiments in plant and animal domestication (Fri) The Near East Week 4 Read Price and Gebauer ch. 2-3 1/28-2/1 Read Cowan and Watson ch. 3. Read Price and Gebauer ch. 1 Read Zeder et al. ch. 14-15, 19-22. Student presentation: domestication of plants in the Near East (Wed) Student presentation: domestication of animals in the Near East (Fri) Week 5 Africa 2/4-8Read Cowan and Watson ch. 4. Read Zeder et al. ch. 6. Student presentation: domestication of plants/animals in sub-Saharan Africa (Wed) Student presentation: domestication of plants/animals in Ethiopia (Fri) **ESSAY #2 DUE MONDAY** Week 6 Europe Read Price and Gebauer ch. 4. 2/11-15 Read Cowan and Watson ch. 5. Read Zeder et al. ch. 11, 17, 24. Student presentation: the spread of agriculture through Europe (Wed) Student presentation: the domestication of horses and donkeys (Fri) Week 7 East Asia 2/18-22 Read Price and Gebauer ch. 5. Read Cowan and Watson ch. 2. Read Zeder et al. ch. 10. Student presentation: domestication of plants/animals in southern China (Wed) Student presentation: domestication of plants/animals in northern China (Fri)

Week 8 2/25-3/1	Catch-up and review for midterm Student presentation: domestication of plants/animals in New Guinea (Wed) Student presentation: the spread of agriculture into India (Fri) MIDTERM FRIDAY
3/4-8	SPRING BREAK. HAVE FUN!
Week 9 3/11-15	Mesoamerica and Central America Read Cowan and Watson ch. 8. Student presentation: maize, beans, and squash (Wed) Student presentation: other domesticated plants/animals from Mexico (Fri)
Week 10 3/18-22	More on Mesoamerica and the New World Tropics Read Price and Gebauer ch. 6. Read Zeder et al. ch. 5, 7, 9. Student presentation: the spread of agriculture south from Mexico (Wed) Student presentation: phytoliths and pollen as archaeological evidence (Fri)
Week 11 3/25-29	South America Read Cowan and Watson ch. 9. Read Zeder et al. ch. 4, 12, 16, 23. Student presentation: domestication of plants in South America (Wed) Student presentation: domestication of animals in South America (Fri) ESSAY #3 DUE MONDAY
Week 12 4/1-5	Eastern North America Read Price and Gebauer ch. 7. Read Cowan and Watson ch. 6. Read Zeder et al. ch. 3. Student presentation: domestication of indigenous N. American plants (Wed) Student presentation: spread of Mexican/South American crops into eNA (Fri)
Week 13 4/8-12	Western North America Read Price and Gebauer ch. 8. Read Cowan and Watson ch. 7. Student presentation: early agriculture in western N. America (Wed)
Week 14 4/15-19	The hunting-gathering-horticultural continuum Models of the agricultural origins Read Price and Gebauer ch. 9-10. Read Cowan and Watson ch. 10. Student presentation: industrialization of agriculture (Fri) CRITICAL BOOK REVIEW DUE MONDAY
Week 15 4/22-26	Conclusion: The consequences of farming Read Diamond ch. 2. Review for final Student presentation: the Green Revolution (Wed) Student presentation: organic agriculture (Fri)
12/13	FINAL EXAM, THURSDAY, MAY 2, 10:00-11:40 A.M.

ANTHROPOLOGY 334 STUDENT DATA SHEET

tudent name:
tudent email:
Year in school (freshman, sophomore, etc):
1 ajor:
Inor:
lobbies/other interests:
Iave you ever had an anthropology class before?
Why are you taking this course? (Be honest; it's OK)
anything else you want me to know?
attach a photo of yourself to this data sheet and you will receive 2 points extra credit in your nal grade. The purpose of the photo is to help me learn your name. You can have the photo
ack at the end of the semester if you come to my office to get it. Please sign and return this sheet
y the 2 nd week of classes to indicate that you have received and read the syllabus. If you do not eturn the sheet, I will assume you have dropped the course.
ignature: Date: