Prerequisites:
the "Age of Sail"; emphasis on two aspects that are of particular interest
of wooden ships between 1400 and 1900, a period popularly known as
Archaeological and historical sources to exam the outfitting and sailing
Credits 3. 3 Lecture Hours.

Prerequisite: Approval of instructor.

ANTH - ANTHROPOLOGY

ANTH 601 Biological Anthropology
Credits 3. 3 Lecture Hours.
Survey of the field of biological anthropology covering the principles of
evolution, human evolution, human adaptation, human variation, primate
diversity and evolution, osteology and bioarchaeology.

ANTH 602 Archaeological Methods and Theory
Credits 3. 3 Lecture Hours.
Development of archaeology as a discipline; methods and theories used
in archaeology for reconstructing cultural history and cultural process.

ANTH 603 Seafaring Life and Maritime Communities
Credits 3. 3 Lecture Hours.
Employs primary and scholarly sources to examine the social
organization, work routines, living conditions, and material culture
of mariners between 1450 and 1950; broader trends in maritime
communities and global seafaring are also investigated.

Prerequisite: Approval of instructor.

ANTH 604 Cultural Method and Theory
Credits 3. 3 Lecture Hours.
Survey of the theoretical concepts used in anthropology and how to
construct models used in cultural and social anthropology.

ANTH 605 Conservation of Archaeological Resources I
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Fundamentals and applications of artifact conservation techniques in
archaeology.

Prerequisite: Knowledge of basic chemistry and physics recommended.

ANTH 606 Conservation of Archaeological Resources II
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Comprehensive study of techniques used in the identification and
conservation of metal and wooden artifacts.

Prerequisite: ANTH 605.

ANTH 607 Historical Archaeology
Credits 3. 3 Lecture Hours.
Past and present theoretical positions and research strategies in
historical archaeology.

Prerequisite: ANTH 313 recommended.

ANTH 608 Skills in Maritime Archaeology
Credits 3. 3 Lecture Hours.
Themes and tools of maritime archaeology; topics include remote
sensing and mapping as well as interpreting, recording and storing data
used in maritime archaeological surveys.

Prerequisites: Graduate classification; approval of instructor.

ANTH 609 Culture and Evolution
Credits 3. 3 Lecture Hours.
This seminar will seek to integrate the study of culture with the natural
sciences. The foundation of the course is the assumption that culture is a
biological adaptation and that we can examine it scientifically.

ANTH 610 Outfitting and Sailing the Wooden Ship 1400-1900
Credits 3. 3 Lecture Hours.
Archaeological and historical sources to exam the outfitting and sailing
of wooden ships between 1400 and 1900, a period popularly known as
the "Age of Sail", emphasis on two aspects that are of particular interest
to the nautical archaeologist.

Prerequisites: Approval of instructor; graduate classification.

ANTH 611 Nautical Archaeology
Credits 3. 3 Lecture Hours.
Introduction to the history and theoretical basis of nautical archeology
as a discipline; fundamental concepts in nautical science relevant to the
history of seafaring; key developments in the history of seafaring.

Prerequisites: Approval of instructor and graduate classification.

ANTH 612 Preclassical Seafaring
Credits 3. 3 Lecture Hours.
Seafarers and watercraft of the ancient Near East and Mediterranean
until ca. 700 B.C. Types of watercraft used, routes, cargoes, voyages of
exploration and economics of maritime trade.

ANTH 613 Classical Seafaring
Credits 3. 3 Lecture Hours.
Culture history of Mediterranean seafarers between ca. 700 B.C. and end
of Byzantine Empire; types of ships and boats, sea law, naval tactics,
harbor-works, routes, cargoes and economics of trade.

ANTH 614 History of Shipbuilding Technology
Credits 3. 3 Lecture Hours.
Design and construction of preserved and excavated sailing ships, the
expertise of their builders and technology involved in ancient and early
shipbuilding.

Prerequisite: Approval of instructor.

ANTH 615 History of Shipbuilding Technology
Credits 3. 3 Lecture Hours.
Techniques of recording and interpreting excavated ships; preservation of
hulls; ship drafting, modeling, lofting, testing and other methods used in
the research and/or reconstruction of ships.

Prerequisite: Approval of instructor.

