

IN SEARCH OF ICE AGE AMERICANS

It is widely accepted that the first Americans came here over 12,000 years ago, when the earth was in the waning grip of an Ice Age. But ascertaining precisely who these initial colonists were, where they originated, when and how they got here, and how they adapted to their new landscape, has proven challenging – if not often highly controversial. The goal of this course is to look across disciplinary boundaries, to see how this story is being pieced together by disciplines as different as archaeology, geology, linguistics, physical anthropology, and molecular biology, and how this study occasionally forces us to confront prickly ethical issues (even legal challenges), when science and native tradition collide. How this course will unfold is outlined below, followed by the usual administrative details.

CLASS	TOPICS AND REQUIRED READINGS:
August 18	<p>Course introduction – details, deadlines, and a map of the course. Getting to the New World on time – What does it mean to be first in a new land? Issues in the peopling of the Americas. A brief review of the first few million years of human prehistory.</p> <p style="padding-left: 40px;">Meltzer, D. and T. Dillehay (1999) The search for the earliest Americans. <i>Archaeology</i> 52:60-61.</p> <p style="padding-left: 40px;">Nemecek, S. (2000) Who were the first Americans? <i>Scientific American</i>, November.</p>
August 25	<p>The landscape of colonization: glaciers, climates and environments of Ice Age North America – Why Ice Ages happen. Glaciers and glacial history of North America. Climates, environments of Pleistocene North America. Beringia, Coast & Corridor: routes of migration</p> <p style="padding-left: 40px;">Elias, S. (2002) Setting the stage: environmental conditions in Beringia as people entered the New World. In <i>The first Americans</i>, edited by N. Jablonski, pp. 9-25. <i>Memoirs California Academy of Sciences</i>, No. 27.</p> <p style="padding-left: 40px;">Erlandson, J. (2002) Anatomically modern humans, maritime voyaging, and the Pleistocene colonization of the Americas. In <i>The first Americans</i>, edited by N. Jablonski, pp. 59-92. <i>Memoirs California Academy of Sciences</i>, No. 27.</p> <p style="padding-left: 40px;">Wright, H. (1991) Environmental conditions for Paleoindian immigration. In <i>The first Americans: search and research</i>, edited by T. Dillehay and D. Meltzer, pp. 113-135. CRC Press.</p>
September 1	<p>From Paleoliths to Paleoindians. Could they really be the 10 Lost Tribes of Israel? The American Paleolithic dispute. What have the bones to say? Resolution at Folsom. Setting up the Clovis / pre-Clovis controversy.</p> <p style="padding-left: 40px;">Meltzer, D.J. (1994) The discovery of deep time: a history of views on the peopling of the Americas. In <i>Method and theory for investigating the peopling of the Americas</i>, edited by R. Bonnichsen and D.G. Steele, pp. 7-26. Center for the Study of the First Americans, Corvallis.</p>
September 8	<p>The pre-Clovis controversy and its resolution – Battles over ancient archaeological sites in the Americas. Finding the footprints of the earliest Americans.</p> <p style="padding-left: 40px;">Adovasio, J. and J. Page (2002) <i>The first Americans: in pursuit of archaeology's greatest mystery</i>. Random House, New York. Read Chapters 7 ('Melee over Meadowcroft') and 9 ('Fireworks and the Paleo-police').</p> <p style="padding-left: 40px;">Dillehay, T. (1997) The battle of Monte Verde. <i>The Sciences</i>, January/February, pp. 28-33.</p>

