

ARCHAEOLOGICAL STUDIES

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This interdisciplinary major is supervised by the University's Council on Archaeological Studies. Inquiries about the major may be addressed to the chair of the council, Richard Burger, Department of Anthropology, 10 Sachem Street, or to the DUS.

The major in Archaeological Studies provides a program of interdepartmental offerings covering prehistoric, early historic, medieval, and other cultures and cultural developments in the Old and New Worlds, and introduces students to the analytic tools that facilitate archaeological studies. The major is designed to expose students to a variety of archaeological research perspectives: anthropological, historical, art historical, and scientific. Also emphasized are substantive studies including (1) study of such prehistoric-early historic transformations as the origins of agriculture, cities and states, and early empires, and (2) study of the material culture, art, and architecture of prehistoric, early historic, and medieval cultures, including the iconography of ancient cultures, the relationship between art and society, ancient writing systems, and American historical archaeology.

REQUIREMENTS OF THE MAJOR

The major consists of twelve courses, including the senior project. In addition, students must participate in a Yale-affiliated summer research project, or another archaeological field school approved in advance by the DUS. The following five courses are required: an introductory survey; the introductory laboratory course ARCG 316L; an advanced laboratory course; a theory course; and the senior research project ARCG 491. The remaining seven courses required for the major must be distributed among the six subject areas represented by the departments and programs offering courses multiple-titled with Archaeological Studies, with three of those seven courses falling in different departments and programs. The relevant departments and programs are Anthropology, Classics, Environmental Studies, Geology and Geophysics, History, History of Art, and Near Eastern Languages and Civilizations. Some courses may be applied to categories other than the ones in which they are listed in this bulletin upon approval by the DUS. For three of the seven archaeology electives students may, with permission of the DUS, substitute courses from other departments in areas related to their research.

Students majoring in Archaeological Studies are strongly encouraged, but are not required, to devote a second summer to archaeological research, either in the field or in a laboratory. Members of the Council faculty currently direct archaeological field projects in China, Egypt, Guatemala, Peru, Mongolia, Senegal, Syria, and Rome. Qualified majors are encouraged to apply for research positions with these projects.

Field research In addition to being the base for several faculty field projects around the globe, the Council on Archaeological Studies takes as its principal mission the encouragement of multiple field experiences. Our undergraduate majors are required to participate in at least one intensive summer field school. Approval is required, and costs are often subsidized by the Council. Students are encouraged to participate in each other's field projects, thereby learning about the greatest number of cultures and areas possible, while experiencing a diverse array of field situations.

SENIOR REQUIREMENT

The final requirement for the major is a senior research project (ARCG 491) in some field of archaeology, preferably one involving more than one area or discipline.

ADVISING

Students majoring in Archaeological Studies should consult with the DUS at the beginning of each term.

REQUIREMENTS OF THE MAJOR

Prerequisites None

Number of courses 12 term courses (incl senior project)

Specific course required ARCG 316L

Distribution of courses 1 intro survey; 1 advanced lab; 1 theory course; 7 electives, at least 1 in each of 3 areas, as specified

Field requirement 1 summer field techniques course or research project, as specified

Substitution permitted For 3 electives, 3 courses related to research, with DUS permission

Senior requirement Research project (ARCG 491)

COUNCIL ON ARCHAEOLOGICAL STUDIES

Anthropology Richard Burger (*Chair*), Oswaldo Chinchilla, Ellery Frahm, William Honeychurch, Roderick McIntosh, Eric Sargis, Anne Underhill, David Watts

Classics Andrew Johnston, Diana Kleiner

Geology & Geophysics Ronald Smith

History Joseph Manning

History of Art Edward Cooke, Jr., Milette Gaifman, Mary Miller

Near Eastern Languages & Civilizations John Darnell, Karen Foster, Eckart Frahm, Harvey Weiss

Religious Studies Stephen Davis

Courses

Anthropology

ARCG 171a / ANTH 171a, Great Civilizations of the Ancient World Jargalan Burentogtokh

A survey of selected prehistoric and historical cultures through examination of archaeological sites and materials. Emphasis on the methodological and theoretical approaches by which archaeologists recover, analyze, and interpret the material remains of the past. SO

* **ARCG 207a / ANTH 207a, The Sustainable Preservation of Cultural Heritage** Stefan Simon

Understanding the complex factors that challenge the preservation of cultural heritage through introduction to scientific techniques for condition assessment and preservation, including materials analysis and digitization tools in the lab and in the field. Students learn about collection care and the science used to detect forgeries and fakes; international legal and professional frameworks that enable cross-cultural efforts to combat trafficking in antiquities; and how to facilitate preservation. SO RP

ARCG 232a / ANTH 232a / LAST 232a, Ancient Civilizations of the Andes Richard Burger

Survey of the archaeological cultures of Peru and Bolivia from the earliest settlement through the late Inca state. SO

