ANTHROPOLOGY (ANTH)

ANTH 508: Visualizing Anthropological Data

3 Credits

Recommended Preparations: STAT 500; STAT 511; Or a standard introductory statistics course or an equivalent course at the student's previous institution. Anthropology is a four-field discipline comprising dozens of sub-disciplines, each one characterized by particular theoretical and methodological approaches. As a consequence, the data that anthropologists regularly collect, analyze, and display are diverse in nature, scale and complexity. The purpose of this course is to expose anthropology graduate students to the field's wide range of approaches for managing and visualizing anthropological data. Course content will focus on ways of organizing, analyzing, and representing anthropological datasets. Lectures, practicums, and discussion will center on the criteria and rationale behind visual representations and how these are related to research questions, hypotheses, models, and goals.

ANTH 509: Proposal Writing

3 Credits

This course provides practical training and experience in proposal writing and revisions for graduate students in anthropology and related disciplines.

Prerequisite: STAT 451

ANTH 521: Current Literature in Archaeology

1 Credits/Maximum of 1

Seminar designed to expand general knowledge of archaeology through exposure to current research and related issues in contemporary archaeology. ANTH 521ANTH 521 Current Literature in Archaeology (1)This seminar is designed to expand general knowledge of archaeology through exposure to current research and related issues in contemporary archaeology. We accomplish this by examining the best of recent journal literature. We may also occasionally read a chapter from an edited book. We will normally read and discuss one article per week, although we might increase that number in cases where articles have been followed by published debates. Articles should be selected from a list of approved journals that will be supplied in class. Each article must be approved in advance by the course professor. The presenter should follow the standard outline for article discussion that will also be supplied in class.Faculty: Frances Hayashida, Kenneth Hirth, George Milner, Dean Snow, and David Webster

ANTH 541: Current Literature in Integrative Anthropology

1 Credits/Maximum of 6

This course (Journal Club) is a survey and discussion of recent, cutting-edge research papers across anthropology, including human ecology, archaeology, biological anthropology, and especially on work that is integrative among these areas of research and/or connects to other disciplines. This course will provide students with experience in making critical evaluations of the use of theory, method, and analysis in the field of anthropology.

ANTH 545: Seminar in Anthropology

1-9 Credits/Maximum of 9

Critical analysis of research in selected areas of anthropology.

ANTH 556: Social Organization of Traditional Societies

3 Credits

Cultural bases of social organization of traditional societies.

ANTH 559: Human Ecology

3 Credits

Within the anthropological and environmental sciences, human ecology (incorporating environmental anthropology, ecological anthropology, cultural ecology, behavioral ecology and evolutionary ecology) is the study of dynamic interactions between people and the environment, past and present. The readings are designed to give students an overview of the fundamental ecological processes that pattern human behavioral responses to environmental variability and how and why human behavior recursively shapes environmental variability. These incorporate a wide range of topics with an emphasis on how human social behavior and resource use are integrated into ecological processes and their services at multiple scales. In so doing, the course takes a holistic perspective of the human experience; one that views cultural, biological, environmental, demographic, and technological processes as interconnected phenomena, and human behavior and practices as components of complex adaptive systems. The topics covered are especially timely in our contemporary political and environmental context, and will explore the relevance of human ecology for these on-going debates.

ANTH 560: Ecology, Evolution, and Human Behavior

3 Credits

This course provides fundamental theory to understand the nature of the dynamic relationship between human decision-making and the natural and social environment. We focus on ecological anthropological theory operating at multiple scales, from the individual to the population, to the community. We will learn how such theory has been applied in the development of a wide range of questions in ecological anthropology, with a focus on key empirical studies of resource use and reproduction, population growth, subsistence and social intensification, disturbance dynamics, niche construction, and cooperation.

ANTH 562: Laboratory Methods in Anthropology

3-9 Credits/Maximum of 9

Supervised laboratory research, utilizing materials from physical anthropology or archaeology or cultural anthropology.

ANTH 563: Current Literature in Biological Anthropology

1 Credits/Maximum of 1

Seminar designed to expand general knowledge of Biological Anthropology through exposure to current research and issues in contemporary Biological Anthropology.