September 15	<p><i>Echoes of the past: Reconstructing the peopling of the Americas from native language</i> – Language and language change. Methods of historical linguistics. Languages and language families in the Americas. Amerind, Na-Dene, and Eskimo-Aleut: Greenberg and his critics. What do Native American languages reveal of the origin and antiquity of the first Americans?</p> <p>Nichols, J. (2002) The first American languages. In <i>The first Americans</i>, edited by N. Jablonski, pp. 273-294. Memoirs California Academy of Sciences, No. 27.</p>
September 22	<p><i>Telltale teeth and bones? Lessons from the skeletal remains of Ice Age Americans</i> – Teeth as historical indicators. Sundatonty and Sinodonty. Cavities in the dental argument? Using skeletal anatomy to reconstruct affinities of ancient and modern populations. Paleoindian patterns. Europeans in America? – the Kennewick case. Population variation and evolution in the first Americans.</p> <p>Steele, D.G. and J. Powell (2002) Facing the past: a view of the North American human fossil record. In <i>The first Americans</i>, edited by N. Jablonski, pp. 93-122. Memoirs California Academy of Sciences, No. 27.</p> <p>Turner, C. (2002) Teeth, needles, dogs, and Siberia: bioarchaeological evidence for the colonization of the New World. In <i>The first Americans</i>, edited by N. Jablonski, pp. 123-158. Memoirs California Academy of Sciences, No. 27.</p>
September 29	<p><i>Ancestral genes: using DNA to reconstruct Native American population history</i> – A genetics primer. Mitochondrial DNA and the Non-Recombining portion of the Y chromosome. DNA as a molecular clock and a measure of genetic distance. mtDNA and NRY-DNA and the population history of Native Americans.</p> <p>Zegura, S. T. Karafet, L. Zhivotovsky, and M. Hammer (2004) High-resolution SNPs and microsatellite haplotypes point to a single, recent entry of Native American Y chromosomes in the Americas. <i>Molecular Biology and Evolution</i> 21:164-175.</p> <p>Merriwether, D.A. (2002) A mitochondrial perspective on the peopling of the New World. In <i>The first Americans</i>, edited by N. Jablonski, pp. 295-310. Memoirs California Academy of Sciences, No. 27.</p>
October 6	<p>FIRST HALF OF CLASS: <i>Synthesis or antithesis?</i> – A comparison of archaeological and non-archaeological evidence on the first Americans. Where did the first Americans come from? When did they arrive? How many migrations were there, and in what order? Is there convergence on the origin and ancestry of the first Americans?</p> <p>Greenberg, J., C. Turner, and S. Zegura (1986) The settlement of the Americas: a comparison of the linguistic, dental, and genetic evidence. <i>Current Anthropology</i> 27:477-497.</p> <p>Meltzer, D. (1993) The Pleistocene peopling of the Americas. <i>Evolutionary Anthropology</i> 1:157-169.</p> <p>SECOND HALF OF CLASS: <i>Mid-term exam – Term paper topics due</i></p>
October 13	<p><i>Entering new landscapes: the challenges of colonization</i> – On the archaeological record of initial colonization. Why colonize the Americas? The needs of colonists. Learning the landscape: wayfinding; understanding weather and climate; learning resources. The changing Scale of colonization. Colonizing compromises.</p> <p>Meltzer, D. (2002) What do you do when no one's been there before? Thoughts on the exploration and colonization of new lands. In <i>The first Americans</i>, edited by N. Jablonski, pp. 27-58. Memoirs California Academy of Sciences, No. 27.</p>
October 20	<p><i>Clovis archaeology from west to east</i> – Origins, Siberia and ... Iberia? The hallmarks of Clovis. The Clovis archaeological record in the west. Clovis adaptations. The eastern fluted point occupation. Clovis caches.</p>

	<p>Dincauze, D. (1993) Fluted points in the eastern forests. In <i>From Kostenki to Clovis: Upper Paleolithic – Paleo-indian adaptations</i>, edited by O. Soffer and N. Praslov, pp. 279-292. Plenum Press, New York</p> <p>Stanford, D. (1991) Clovis origins and adaptations: an introductory perspective. In <i>Clovis: origins and adaptations</i>, edited by R. Bonnicksen and K. Turnmire, pp. 1-13. Center for the Study of the First Americans, Corvallis.</p> <p>Stanford, D. and B. Bradley (2002) Ocean trails and prairie paths? Thoughts about Clovis origins. In <i>The first Americans</i>, edited by N. Jablonski, pp. 255-272. Memoirs California Academy of Sciences, No. 27.</p>
October 27	<p><i>Pleistocene Overkill – a crime against nature?</i> – A long vanished zoo: ecology of the now-extinct megafauna. Meat on the hoof – examining the possible role of human hunting in megafaunal extinctions. Are extinctions contagious? – looking at hyper-disease. Climate and environmental change and some case studies.</p> <p>Grayson, D. and D. Meltzer (2003) Requiem for North American overkill. <i>Journal of Archaeological Science</i> 30:585-593.</p> <p>Martin, P. (1973) The discovery of America. <i>Science</i> 179:969-974.</p>
November 3	<p><i>Late Paleoindian occupations of the Plains and Rocky Mountains</i> – Adaptive radiation at the end of the Ice Age. Bison, foraging theory, and Paleoindian hunting. Folsom archaeology and adaptations. The co-evolution of predators and prey in later Paleoindian times.</p> <p>Hofman, J. and Todd, L. (2001) Tyranny in the archaeological record of specialized hunters. In <i>People and wildlife in northern North America: essays in honor of R. Dale Guthrie</i>, edited by Gerlach, C. and Murray, M., pp. 200-215. BAR International Series 944.</p> <p>Wheat, J. (1967) A Paleo-Indian bison kill. <i>Scientific American</i>, January 1967.</p>
November 10	<p><i>Settling into the forest: Late Paleoindian occupations of eastern North America</i> – Postglacial establishment of the eastern forests. A proliferations of styles. Dalton and dietary expansion. Life in caves. Life after death.</p> <p>Anderson, D. (1995) Paleoindian interaction networks in the eastern woodlands. In <i>Native American interaction: multiscalar analyses and interpretations in the eastern woodlands</i>, edited by M. Nassaney and K. Sassaman, pp. 1-26. Knoxville, University of Tennessee Press.</p> <p><i>Late Glacial archaeology and adaptations in the High Arctic</i> – Arctic climate and environments. Fluted points in Alaska. Nenana complex sites. Paleoarctic tradition, tools and technology. Hunters on the North Slope – the Mesa Complex.</p> <p>Hoffecker, J. and S. Elias (2003) Environment and archaeology in Beringia. <i>Evolutionary Anthropology</i> 12:34-49.</p> <p>Submit draft of research paper for comments (OPTIONAL!)</p>
November 17	<p><i>When past and present collide</i>. Old World meets New: Cortes in America. From Siberia to Smallpox. Prehistory's consequences. Linking ancient remains & modern people across the great divide. Native American Graves Protection and Repatriation Act (NAGPRA). Hitting NAGPRA where it hurts – the Kennewick affair.</p> <p>Hitt, J (2005) Mighty white of you: racial preferences color America's oldest skulls and bones. <i>Harper's Magazine, July 2005</i>.</p> <p>Catch-up if discussion has fallen behind & review for final exam.</p>
December 1	Term papers due this day by 5 PM
December 6	Final exam, 3-6 PM

