ANTH 591: Feeding the World: from the past, to traditional food systems, to GMO’s
College Hall 138
Tu/Th 10:35-11:50 (1 hr and 15 mins each meeting)

Instructor: Jade d'Alpoim Guedes jade.dalpoimguedes@wsu.edu

Purpose of the Course:
Climate change, unparalleled population growth and ecological degradation means that securing the world’s food supply is one of the greatest challenges of our times. Using a series of readings derived from Anthropology, Archaeology, Economics, Intellectual Property Law and Biology, this course situates challenges in meeting the world’s food supply in a multi-disciplinary framework that uses ethnobiology as a common guiding stream. The first half of the course will situate major transformations in food production regimes in their archeological and historical context and will examine the ways in which traditional peoples around the world have met the challenge of meeting their food supply. The second half of the course compares these early developments to the modern food crisis using three examples. We will first examine traditional ecological knowledge in farming systems around the world asking the question: what makes these systems adapted and sustainable to their local environment. We will then focus on the goals of the green revolution, led by Norman Borlaug which involved the development of high-yielding varieties of cereal grains, expansion of irrigation infrastructure, modernization of management techniques, distribution of hybridized seeds, synthetic fertilizers, and pesticides to farmers and will chart how these “modernist” systems have been integrated, successfully or not to the rest of the world. Late in the 20th century, scientists began to directly manipulate life forms on the genetic level. We will discuss a number of the controversies relating to the development of biotechnology and agribusiness, including terminator seeds, contamination of non-GMO crop varieties, Golden Rice, and Indian farmer suicides. The intent of this discussion is to go beyond attacking or defending biotechnology, but rather using an anthropological framework to understand it and use it as a lens to understand how the world works. This course will focus on what can be learn from traditional ecological knowledge of food systems and how knowledge from these systems could be integrated into modern systems in an ethical framework.

Evaluation will be as follows:

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<thead>
<tr>
<th>Description</th>
<th>Percentage of final grade</th>
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<tr>
<td>Class participation Evidence of having prepared readings by speaking up and</td>
<td>30%</td>
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<td>by leading a week of discussion.</td>
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<tr>
<td>Position papers (2) Brief background, synopsis and discussion questions and</td>
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<td>a statement of your position on a debated issue in articles or chapters</td>
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<td>Research presentation 15 minute SAA or AAA style presentation of your</td>
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<td>research project</td>
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<tr>
<td>Final Paper 15 page essay relating the course material to an original</td>
<td>40%</td>
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<td>research topic.</td>
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<td>Total</td>
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COURSE POLICIES

Accommodation

Students with Disabilities: Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.

Academic integrity

Unless noted otherwise by the professor, all of the work in this course is to be completed by the individual. We employ a zero tolerance policy for plagiarism and cheating. Anyone caught cheating or guilty of plagiarism will at the very least receive a “0” for the given assignment (and more likely an “F” for the entire course) and be reported to the Office of Student Conduct without exception. Please refer to Washington State University’s official statement (www.wsulibs.wsu.edu/plagiarism) on academic integrity standards and procedures. If you don’t know what plagiarism is, then come to our office hours soon. Ignorance is not a valid excuse.

Syllabus is Subject to Change

This syllabus and schedule are subject to change. Notice will be given by email and/or in class if needed.

Classroom safety

You can thank your congressional representatives for my having to include the following statement. “Classroom and campus safety are of paramount importance at Washington State University, and are the shared responsibility of the entire campus population. WSU urges students to follow the “Alert, Assess, Act” protocol for all types of emergencies and the “Run, Hide, Fight” response for an active shooter incident. Remain ALERT (through direct observation or emergency notification), ASSESS your specific situation, and ACT in the most appropriate way to assure your own safety (and the safety of others if you are able).

Please sign up for emergency alerts on your account at MyWSU. For more information on this subject, campus safety, and related topics, please view the FBI’s Run, Hide, Fight video and visit the WSU safety portal.”

Syllabus

Week 1:

Jan 12th: Feeding the World, Feeding Yourself: Introduction to Goals of the Course and A Brief History of Ethnobotany

Required:


Optional:

**Jan 14th**: What is the problem? Population and food.

**Readings:**


Optional:

**Week 2: Turning to the past.**

**Jan 19th** Climate change hypotheses for the origins of agriculture


a.) Climate Change Hypotheses:


A light review of the Younger Dryas phenomenon with pertinent observations about the quality of our data.