ANTH 616 Research and Reconstruction of Ships
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Advanced and experimental methods of organic artifact conservation;
emphasis on composite artifacts, gamma radiation polymerization,
scanning electron microscope evaluation of artifacts and preservation of
traditionally difficult to conserve artifacts.

Prerequisite: ANTH 605.

ANTH 617 Conservation III--Preservation of Organic Materials
Credits 3. 3 Lecture Hours.
Survey of the theoretical concepts used in anthropology and how to
construct models used in cultural and social anthropology.

ANTH 618 Medieval Seafaring in the Mediterranean
Credits 3. 3 Lecture Hours.
Survey of the field of biological anthropology covering the principles of
evolution, human evolution, human adaptation, human variation, primate
diversity and evolution, osteology and bioarchaeology.

Prerequisite: Approval of instructor and graduate classification.

ANTH 619 Indians of Texas
Credits 3. 3 Lecture Hours.
Detailed study of diverse native/immigrant Texas Indian lifeways/cultures
from late pre-European to contemporary times; exploration of historical
underpinnings, traditional cultures, especially land-use patterns; detailed
assessment of tribal relationships with colonial powers, U.S., Texas
governments as evidenced in ethnographic, ethnohistoric, historical
materials; application to anthropological, archaeological, and human
ecology research.

Prerequisite(s): Graduate classification, ANTH 602, or ANTH 604, or 620,
or 650.
ANTh 620 Prehistory of Texas
Credits 3. 3 Lecture Hours.
Survey of Texas prehistory from initial migration of human population 11,500 years ago to extermination or removal of Native American cultures by Europeans; processes of cultural adaptation and change to shifting environments and subsistence material correlates of world views and belief systems.

ANTh 622 Folklore Forms and Methods
Credits 3. 3 Lecture Hours.
Introduction to major genres of folklore, various theories and approaches employed by researchers, and specialized resource materials in the humanities and social sciences.
Prerequisites: Graduate classification in liberal arts and approval of instructor.

ANTh 623 Folk Narrative
Credits 3. 3 Lecture Hours.
Theories and techniques used in the study of major folk narrative genres; folktale and legend; brief survey of other narrative forms, including tall tale, epic, myth, joke, personal and family narratives.
Prerequisites: Graduate classification in liberal arts and approval of instructor.

ANTh 624/GEOG 687 Geoarchaeology
Credits 3. 3 Lecture Hours.
Application of geological concepts and methods to archaeological research; history of geoarchaeology; site formation processes; modification of archaeological sites and sediments; landscape reconstruction and change and their effects on human behavior.
Prerequisite: ANTH 602 or equivalent.
Cross Listing: GEOG 687/ANTH 624.

ANTh 625 Zooarchaeology
Credits 4. 3 Lecture Hours. 3 Lab Hours.
Analysis of animal bones from archaeological sites; inference of how prehistoric peoples hunted, domesticated and used animals.
Prerequisite: Basic knowledge of zoology and archaeology.

ANTh 626 Human Paleopathology
Credits 3. 3 Lecture Hours.
Pathological lesions exhibited in prehistoric or early historic human remains; problems in diagnosing lesions in fossil skeletal remains, and evaluating the occurrence of these lesions in past populations.
Prerequisite: ANTH 425.

ANTh 627 Human Paleonutrition
Credits 3. 3 Lecture Hours.
Evaluation of past human diets and subsistence patterns from the perspective of research in archaeology, zooarchaeology, ethnobotany, bioarchaeology and cultural anthropology.
Prerequisite: 6 hours of advanced courses in anthropology or approval of instructor.

ANTh 628 New World Seafaring
Credits 3. 3 Lecture Hours.
Cultural history of seafaring in the Western Hemisphere from the fifteenth century to the present; ship types and their uses; harborworks, commerce, naval warfare, sailing routes, maritime practices.
Prerequisites: ANTH 615 and ANTH 616 or approval of instructor.

ANTh 629 Post-Medieval Seafaring
Credits 3. 3 Lecture Hours.
Cultural history of European seafaring from the fifteenth century to the early twentieth century; ship types and their uses, shipping routes and cargoes, maritime technology and economic institutions, seafaring practices, and naval warfare.
Prerequisites: ANTH 615 and ANTH 616 or approval of instructor.

ANTh 630 Human Evolutionary Ecology
Credits 3. 3 Lecture Hours.
Evolutionary ecology of human behavior and culture, including habitat choice and use of space, time allocation, resource acquisition and allocation, sex and reproduction, altruism and cooperation and the coevolution of genes and culture.
Prerequisite: Graduate classification.