ANTH 566: Infectious Diseases in Anthropological Populations

3 Credits

Surveys infectious diseases in history and prehistory; introduces concepts from microbiology, immunology, and epidemiology, applies them to past human populations. ANTH 566 ANTH 566 Infectious Diseases in Anthropological Populations (3) Throughout history, more people have died of infectious diseases than of any other causes. Such diseases are therefore of great importance in human ecology and demography. Yet anthropologists have paid scant attention to the implications of infectious diseases for human populations, especially populations in the past. This course attempts to correct that oversight. The course is designed for graduate students and advanced undergraduates in anthropology and related fields (biology, population studies, health sciences). The primary focus will be the role of infectious diseases in human population ecology, but enough background will be provided on the biology of infectious diseases to make the course as self-contained as possible. Thus, we will review basic information about the biology of pathogen-host interactions, including some elementary microbiology and immunobiology. (Note that the course is not intended to replace introductory-level courses in those fields.)We will also discuss the evolutionary arms race between the human host and its pathogens, especially in the evolution of pathogen virulence.Once this basic background has been provided, the remainder of the course will deal with infectious diseases in past human populations. What was the role of infectious diseases in population regulation? How did human population structure affect infectious disease dynamics? How did infectious diseases contribute to the mortality "crises" that are known to have affected many preindustrial societies?To address these questions, we will review recent insights based on mathematical models of the epidemic process. The focus will not be on the mathematics per se-- indeed, students need not have any special mathematical background. But they will be expected to learn Stella, a computer language for dynamic modeling. (Stella was chosen because it is easy to learn, and yet allows construction of sophisticated models without requiring any attention to the underlying math.) Toward the middle of the semester, students will break into 2-4 groups, each of which will select a particular disease or class of diseases, develop some models of them using Stella, and present the results to the class as a whole. The entire class will then work together to explore and extend the models developed by the separate groups.Grading will be based on the group presentations, in which all students are required to participate. Participation in general classroom discussion will also be taken into account. Since the class will combine formal lectures with a more seminar-like format, active student participation is essential for a good grade. This course will be offered once a year with an enrollment of 15.

ANTH 571: Principles of Human Evolutionary Biology

3 Credits

Mechanisms and quantification of human genetic variation and survey of evolutionary aspects of human ecology, life cycle, and population biology.

ANTH 572: Advances in Anthropological Methods

3 Credits

This lecture-based course will provide exposure to current data collection methods and analyses in integrative anthropology research, and offer specific examples of application. The course will focus especially on the creative application of newly available technologies to help address major outstanding issues in biological anthropology, or on how the combination of traditional approaches and modes of data collection with advances in computational or statistical analysis can advance the field. Research design issues, data limitations and computational analysis requirements, and anticipated future developments will be considered for each method and subject area combination. Students will be exposed to the challenges, limitations, and processes of ultimately successful research studies and programs, to provide a practical awareness and guidance towards the development of their own research projects and careers in anthropology.

ANTH 573: Anthropology Research Practicum

3-12 Credits/Maximum of 12

This course will provide a structured and supervised research experience to first-year students in the anthropology graduate program, providing both 1) hands-on exposure to anthropological laboratory and/or analytical methods, and 2) related professional development preparation to benefit the students' ongoing graduate training and future research careers. Specifically, with the help of anthropology faculty, students will identify a suitable, rotation-type research experience that can be conducted reasonably over the course of the semester. Meanwhile, the classroom experience will involve discussions on the research-related topics most relevant to the students' level of training and development. Likely topics include the development of research questions and study designs, power calculations, tools and strategies for literature survey, research funding options and strategies, data management and archiving, publication formats and journal outlets (including preprint servers), the publication preparation/submission/review process, academic conferences and traditional and non-traditional networking opportunities (including the effective use of social media), effective structures for research presentations in both poster and podium formats, and scientific outreach opportunities. Students will also read papers relevant to their research interests, and update the class regularly on the progress, challenges, and learnings from their ongoing research experiences/projects.

ANTH 575: Population, Food, and Traditional Farming

3 Credits

This course explores the relationship between demographic processes (fertility, mortality, migration) and traditional farming, especially farming near the subsistence level. ANTH 575 Population, Food, and Traditional Farming (3) This course explores the complex relationship between demographic processes and traditional agriculture. It starts with the premise that traditional agriculture, at least agriculture near the subsistence level, is primarily demographic in its motivation: the main purpose of a small-scale, preindustrial family farm is to create and support a family, i.e. produce children (fertility) and keep them alive (survival). This idea will be the starting point for re-examining existing theories about population and agriculture, and for formulating new models of the traditional farming household as a demographic enterprise. Some of the topics to be addressed include: (1) the slippery concepts of 'population pressure', 'over-population', 'population regulation', 'carrying capacity', and 'sustainability'; (2) some basic ecology and economics of subsistence production and consumption; (3) the debate over agricultural intensification; (4) the effects of under-nutrition on fertility and mortality; (5) the nature of the household labor force; (6) the household demographic life cycle and its economic implications; (7) seasonality and the allocation of household labor; (8) the demography of the 'hungry season' (9) risk management and food shortages; and (10) household wealth differentials and their demographic implications.