THE USUAL ADMINISTRATIVE DETAILS

Because of the interdisciplinary range of the course there is no single book that encompasses all of the material. However, your text for the course (*The first Americans: the Pleistocene colonization of the New World*, edited by N. Jablonski) comes close, since it is based on a conference a few years back which brought together archaeologists, geneticists, linguists, and physical anthropologists. Still, there are holes in its coverage, and to fill those gaps you'll also be reading a number of journal articles. These will be put on reserve in the ISEM library, which is located on the first floor of Heroy Hall (enter the main door on the west side of the building, and just veer to your left - it's in Room 129).

There are no pre-requisites for this class, though a background in any of the subjects of the course will prove useful. The course format will be primarily lecture. However, I hope and expect you to raise questions and discussion points. If you sit there quietly the entire semester, it will not count against you. If, however, you ask questions and speak on occasion, you will be generously rewarded (see below).

THE USUAL ADMINISTRATIVE DETAILS EVERYONE REALLY WANTS TO KNOW ABOUT

I do not take attendance, but I expect everyone to attend every class. If you do not, I can virtually guarantee that you will do badly in the course, as the exams are based largely on what is discussed in the classroom. One cannot just do the reading and expect to pass. If on occasion you are running late, show up anyway. I'd rather you arrive late than not at all. Habitual tardiness or absences will be duly noted, however, for you can be assured that I am well aware of who is present and who is not. Those of you who attend regularly will not only do far better on your exams, you will also get a boost from me at the end of the semester if you're hovering between two grades. Those of you who do not will not get any sympathy from me in this regard.

Please put your cell phones on silent or turn them off when you get to class.

Your grade will be based on your performance on two **exams**, each worth 35% of your total: a midterm on **October 6**, during the second half of class, and a final on **December 6** at the officially scheduled exam time. Mark your calendars now so as not to miss these gala events!

My policy on missed exams is to give a make-up if the absence was unavoidable. A note from your Advisor or Doctor (as appropriate) is required. Exam details will come when we get closer to the date. Here let me note they will include T/F and multiple choice sections, as well identifications/short answers and essays. Students who may need academic accommodations for a disability should contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities, at 214 768-4563, who will establish eligibility and suggest appropriate arrangements for taking the exams. This process must be completed one week before the first exam.

For the remaining 30% of your grade, you will submit a **research paper** on a course related topic. The accompanying handout provides details guidelines for the paper. Here, let me note that the **topic must be approved by me**. That's not as onerous as it sounds – I'm interested in lots of things, and we will have little problem finding a topic that's mutually agreeable. Plus, knowing what you will write about will give me the opportunity to recommend source material to get you started. Your topic must be approved by **October 6**. Papers on topics that lack prior approval will be penalized a full letter grade.

On the matter of sources, I have included with your required texts Gordon Harvey's ***Writing with sources: a guide for students***. This inexpensive and handy paperback should be consulted in the event of any question in your mind about how to properly use source material, especially the use of bits you may pull down off the web. And if it doesn't answer your question, come see me.

On the accompanying handout is a list of possible topics from which you can pick one, or we can develop one that is not on that list. Additional details on format, details, helpful hints in writing, etc., are also on the handout. As a special – but optional – service, I will accept outlines or drafts or your papers on **November 17**, then read and return them with comments and suggestions for improvement *before* the Thanksgiving break. This service comes to you at no charge – I am not grading papers, only offering

suggestions on how you can improve them (and your grade!). Otherwise, the hard deadline is by 5 PM on **December 1** – then I grade the papers for real. Late papers will be penalized ½ letter grade each day they are late.

In ***all*** work for the class you are expected to follow the SMU Honor Code. If you have any questions about what that means, see **www.smu.edu/studentlife/PCL_05_HC.asp**. Violators will be prosecuted.

A final note on grading: I do not give extra credit. But I generously round up the grades of those who participate in class by asking questions, raising discussion points from the reading, or showing other signs of intelligent life.

My office is 442 Heroy and phone number is 214 768-2826; my email is **dmeltzer@mail.smu.edu**. The official office hours are Tuesday/Thursday 11:30-1:30 PM, but it is not a problem if you need to see me at just about any other time during the week. Just contact me by email or phone, and we'll set up a time to meet.