

**ANTHROPOLOGY 5273**  
**ANTHROPOLOGICAL DEMOGRAPHY**

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509 Dale Hall Tower  
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Office Hours: Tu/Th 2:30 – 3:30 PM or by appt

Fall 2003  
Thurs 7:00 – 9:40 PM  
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This seminar will consider demography, the study of human populations, from an anthropological perspective. We will cover a wide range of topics including:

- Basic demographic theory
- Human demography in evolutionary perspective
- Demography and subsistence mode
- Proximate determinants of demographic outcomes
- Reproductive success
- Nuptiality/polygyny
- Kinship and demographic outcomes
- Longevity and reproductive senescence
- The demographic transition
- Historical demography
- The role of culture in demographic explanation
- Paleodemography

The course will focus on critical discussion of the readings, which will cover theory, methods, and empirical case studies. Lectures will be kept to a minimum, but will be used when necessary. Readings will emphasize small-scale societies, natural fertility populations and developing countries, and class exercises will use actual empirical data from current and historical hunter-gatherer, horticulturalist and pastoralist populations.

**Course requirements:**

Grades will be based on class participation, reaction papers, two homework assignments using empirical data, and a research paper.

Class participation and attendance: Everyone is expected to attend and to participate fully in every class. In addition, each student must email to me a set of discussion questions based on the readings (at least one question per reading); these are due by 5 pm the day of class. If you have problems, confusions, or criticisms arising from the readings, you are encouraged to bring them into class as well.

Reaction papers: On three separate occasions (of your choosing), you will write up a reaction paper based on that week's readings; reaction papers are due the day the readings are discussed. These should be about 2-3 full pages in length (typed, double-spaced). Reaction papers are not intended to be summaries of the week's readings. Rather, they should demonstrate that you have thoroughly and critically read the material and are able to synthesize it. Reaction papers may not be written for weeks 1, 2 or 3.

In writing your reaction papers, you may want to do one or more of the following:

- Consider the arguments made by the authors. Do they support or contradict each other? Are they well-developed? Have the authors overlooked anything that might strengthen their arguments? Do you find the arguments made in one reading more persuasive than the arguments made in the other readings, and if so, why?
- Consider the evidence provided by the authors to support their arguments. Is the evidence sufficient? Is it persuasive? Is the evidence provided in one reading more persuasive than the evidence provided in the other readings, and if so, why?
- Discuss issues none of the authors considered but you think are important to the subject being studied. In doing so, you may want to refer to other scholarly work on that week's topic. (I will provide a list of "recommended readings" for each week.) What do these other works tell us about the subject that the assigned readings did not? How do these other works address issues that you think the authors of the assigned readings should have?

Homework assignments: Homework assignments will be given out during weeks 2 and 3, and will cover the basic demographic concepts introduced during those weeks. Each assignment will consist of computer exercises, and will involve the manipulation of raw demographic data into meaningful statistics (such as life expectancy or total fertility rate) or plots. Homework #1 (Mortality) is due on September 11, and Homework #2 (Fertility) is due on September 18.

Research paper: You are expected to pursue a demographically-oriented research project, preferably one that is in line with your own substantive interests. There are three options:

1) *A research proposal.* A proposal should include a statement of the research question, the rationale for posing the question, a discussion of theory and hypotheses, a review of the relevant research literature, and a description of the data and methods that will be used to address the question posed. This should be a proposal for research that is realistically feasible (e.g., for a Master's or Ph.D. dissertation).

2) *An empirical research project.* The scope of this is quite broad, and can encompass such disparate projects as a cross-cultural examination of two demographic variables, an in-depth study of demographic change over time within a single culture, or a comparison of mortality rates from cemetery data in Norman and neighboring historically non-white communities. This paper should include all of the components of the research proposal as outlined above as well as analysis results and a discussion of findings.

3) *A review paper.* This should consist of an extensive review of the literature surrounding a focused demographic topic. The paper should include an in-depth review of the research literature, discussion of common themes, criticism of the literature, suggestions for future research projects, etc.

Papers should be at least 15 pages long (not counting figures, tables, and bibliography), and should be written in up in the form of a paper submitted for publication (for options 1 and 3) or a grant proposal (for option 2). A half-page (non-graded) abstract of your paper topic is due on September 25.

A very preliminary draft of the paper is due on October 23; this essentially contains the "front matter" of your paper, with the statement of the research question, the rationale for posing the question, a discussion of theory and hypotheses, a review of the relevant research literature, and your preliminary bibliography. This will give me a chance to assess where you are and where you're heading, as well as to suggest literature you may not have seen, etc.