The first half of the course will be in lecture format, the second will be more like a seminar. At about the mid-point of the semester, students will split into groups of 2-4 (depending on class size). Each group will select an ethnographic/demographic/economic monograph on traditional agriculture from a list provided by the instructor, prepare and present a PowerPoint presentation on it, and lead an extended classroom discussion of it. Each presentation ought to take up at least two or three class periods. The course grade will be based on the presentation and on general seminar participation (approximately 80 percent presentation and 20 percent participation, including doing the required readings). This course should appeal to graduate students and advanced undergraduates in anthropology, geography, crop and soil science, demography, rural sociology, agricultural economics, and behavioral ecology.

Prerequisite: ANTH 408

ANTH 579: Spatial Demography

3 Credits

This graduate course will expose students to spatial analysis tools and analytical methods applied to demographic research. ANTH (SOC) 579 Spatial Demography (3)The improved application of spatial data and methods to demographic research is a critical methodological challenge facing demographers today. This graduate seminar is designed to focus on substantive demographic research topics while exposing sociologists and demographers to challenges in, and opportunities for, using geographic information systems (GIS), spatial analysis, and spatial statistics in their own research. Substantive foci will include readings and discussions of spatial perspectives on topics such as racial/ethnic segregation, spatial mismatch/entrapment, poverty, crime/delinquency, migration, health inequalities, wellbeing, maternal and child health, environmental justice, and population and environment relations. Similarly, the seminar will highlight connections between spatial concepts and data availability (e.g., Modifiable Areal Unit Problem - MAUP; data privacy), other emerging methodological approaches to studying society (e.g., contextual modeling, multi-level modeling and the area of neighborhood effects) as well as the integration of different types of data (e.g. qualitative data and quantitative data). Throughout the course lectures and discussions will be complemented with lab sessions introducing spatial analysis methods and GIS and spatial analysis software. The lab sessions will include the use of among other software GeoDa, CrimeStat, R, and ArcGIS (including Geostatistical Analyst and Spatial Analyst extensions). These lab sessions will introduce many methodological and technical issues relevant to spatial analysis (e.g., error, data validation, data integration, cartography, exploratory spatial data analysis, spatial regression modeling, geographically weighted regression, point pattern analysis and geostatistics). Assignments for the courses include up to two writing assignments, up to four lab assignments, and a final project which will be presented as a short 15-minute presentation as well as submitted as a term paper. The writing assignments will include an annotated bibliography/brief literature review within a selected demographic theme area and a profile of a well-known demographer and their adoption of spatial thinking/perspectives/methods. The lab assignments will focus on building geospatial databases, basic spatial analysis, exploratory spatial data analysis, and spatial regression modeling. The courses will include other labs and assignements that will be completed for no grade; these are inteded as mechanisms/opportunities for developing and enhancing familiarity with selected software, data resources, and analytic methods.

Prerequisite: Graduate course in statistics, i.e., SOC 574 or ANTH 509

Cross-listed with: SOC 579

ANTH 588: Method and Theory in Archaeology

3 Credits

Methodological strategies and tactics in archaeological research; major theories in cultural anthropology as applied to archaeological data.

ANTH 590: Colloquium

1-3 Credits/Maximum of 3

Continuing seminars which consist of a series of individual lectures by faculty, students, or outside speakers.

ANTH 596: Individual Studies

1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, which are supervised on an individual basis and which fall outside the scope of formal courses.

Prerequisite: prior approval of proposed assignment by instructor

ANTH 597: Special Topics

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or term.

ANTH 600: Thesis Research

1-15 Credits/Maximum of 999

No description.

ANTH 601: Ph.D. Dissertation Full-Time

0 Credits/Maximum of 999

No description.

ANTH 602: Supervised Experience in College Teaching

1-3 Credits/Maximum of 6

Supervised experience in teaching and orientation to other selected aspects of the profession at the Pennsylvania State University.

ANTH 603: Foreign Academic Experience

1-12 Credits/Maximum of 12

Foreign study and/or research constituting progress toward the degree at a foreign university.