* **ARCG 255b / ANTH 255b / LAST 255b, Inca Culture and Society** Richard Burger

The history and organization of the Inca empire and its impact on the nations and cultures it conquered. The role of archaeology in understanding the transformation of Andean lifeways; the interplay between ethnohistoric and archaeological approaches to the subject. SO

ARCG 267b / ANTH 267b, Human Evolution Jessica Thompson

Examination of the fossil record of human evolution, including both paleontological and archaeological evidence for changes in hominid behavior during the Pleistocene. Prerequisite: Introductory course in biological anthropology or biology. SO

ARCG 316La / ANTH 316La, Introduction to Archaeological Laboratory Sciences Ellery Frahm

Introduction to techniques of archaeological laboratory analysis, with quantitative data styles and statistics appropriate to each. Topics include dating of artifacts, sourcing of ancient materials, remote sensing, and microscopic and biochemical analysis. Specific techniques covered vary from year to year.

* **ARCG 353a / ANTH 353a, The Archaeology of Trade and Exchange** Richard Burger

This seminar will focus on archaeological approaches to exchange and trade. As background, we will review some of the principal theories of exchange from anthropology and sociology, such as those of Mauss, Malinowski and Polanyi. The role of trade and exchange in different kinds of societies will be examined by contextualizing these transactions within specific cultural configurations and considering the nature of production and consumption as they relate to movement of these goods. We will consider methods and models that have been used to analyze regions of interaction at different spatial scales and the theoretical arguments about the social impact of inter-regional and intra-regional interactions involving the transfer of goods, including approaches such as world systems, unequal development and globalization. In addition, we will examine the ways that have been utilized in archaeology to identify different kinds of exchange systems, often through analogies to well documented ethnographic and historic cases. Finally, we will consider the range of techniques that have been employed in order to track the movement of goods across space. These sourcing techniques will be evaluated in terms of their advantages and disadvantages from an archaeological perspective, and how the best technical analyses may vary according to the nature of natural or cultural materials under consideration (ceramics, volcanic stone, metals, etc.). The theme for this year's seminar is obsidian so students should select some aspect of obsidian research for their final paper and presentation.

* **ARCG 385a / ANTH 385a, Archaeological Ceramics** Anne Underhill

Archaeological methods for analyzing and interpreting ceramics, arguably the most common type of object found in ancient sites. Focus on what different aspects of ceramic vessels reveal about the people who made them and used them. SO

* **ARCG 397b / ANTH 397b, Archaeology of East Asia** Anne Underhill

Introduction to the findings and practice of archaeology in China, Japan, Korea, and southeast Asia. Methods used by archaeologists to interpret social organization, economic organization, and ritual life. Attention to major transformations such as the initial peopling of an area, establishment of farming villages, the development of cities, interregional interactions, and the nature of political authority. SO

* **ARCG 399a / ANTH 478a / EVST 399a / NELC 399a, Agriculture: Origins, Evolution, Crises** Harvey Weiss

Analysis of the societal and environmental drivers and effects of plant and animal domestication, the intensification of agroproduction, and the crises of agroproduction: land degradation, societal collapses, sociopolitical transformation, sustainability, and biodiversity. SO

* **ARCG 454a / ANTH 454a, Statistics for Archaeological Analysis** William Honeychurch

An introduction to quantitative data collection, analysis, and argumentation for archaeologists. Emphasis on the exploration, visualization, and analysis of specifically archaeological data using simple statistical approaches. No prior knowledge of statistics required.

QR

ARCG 464b / ANTH 464b / E&EB 464b, Human Osteology Eric Sargis

A lecture and laboratory course focusing on the characteristics of the human skeleton and its use in studies of functional morphology, paleodemography, and paleopathology. Laboratories familiarize students with skeletal parts; lectures focus on the nature of bone tissue, its biomechanical modification, sexing, aging, and interpretation of lesions. SC, SO

*** ARCG 476b / ANTH 476b, GIS and Spatial Analysis for Archaeology** William Honeychurch

Introduction to the use of geographical information systems (GIS) in anthropology, with attention to archaeological applications. Examples from theoretical, analytical, and geographical contexts; introduction to current software. SO

Classics

ARCG 161a / CLCV 161a / HSAR 247a, Art and Myth in Greek Antiquity Milette Gaifman

Visual exploration of Greek mythology through the study of ancient Greek art and architecture. Greek gods, heroes, and mythological scenes foundational to Western culture; the complex nature of Greek mythology; how art and architecture rendered myths ever present in ancient Greek daily experience; ways in which visual representations can articulate stories. Use of collections in the Yale University Art Gallery. HU

ARCG 252a / CLCV 175a / HSAR 252a, Roman Architecture Diana Kleiner

The great buildings and engineering marvels of Rome and its empire. Study of city planning and individual monuments and their decoration, including mural painting. Emphasis on developments in Rome, Pompeii, and central Italy; survey of architecture in the provinces. HU