ANTh 631 Primate Behavioral Ecology
Credits 3. 3 Lecture Hours.
Survey the behavioral ecology of the nonhuman primates exploring topics such as their hunting behavior; sexual coercion; language capabilities; culture; tool use; homosexuality; dominance; parental care, ethics of field study and their conservation.
Prerequisite: Graduate classification.

ANTh 632 Deep Submergence Archaeology
Credits 3. 3 Lecture Hours.
Addresses issues in the new field of deep submergence archaeology by examining the discipline's history, technologies, specific case studies of ship wrecks in deep water and related topics. Students will interact with leaders in the field via video conferencing and visiting lecturers.
Prerequisite: Approval of instructor.

ANTh 634 Palynology
Credits 4. 3 Lecture Hours. 3 Lab Hours.
Principles and techniques used in palynology, pollen morphology, ontogeny, biochemistry, dispersion and preservation; role of palynology as a research tool in plant taxonomy agriculture, medicine, paleobotany and anthropology.

ANTh 635 Violence and Warfare
Credits 3. 3 Lecture Hours.
The anthropological study of violence and warfare and the place of these phenomena in cultural evolution, religion, economics, politics and social structure; particular attention paid to the rise of industrialized warfare and its impact on the pre-industrial world.
Prerequisite: Graduate classification.

ANTh 636 Computer Graphics in Archaeology
Credits 3. 3 Lecture Hours.
Focuses on the acquisition, manipulation, and presentation of archaeological data and images; a variety of state-of-the-art technologies will be employed to develop professional desktop publications, slide and digital presentations, electronic publications and images.
Prerequisite: Graduate classification.

ANTh 637 Paleoethnobotany
Credits 4. 3 Lecture Hours. 3 Lab Hours.
Interrelationship between plants and humans from prehistoric times to present, theoretical and methodological use of botany as a research tool for the understanding of cultural systems.
ANTH 638 Proposal Writing in Anthropology
Credits 3. 3 Lecture Hours.
Workshop class designed to assist advanced doctoral students in writing research grant proposals to fund their dissertation projects. Students will craft their own NSF-style Dissertation Improvement proposals, should be prepared to accept constructive criticism of their work, and to offer it on the work of their classmates.
Prerequisites: Graduate classification.

ANTH 640 Anthropological Ethics and Professionalism
Credits 3. 3 Lecture Hours.
Codes of professional ethics applicable to excavation and preservation of archaeological sites; ethnographic fieldwork and professional relationships with colleagues and informants; professional protocols for publication and presentation of research results.
Prerequisites: Graduate classification in anthropology and approval of instructor.

ANTH 641 Applied Anthropology
Credits 3. 3 Lecture Hours.
Theory, ethics and practical applications of anthropological methods and concepts as they relate to planned programs of socio-cultural change.

ANTH 642 Research Design in Anthropology
Credits 3. 3 Lecture Hours.
Research design used by anthropologists to develop sampling strategies, test hypotheses and compile quantitative data.
Prerequisite: ANTH 602.

ANTH 643 Australopithecine Paleoecology
Credits 3. 3 Lecture Hours.
Principles and techniques used in the reconstruction of paleoecology and paleoenvironments associated with the African australopithecines; including taphonomy, faunal evolution, climate forcing analysis, habitat preference and land-use patterns; detailed overview of the australopithecine fossil record from the Miocene to the Pleistocene.
Prerequisite: Graduate classification.

ANTH 644 Classical Archaeology
Credits 3. 3 Lecture Hours.
History of the discipline through the individuals, organizations, excavations, theoretical models and ethical issues that have shaped it.
Prerequisite: Graduate classification.

ANTH 646 Ceramic Artifact Analysis
Credits 3. 2 Lecture Hours. 3 Lab Hours.
The introduction of the basic concepts, methods, and approaches used in the analysis of archaeological pottery with a focus on the techniques and theories used to bridge the gap between the recovery of ceramic artifacts and their interpretation within various anthropological contexts.
Prerequisite: Graduate classification.

ANTH 647 Lithic Artifact Analysis
Credits 3. 2 Lecture Hours. 3 Lab Hours.
Laboratory-based course reviewing methods archaeologists use to analyze stone tools and debitage, including identification of tool-stone sources, reconstruction of technology, explanation of assemblage variability, and microscopic use-wear analysis.
Prerequisite: Graduate classification and approval of instructor.