On Dec 11, each student will present his or her paper in class. A hard copy of the final version of the paper is due in my mailbox by noon on Wednesday December 17. Do not e-mail the final version of your paper to me and expect me to print it for you.

### Grading:

Class participation and attendance	20%
Reaction papers	15%
Homework assignments	5%
Preliminary draft of research paper	10%
In-class presentation of research paper	10%
Research paper	40%
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Total	100%

### **Readings**

There are no textbooks for the course. The readings are drawn from a variety of sources, and are listed below. I will make a photocopy of each week's reading available at least one week in advance; in addition, the readings that are available online will be linked to the course website, on Blackboard (<https://ou.blackboard.com/>). All readings are required, except for one optional reading in week 1, on the ethnographic background of the Ache.

### **Tentative schedule of classes and readings**

#### **August 28/Week 1: Introduction and overview, or, Broken down by age and sex**

- *Optional:* Hill, Kim, and A. Magdalena Hurtado. 1996. *Ache Life History: The Ecology and Demography of a Foraging People*. Aldine de Gruyter: New York. [Chapter 2: The Ache]

#### **September 4/Week 2: Basic demographic theory I: Mortality and life expectancy**

- Haupt, Arthur, and Thomas T. Kane. 1998. *Population Handbook*, Fourth Edition. Population Reference Bureau: New York [Ch. 5 (Mortality), Ch. 6 (Morbidity)]
- Howell, Nancy. 2000. *Demography of the Dobe !Kung*, Second Edition. Aldine de Gruyter: New York [Ch. 3 (Causes of sickness and death), Ch. 4 (The measurement of mortality)]
- Hill, Kim, and A. Magdalena Hurtado. 1996. *Ache Life History: The Ecology and Demography of a Foraging People*. Aldine de Gruyter: New York. [Ch. 5 (Causes of mortality), Ch. 6 (Rates of mortality)]

#### **September 11/Week 3: Basic demographic theory II: Fertility**

- ❖ *Homework #1 due (Mortality)*
- Haupt, Arthur, and Thomas T. Kane. 1998. *Population Handbook*, Fourth Edition. Population Reference Bureau: New York [Ch. 3 (Fertility), Ch. 4 (Factors affecting fertility)]
- Howell, Nancy. 2000. *Demography of the Dobe !Kung*, Second Edition. Aldine de Gruyter: New York [Ch. 6 (An overview of !Kung women's fertility: Completed reproductive careers), Ch. 7 (Fertility performance, 1963-1973), Ch. 8 (!Kung fertility performance in comparative perspective), Ch. 13 (Fertility performance of !Kung men)]
- Hill, Kim, and A. Magdalena Hurtado. 1996. *Ache Life History: The Ecology and Demography of a Foraging People*. Aldine de Gruyter: New York. [Ch. 8 (Female fertility), Ch. 9 (Male fertility)]

#### **September 18/Week 4: Human demography in evolutionary perspective**

- ❖ *Homework #2 due (Fertility)*
- Ross, Caroline. 1998. Primate life histories. *Evolutionary Anthropology* 6: 54-63.
- Hill, Kim, Christophe Boesch, Jane Goodall, Anne Pusey, and Jennifer Williams. 2003. Mortality rates among wild chimpanzees. *Journal of Human Evolution* 40: 437-450.
- Kaplan, Hillard. 1997. The evolution of the human life course. In *Between Zeus and the Salmon: The Biodemography of Fertility*, K. Wachter and C. Finch, eds., pp. 175-211. Washington, D.C.: National Academy Press.
- Clarke, Alice L., and Bobbi S. Low. 2001. Testing evolutionary hypotheses with demographic data. *Population and Development Review* 27 (4): 663-660.

### **September 25/Week 5: Demography and subsistence mode: Cross-cultural perspectives**

#### ❖ *Statement of paper topic due*

- Wood, James W. 1994. *Dynamics of Human Reproduction: Biology, Biometry and Demography*. New York: Aldine de Gruyter. [Chapter 1 (Natural fertility)]
- Hewlett, Barry S. 1991. Demography and childcare in preindustrial societies. *Journal of Anthropological Research* 47: 1-37.
- Bentley, Gillian R., Grażyna Jasińska, and Tony Goldberg. 1993. Is the fertility of agriculturalists higher than that of nonagriculturalists? *Current Anthropology* 34: 778-785.
- Sellen, Daniel W., and Ruth Mace. 1997. Fertility and mode of subsistence: A phylogenetic analysis. *Current Anthropology* 38: 878-889.
- Sellen, Daniel W., and Ruth Mace. 1999. A phylogenetic analysis of the relationship between sub-adult mortality and mode of subsistence. *Journal of Biosocial Science* 31: 1-16.
- Marlowe, Frank. 2001. Male contribution to diet and female reproductive success among foragers. *Current Anthropology* 42: 755-760.

