ANTH 4800-008
ARCHAEOLOGY OF CLIMATE CHANGE
SPRING 2017

Meeting Time:        Monday, Wednesday, and Friday, 8:30-9:20 am
                    Old Main 119
Instructor:          Judson Finley
Office:              Old Main 245f
                    Phone: (435)797-9621
                    Email: judson.finley@usu.edu
Office Hours:        Monday and Wednesday 10:00-11:30, or by appointment

Course Description

Climate change is among the most critical problems that we face as a contemporary industrial society. The debate over human influences has taken a prevalent place in the national and global political arena. However, to truly understand the relationships between climate change and human society one must look deep into the past. This class provides a critical understanding of how climate scientists reconstruct past climate and have come to understand the major influences of climate change. The relationships between humans and the natural environment are presented as a series of case studies that are global in nature and span much of the last 2,000,000 years. This class examines how archaeology as an interdisciplinary science creates and uses primary climate data as part of its research agenda. Students will use the online learning platform, Top Hat, in a hybrid classroom where lectures and critical content will be made available prior to each week of class.

Learning Objectives

- Students will gain factual knowledge about the fundamentals of Earth’s climate system
- Students will gain a broader understanding and appreciation of the role climate played in the evolution of the human species, the colonization of the planet, and the rise of complex societies
- Students will apply course materials to understand climate change versus climate variability
- Students will critically evaluate the role of humans in current understandings of climate change

Requirements

Grades for this class are based on four individual components: a reading journal (25%), one 8-10 page research paper (25%), a midterm exam (25%), and a final comprehensive exam (25%). Full participation in class discussions is expected, which means completing the weekly readings
prior to class (this is the purpose of the reading journal). Attendance and discussion will be included in the participation component of the class.

Top Hat

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to download content and submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation will be sent to you by email, but if don’t receive this email, you can register by simply visiting our course website: https://app.tophat.com/e/800881

Note: our Course Join Code is ******

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

***Final Exam: Friday May 5, 2017 7:30-9:20 am, Old Main 119

Required Texts


# Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Reading Sources</th>
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<tbody>
<tr>
<td>1</td>
<td>January 9-13, 2017</td>
<td>Introduction to Class</td>
<td>Woodward (2014), Chapters 1-5</td>
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<td>2</td>
<td>January 16-20, 2017</td>
<td>Framework of Climate Science</td>
<td>READING: Ruddiman (2005), Chapters 1-6 <strong>No Class Monday January 16, 2017</strong></td>
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<td>5</td>
<td>February 6-10, 2017</td>
<td>CASE STUDY: Out of Africa</td>
<td>READING: Frumkin et al. (2011); Petraglia et al. (2010)</td>
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<td>6</td>
<td>February 13-17, 2017</td>
<td>CASE STUDY: Colonizing Australia</td>
<td>READING: Ambrose (1998); O’Connell et al. (2010); Miller et al. (2005)</td>
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<td>8</td>
<td>February 27-March 3, 2017</td>
<td>Peopling the Americas</td>
<td>READING: Meltzer (2004); Fagan (2004), Chapters 1-3 <strong>Midterm Exam Friday March 3, 2017</strong></td>
</tr>
<tr>
<td>9</td>
<td>March 6-10, 2017</td>
<td>SPRING BREAK—NO CLASS</td>
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<tr>
<td>10</td>
<td>March 13-17, 2017</td>
<td>Agriculture and Climate Change</td>
<td>READING: Ruddiman (2005), Chapters 7-11; Fagan (2004), Chapters 4-5</td>
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<td>14</td>
<td>April 10-14, 2017</td>
<td>The Medieval Climate Anomaly</td>
<td>READING: Fagan (2004), Chapters 11-12; Benson et al. (2007)</td>
</tr>
<tr>
<td>15</td>
<td>April 17-21, 2017</td>
<td>Recent Climate Change</td>
<td>READING: Fagan (2004), Epilogue; Ruddiman (2005), Chapters 15-</td>
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**Week 16**  
April 24-28, 2017

<table>
<thead>
<tr>
<th>Reading</th>
<th>Case Study</th>
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| The Geopolitics of Climate Change  
READING: Mann et al. (1998); Mann (2012); Oreskes and Conway (2011)  
CASE STUDY: The Hockey Stick Debate  
LAST DAY OF CLASS—APRIL 28, 2017 |

***Final Exam: Friday May 5, 2017 7:30-9:20 am, Old Main 119***

**Readings**


IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), qualified students with disabilities may be eligible for reasonable accommodations. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, 797-2444 voice, 797-0740 TTY, or toll free at 1-800-259-2966. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print or digital) are available with advance notice.

IN COMPLIANCE WITH THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA), it is the policy of the Department of Sociology, Social Work & Anthropology at Utah State University to maintain the confidentiality of students’ records. When it is not feasible to distribute exams, papers, and other assignments to students individually (e.g., in large-enrollment classes), the instructor may obtain from students a signed waiver of confidentiality regarding class assignments so exams, papers, and other academic exercises may be placed out during class or during other group sessions for students to pick up. A general waiver may be sought from each student at the beginning of the academic term with the understanding that the waiver may be rescinded, in writing, during the academic term if the student chooses. If a student does not sign a waiver, then assignments must be returned to that student confidentially.