Environmental Studies

ARCG 226a / EVST 226a / NELC 268a, Global Environmental History Harvey Weiss

The dynamic relationship between environmental and social forces from the Pleistocene glaciations to the Anthropocene present. Pleistocene extinctions; transition from hunting and gathering to agriculture; origins of cities, states, and civilization; adaptations and collapses of Old and New World civilizations in the face of climate disasters; the destruction and reconstruction of the New World by the Old. Focus on issues of adaptation, resilience, and sustainability, including forces that caused long-term societal change. SO

*** ARCG 473b / ANTH 473b / EVST 473b / NELC 473b, Climate Change, Societal Collapse, and Resilience** Harvey Weiss

The coincidence of societal collapses throughout history with decadal and century-scale abrupt climate change events. Challenges to anthropological and historical paradigms of cultural adaptation and resilience. Examination of archaeological and historical records and high-resolution sets of paleoclimate proxies. HU, SO

Geology and Geophysics

*** ARCG 362b / EVST 362b / G&G 362b, Observing Earth from Space** Xuhui Lee and Ronald Smith

A practical introduction to satellite image analysis of Earth's surface. Topics include the spectrum of electromagnetic radiation, satellite-borne radiometers, data transmission and storage, computer image analysis, the merging of satellite imagery with GIS and applications to weather and climate, oceanography, surficial geology, ecology and epidemiology, forestry, agriculture, archaeology, and watershed management. Prerequisites: college-level physics or chemistry, two courses in geology and natural science of the environment or equivalents, and computer literacy. QR, SC

History of Art

ARCG 161a / CLCV 161a / HSAR 247a, Art and Myth in Greek Antiquity Milette Gaifman

Visual exploration of Greek mythology through the study of ancient Greek art and architecture. Greek gods, heroes, and mythological scenes foundational to Western culture; the complex nature of Greek mythology; how art and architecture rendered myths ever present in ancient Greek daily experience; ways in which visual representations can articulate stories. Use of collections in the Yale University Art Gallery. HU

Near Eastern Languages and Civilizations

*** NELC 001b / AFST 001b / ARCG 001b, Egypt and Northeast Africa: A Multidisciplinary Approach** John Darnell

Examination of approximately 10,000 years of Nile Valley cultural history, with an introduction to the historical and archaeological study of Egypt and Nubia. Consideration of the Nile Valley as the meeting place of the cultures and societies of northeast Africa. Various written and visual sources are used, including the collections of the Peabody Museum and the Yale Art Gallery. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

ARCG 244a / NELC 109a / RLST 245a, The Age of Akhenaton John Darnell

Study of the period of the Egyptian pharaoh Akhenaton (reigned 1353–1336 B.C.E.), often termed the Amarna Revolution, from historical, literary, religious, artistic, and archaeological perspectives. Consideration of the wider Egyptian, ancient Near Eastern, African, and Mediterranean contexts. Examination of the international diplomacy, solar theology, and artistic developments of the period. Reading of primary source material in translation. HU

* **ARCG 311a / ARCG 611a / CLCV 389a / CLSS 811a / NELC 389a / NELC 611a / RLST 355a / RLST 833a, The Ancient Egyptian Temple as Cosmos: Correlation of Architecture and Decoration Program** Christina Geisen

The course focuses on the correlation of archaeology, iconography, and philology by analyzing ancient Egyptian temples under the specific consideration of the interplay of architecture and decoration program. The different types of temples and their developments over time are discussed. The main focus is the function of each temple type, which can only be understood by analyzing the architecture of the monument, its decoration program, related texts (such as rituals, myths, and festival description, but also historical texts), and its place in the cultic landscape of the specific location. The class also provides an overview of rituals performed and festivals celebrated in the temples, as well as of the administrative sphere of the temple. Optional field trip to the Metropolitan Museum of Art in New York to see the Temple of Dendur. No previous knowledge of ancient Egyptian culture or languages is necessary; all texts are read in translation. HU

Advanced Research

* **ARCG 471a or b and ARCG 472a or b, Directed Reading and Research in Archaeology** William Honeychurch

Qualified students may pursue special reading or research under the guidance of an instructor. A written statement of the proposed research must be submitted to the director of undergraduate studies for approval.

* **ARCG 491a or b, Senior Research Project in Archaeology** William Honeychurch

Required of all students majoring in Archaeological Studies. Supervised investigation of some archaeological topic in depth. The course requirement is a long essay to be submitted as the student's senior essay. The student should present a prospectus and bibliography to the director of undergraduate studies no later than the third week of the term. Written approval from the faculty member who will direct the reading and writing for the course must accompany the prospectus.

* **ARCG 492b / ANTH 492b / NELC 321b, Imaging Ancient Worlds** John Darnell, Roderick McIntosh, and Agnete Lassen

The interpretation of epigraphic and archaeological material within the broader context of landscape, by means of creating a virtual model to reconstruct the sensory experiences of the ancient peoples who created those sites. Use of new technologies in computer graphics, including 3D imaging, to support current research in archaeology and anthropology.