### **October 2/Week 6: Proximate determinants of demographic outcomes**

- Bentley, Gillian R. 1999. Aping our ancestors: Comparative aspects of reproductive ecology. *Evolutionary Anthropology* 8: 175-185.
- Wood, James W. 1994. *Dynamics of Human Reproduction: Biology, Biometry and Demography*. New York: Aldine de Gruyter. [Chapter 3, first half (Frameworks for analyzing the determinants of natural fertility)]
- Ellison, Peter T. 2003. Energetics and reproductive effort. *American Journal of Human Biology* 15: 342-351.
- Howell, Nancy. 2000. *Demography of the Dobe !Kung*, Second Edition. Aldine de Gruyter: New York [Ch. 10 (Fatness and fertility)]
- Hill, Kim, and A. Magdalena Hurtado. 1996. *Ache Life History: The Ecology and Demography of a Foraging People*. Aldine de Gruyter: New York. [Ch. 11 (Body size and the timing of sexual maturity)]

### **October 9/Week 7: Reproductive success**

- Strassmann, Beverly I., and Brenda Gillespie. 2003. How to measure reproductive success? *American Journal of Human Biology* 15: 361-369.
- Crognier, E. 2003. Reproductive success: Which meaning? *American Journal of Human Biology* 15: 352-360.
- Moore, John H. 1990. The reproductive success of Cheyenne war chiefs: A contrary case to Chagnon's Yanomamö. *Current Anthropology* 31: 322-330.
- Cronk, Lee. 1991. Wealth, status, and reproductive success among the Mukogodo. *American Anthropologist* 93: 345-360.
- Borgerhoff Mulder, Monique. 1987. On cultural and reproductive success: Kipsigis evidence. *American Anthropologist* 89: 617-634.
- Borgerhoff Mulder, M. 2000. Optimizing offspring: The quality-quantity tradeoff in agropastoral Kipsigis. *Evolution and Human Behavior* 21 (6) 390-410.
- Boone, James. 1986. Parental investment and the elite family structure in preindustrial states: A case study of late medieval-early modern Portuguese genealogies. *American Anthropologist* 88: 859-878.

### **October 16/Week 8: Nuptiality/polygyny**

- Haupt, Arthur, and Thomas T. Kane. 1998. *Population Handbook*, Fourth Edition. Population Reference Bureau: New York [Ch. 7 (Nuptiality)]
- Howell, Nancy. 2000. *Demography of the Dobe !Kung*, Second Edition. Aldine de Gruyter: New York [Ch. 12 (Marriage and remarriage among the !Kung)]

- Blurton Jones, N.G., F.W. Marlowe, K. Hawkes, and J.F. O'Connell. 2000. Paternal investment and hunter-gatherer divorce rates. In *Adaptation and Human Behavior: An Anthropological Perspective*, edited by L. Cronk, N. Chagnon and W. Irons, pp. 69-90. Hawthorne, NY: Aldine de Gruyter.
- Josephson, Steven C. 2002. Does polygyny reduce fertility? *American Journal of Human Biology* 14: 222-232.
- Sellen, Daniel W. 1999. Polygyny and child growth in a traditional pastoral society: The case of the Datoga of Tanzania. *Human Nature* 10: 329-371.
- Haddix, Kimber A. 2001. Leaving your wife and your brothers: When polyandrous marriages fall apart. *Evolution and Human Behavior* 22: 47-60.

### **October 23/Week 9: Kinship and demographic outcomes**

#### ❖ *Preliminary draft of paper due*

- Hill, Kim, and A. Magdalena Hurtado. 1996. *Ache Life History: The Ecology and Demography of a Foraging People*. Aldine de Gruyter: New York [Ch. 13 (Kin effects on life history)]
- Hagen, E.H., R.B. Hames, N.M. Craig, M.T. Lauer, and M.E. Price. 2001. Parental investment and child health in a Yanomamö village suffering short-term food stress. *Journal of Biosocial Science* 33: 503-528.
- Sear, Rebecca, Fiona Steele, Ian A. McGregor, and Ruth Mace. 2002. The effects of kin on child mortality in rural Gambia. *Demography* 39 (1): 43-63.
- Sear, Rebecca, Ruth Mace, and Ian A. McGregor. 2003. The effects of kin on female fertility in rural Gambia. *Evolution and Human Behavior* 24 (1): 25-42.