ANTH 648 Issues in Human Evolutionary Theory
Credits 3. 3 Lecture Hours.
Examination of core concepts and theories in evolutionary biology and paleoanthropology, including human evolution, the species concept, and the role of the human fossil record.
Prerequisite: Graduate classification.

ANTH 649 Origin and Evolution of the Genus Homo
Credits 3. 3 Lecture Hours.
Survey of the human fossil record with a focus on Plio-Pleistocene specimens assigned to our own genus, Homo; provides an overarching picture of the evolutionary history of humans after the Australopithecines and reviews theoretical issues that have influenced our understanding of the evolution of Homo sapiens.
Prerequisite: Graduate classification or approval of instructor.

ANTH 650 Ethnographic Field Methods
Credits 3. 3 Lecture Hours.
Methods common to anthropology for the field collection of data on cultural behavior.
Prerequisites: Graduate classification and approval of instructor.

ANTH 651 Pleistocene Prehistory of Northeast Asia and Alaska
Credits 3. 3 Lecture Hours.
Survey of the Ice-Age paleoenvironments, prehistory and paleoanthropology of Siberia, China, Japan, and Bering Land Bridge area, especially in the context of human colonization of the region and origins of the first Americans.
Prerequisite: Graduate classification.

ANTH 652 First American Archaeology
Credits 3. 3 Lecture Hours.
Survey of past frontiers in First American studies important to the peopling of the Americas: review of the archaeology, geology, and dating of early sites in North, Middle, and South America; human migration hypotheses; biological evidence; and late Quaternary environmental factors.
Prerequisite: Approval of instructor.

ANTH 653 Hunter-Gatherer Archaeology
Credits 3. 3 Lecture Hours.
Overview of development of hunter-gatherer archaeology; current methodological and theoretical issues, especially use of ethnographic and environmental data; ecologically oriented case studies of late Pleistocene and Holocene hunter-gatherers; emphasis on land-use, site-structure, and site formation analyses, especially in North America.
Prerequisites: ANTH 602 or ANTH 604 or approval of instructor.

ANTH 655 Ancient Foodways and Cooking Technology
Credits 3. 3 Lecture Hours.
Study of ancient foodways and cooking technologies, particularly fire-based methods, especially in the context of human evolution, subsistence and settlement behavior, social organization, theoretical underpinnings, and archaeological manifestations thereof, with the focus on ancient hunter-gatherer populations, wild plants, terrestrial animals, and aquatic resources.
Prerequisite: ANTH 602 or ANTH 604 or approval of Instructor.

ANTH 656 Topics in Technological Organization
Credits 3. 3 Lecture Hours.
Review of current problems in the study of artifact assemblages; focus on theory explaining variability in artifact forms and technologies, especially in the contexts of subsistence and settlement behavior as well as exchange and social organization; alternating sections focus on lithic or ceramic technologies. May be taken two times for credit.
Prerequisite: Graduate classification or approval of instructor.
ANTH 658 Quantitative Ethnographic Methods  
**Credits 3. 3 Lecture Hours.**  
Quantitative data collection and analytical methods employed by anthropologists including standardized observation, structured interviews, demography and network analysis; emphasizes hands-on assignments involving data collection among local community.  
**Prerequisite:** Graduate classification.

ANTH 659 The Paleolithic World  
**Credits 3. 3 Lecture Hours.**  
Survey of the Paleolithic archaeological record, beginning with the Oldowan and ending with the Upper Paleolithic and dispersal of modern humans to Australia and the Americas; review of major changes in technology, subsistence and land-use strategies that shaped the Paleolithic World.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 660 Field Archaeology  
**Credits 1 to 12. 1 to 12 Other Hours.**  
Field instruction in the methods of archaeological excavations; recovery and cataloging of cultural, floral and faunal remains; and interpretation of these data. Locations of the field course will vary according to site. Field trips required. May be taken more than once but not to exceed 8 hours of credit toward an MA degree and not to exceed 12 hours of credit toward a PhD degree.  
**Prerequisite:** ANTH 602 or equivalent.