**Jan 21th** Explaining change in subsistence regimes: Why farm when there are so many mongogo nuts?

b.) Alternative views:


**Week 3:**

**Jan 26th:** The transition to Agriculture in the Near East: From the Upper Paleolithic to the PPNB.


**Jan 28th:** Debate: Conflicting conceptual frameworks about human plant interaction (NCT and HBE) Was there a broad spectrum revolution in the Near East?


**Week 4**

**February 2nd** Documenting plant domestication: How do we know?

**Readings:**


**February 4th:** Moving Agriculture, Moving Culture: the Movement of Agriculture and people into Europe

Bellwood, Peter (2005) First Farmers: The Origins of Agricultural Societies. Chapter 4 Part 1


**Week 5:**

**February 9th** Debate: The Origins of Rice and Millet Agriculture
The following 3 articles comprise a series of arguments about characterizing rice exploitation in early South China. The first article, by Jiang and Liu, presents a short report on new finds from the Lower Yangzi River. The second article, by Fuller et al., argues that before making claims for rice domestication, other possibilities need to be considered. The third article by Liu et al. is the short form of a reaction to Fuller et al., with the long version being the Holocene article. The following two are articles by Fuller et al. that follow up with new evidence.


*On East Asian Millet Domestication*


**February 11th Wet-Rice Farming and intensive traditional agriculture**

Readings:

Boserup, Ester (1965) *The Conditions of Agricultural Growth*. Introduction and Chapters 1-4


Week 6

February 16th: Pigs and Yams and Rice agriculture: The spread of Agriculture to the Pacific


February 18th: Africa and India: the forgotten homelands of millet domestication.


Fuller, Dorian Q and Hildebrand, Elisabeth Anne Domesticating Crops in Africa In Mitchell and Lane (eds) the *Oxford Handbook of African Archaeology*: 507-525.


Week 7:

February 23rd Corn Domestication/ Traditional Ecological Knowledge in the American Southwest and Mexico. *Bill Lipe Guest Lecture*


February 25th Diet in the Andes and what is a weed anyway? Domestication and Cultivation in North America


**Week 8:**

**March 1** Food Globalization past and present

Readings:


Optional but worth a read!

**March 3** Traditional Farming Systems across Asia: Bali and the green revolution crisis.


Watch: https://www.youtube.com/watch?v=lNKrR27Cqw

AAA Abstract discussion: Who would we like to invite?

**Week 9:**

**March 8** Why has shifting cultivation got such a bad rap?


**March 10** Norman Borlaug, the Green Revolution and the Origins of Industrial Agriculture

Readings:


**Week 10:**
**March 14-18:** NO CLASS: SPRING BREAK

**Week 11:**

**March 22nd**: What does the great leap forward tell us about smallholder agriculture?


**March 24th**: Small Holder Agriculture in Africa.


**Week 12:** March 29-31: Instructor Away (CAA meetings)

While I am gone, read start reading Kloppenburg (2004) chapters

**Week 13**
**April 5th**: Instructor Away (SAA Meeting)

**April 7th** Instructor Away (SAA Meeting)

**Week 14:**

**April 12th**: “What’s in a GMO?: History and Technology of Genetically Modified Organisms” Kevin Murphy Guest Lecture

Readings:

Baseball bats and breast cancer: The court mulls over gene patenting
Columnist takes on the biotech industry http://www.patentbaristas.com/archives/2005/12/16/muckraking-columnist-takes-on-biotech-industry/

April 14th: Genetically Modified Organisms
Readings:


Week 15:
April 19th: GMO Debate:

1.) Golden Rice:
This Rice Could save 1000 kids a year http://www.time.com/time/magazine/article/0,9171,997586,00.html
Johns, Timothy 2003 Plant Biodiversity And Malnutrition: Simple Solutions To Complex Problems *African journal of food, agriculture, nutrition and development AJFAND*

2.) Ecological issues:


3.) Bt and Indian Farmer Suicides:

BT Cotton, Remarkable Success and Four Ugly Facts


http://www.whale.to/b/shiva1.pdf
April 21st Ethics

Readings:


What Have We Forgotten? Returning Data from Ethnobiological Research to Local Communities

Optional:

Week 16:

April 26th: Can we feed the world in the 21st century and be sustainable?

The Quinoa Debate
[http://www.motherjones.com/tom-phillpott/2013/01/quinoa-good-evil-or-just-really-complicated](http://www.motherjones.com/tom-phillpott/2013/01/quinoa-good-evil-or-just-really-complicated)


**April 28th Student Presentations**