### **October 30/Week 10: Longevity and reproductive senescence**

- Oeppen, Jim, and James W. Vaupel. 2002. Broken limits to life expectancy. *Science* 296 (5570): 1029-1031.
- Kaplan, Hillard, Jane Lancaster, and Arthur Robson. 2003. Embodied capital and the evolutionary economics of the human life span. In *Life Span: Evolutionary, Ecological, and Demographic Perspectives*, James R. Carey and Shripad Tuljapurkar (eds.), pp. 152-182. New York: Population and Development Review Supplement Series.
- Hawkes, Kristen. 2003. Grandmothers and the evolution of human longevity. *American Journal of Human Biology* 15: 380-400.
- Alvarez, Helen Perich. 2000. Grandmother hypotheses and primate life histories. *American Journal of Physical Anthropology* 113: 435-450.
- Peccei, Jocelyn Scott. 2001. A critique of the grandmother hypotheses: Old and new. *American Journal of Human Biology* 13: 434-452.
- Marlowe, F. 2000. The patriarch hypothesis: An alternative explanation of menopause. *Human Nature* 11 (1): 27-42.

### **November 6/Week 11: The demographic transition**

- Bongaarts, John. 1998. Demographic consequences of declining fertility. *Science* 282: 419-420.
- Borgerhoff Mulder, Monique. 1998. Demographic transition: Are we any closer to an evolutionary explanation? *Trends in Ecology and Evolution* 13 (7): 266-270.
- Turke, Paul. 1989. Evolution and the demand for children. *Population and Development Review* 15: 61-90.
- Mace, Ruth. 2000. An adaptive model of human reproductive rate where wealth is inherited: Why people have small families. In *Adaptation and Human Behavior: An Anthropological Perspective*, edited by L. Cronk, N. Chagnon, and W. Irons, pp. 261-282. Hawthorne, NY: Aldine de Gruyter.
- Low, Bobbi S. 1994. Men in the demographic transition. *Human Nature* 5: 223-253.

**November 13/Week 12: Historical demography/migration**

- Haupt, Arthur, and Thomas T. Kane. 1998. *Population Handbook*, Fourth Edition. Population Reference Bureau: New York [Ch. 8 (Migration)]
- Swedlund, Alan C. 1978. Historical demography as population ecology. *Annual Review of Anthropology* 7: 137-173.
- Clarke, Alice L., and Bobbi S. Low. 1992. Ecological correlates of human dispersal in 19<sup>th</sup> century Sweden. *Animal Behavior* 44: 677-693.
- Strassmann, Beverly I., and Alice L. Clarke. 1998. Ecological constraints on marriage in rural Ireland. *Evolution and Human Behavior* 19 (1): 33-55.
- Towner, Mary C. 2002. Linking dispersal and marriage in humans: Life history data from Oakham, Massachusetts, USA (1750-1850). *Evolution and Human Behavior* 23 (5): 337-357.

**November 20/Week 13: The role of culture in demographic explanation**

- Durham, William H. 1991. *Coevolution: Genes, Culture, and Human Diversity*. Stanford University Press: Stanford. (Ch. 2: Culture and human diversity: A case study of marriage in Tibet.)
- Hammel, Eugene A., and Diana S. Friou. 1997. Anthropology and demography: Marriage, liaison, or encounter? In *Anthropological Demography: Toward a New Synthesis*, David I. Kertzer and Tom Fricke (eds.), pp. 175-200. University of Chicago Press: Chicago.
- Scheper-Hughes, Nancy. 1997. Demography without numbers. In *Anthropological Demography: Toward a New Synthesis*, David I. Kertzer and Tom Fricke (eds.), pp. 201-222. University of Chicago Press: Chicago.
- Roth, Eric Abella. 1999. Proximate and distal variables in the demography of Rendille pastoralists. *Human Ecology* 27: 517-536.

**November 27/Week 14: Thanksgiving (no class)****December 4/Week 15: Paleodemography**

- Meindl, Richard S., and Katherine F. Russell. 1998. Recent advances in method and theory in paleodemography. *Annual Review of Anthropology* 27: 375-399.
- Milner, George R., James W. Wood, and Jesper L. Boldsen. 2000. Paleodemography. In *Biological Anthropology of the Human Skeleton*, M. Anne Katzenberg and Shelley R. Saunders (eds.), pp. 467-497. Wiley-Liss: New York.
- Rankin-Hill, Lesley M. 1997. *A Biohistory of 19<sup>th</sup>-Century Afro-Americans: The Burial Remains of a Philadelphia Cemetery*. Bergin and Garvey: Westport, CT. (Ch. 4: Mortality and health in early nineteenth-century Philadelphia.)
- Storey, Rebecca. 1985. An estimate of mortality in a pre-Columbian urban population. *American Anthropologist* 87: 519-535.

**December 11/Week 16: Presentation of class papers****Wednesday, December 17: Final paper due to me by noon**