ANTH 661 Environmental Archaeology  
**Credits 3. 2 Lecture Hours. 3 Lab Hours.**  
Examination of the paleoecological context in which past humans interacted with the natural environment; review of advanced principles, method and theory, and practical applications used in paleoenvironmental reconstruction.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 662 Method and Theory in the Peopling of the Americas  
**Credits 3. 3 Lecture Hours.**  
Interdisciplinary review of current evidence from the fields of archaeology, genetics, biological anthropology and paleoecology for the dispersal of modern humans to the New World during the Pleistocene; understanding theory and method used to explain prehistoric human migration and colonization of empty lands.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 663 Analytical Methods in Archaeology and Conservation  
**Credits 3. 3 Lecture Hours.**  
Conventional and advanced techniques used for artifact material analysis and artifact documentation; material analysis is the way that we study artifacts, both in structure and elemental composition; includes photography and artifact sketching, computer modeling, laser digitization, computer image photogrammetry, 3D printing and XRF elemental analysis.  
**Prerequisite:** Graduate classification in anthropology or approval of instructor.

ANTH 664 The Neanderthals  
**Credits 3. 3 Lecture Hours.**  
Origin and evolution of Neanderthals.  
**Prerequisite:** Graduate classification.

ANTH 665 Human Variation  
**Credits 3. 3 Lecture Hours.**  
Biological basis of variation in the physical features of modern humans; details of anatomical and physiological differences of living populations to understand their adaptive and historical significance; history of human variation studies rooted in the historical notion of “race”.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 666 The Viking Age  
**Credits 3. 3 Lecture Hours.**  
Survey of the Scandinavian Viking Age, based on archaeology, literary sources, history of religion and bioarchaeology; discussion of political, economic, religious and other cultural aspects of the period, as well as contemporary conceptions of the Vikings and how those conceptions have been put to use; examination of how archaeological sciences have helped analyze the Vikings themselves as well as the artifacts they left behind.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 668 The Viking Age  
**Credits 3. 3 Lecture Hours.**  
Survey of the Paleolithic archaeological record, beginning with the Oldowan and ending with the Upper Paleolithic and dispersal of modern humans to Australia and the Americas; review of major changes in technology, subsistence and land-use strategies that shaped the Paleolithic World.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 670 Bridging Theme Seminar in Anthropology  
**Credits 3. 3 Lecture Hours.**  
Examination of topics that bridge two or more subfields in anthropology, including studies of diasporas, dispersals and migration; evolution and ecology; material culture and technology; and food, nutrition, and culture. May be taken three times for credit.  
**Prerequisite:** Graduate classification.

ANTH 672 Ancient Genetics  
**Credits 3. 3 Lecture Hours.**  
Ancient DNA and its role in answering anthropological and archaeological questions.  
**Prerequisite:** Graduate classification or approval of instructor.

ANTH 675 Teaching Anthropology  
**Credits 0. 0 Lecture Hours.**  
Introduction to course planning for future instructors of anthropology; includes course design, student motivation and engagement, assessment of design and implementation and technology use in education.  
**Prerequisites:** Graduate classification; admission to graduate program in the Department of Anthropology.

ANTH 681 Seminar  
**Credits 0-1. 0 Lecture Hours. 0-1 Other Hours.**  
Orientation to graduate degree requirements in the Anthropology Department at Texas A&M; systematic introduction to the department’s faculty and bridging themes of their research. Must be taken on a satisfactory/unsatisfactory basis.  
**Prerequisite:** Graduate classification.

ANTH 684 Anthropology Internship  
**Credits 3 to 9. 3 to 9 Other Hours.**  
Opportunity to put anthropology learned in the classroom into practice; may be used to gain practical experience in a variety of settings including: local, state or federal agencies; museums; non-profit organizations; non-governmental organizations; and private firms.  
**Prerequisites:** ANTH 601, ANTH 602, ANTH 604 or ANTH 602, ANTH 615, ANTH 616; approval of committee chair.

ANTH 685 Directed Studies  
**Credits 1 to 12. 1 to 12 Other Hours.**  
Directed individual study of selected problems in anthropology.  
**Prerequisite:** Approval of instructor.
ANTH 689 Special Topics in...
Credits 1 to 12. 1 to 12 Lecture Hours.
Selected topics in an identified area of anthropology. May be repeated for credit.
Prerequisite: Approval of instructor.

ANTH 691 Research
Credits 1 to 23. 1 to 23 Other Hours.
Research for thesis.
Prerequisite: Approval of graduate advisor.