Accounting

College of Business

ACTG 440. Advanced Information Technology for Accountants. 3 credits. Offered spring.
This course is offered only for accounting majors seeking a minor in CIS. Topics include legacy systems, the systems development life cycle, telecommunications, distributed processing, networking and information security, taught from an accounting perspective. Prerequisite: ACTG 313 with a grade of “C-” or better and declared CIS minor.

ACTG 450. Governmental and Nonprofit Accounting and Reporting. 3 credits. Not currently offered.
Focuses on budgeting, accounting and financial reporting principles associated with private and public nonprofit organizations. Includes survey of state, local, municipal and federal government accounting. Prerequisite: ACTG 343 with grade of “C-” or better. Prerequisite or corequisite: ACTG 344.

ACTG 475. Accounting Decision Making and Control. 3 credits. Offered fall and spring.
The study of cost accounting concepts and information used by business organizations to make strategic, organizational and operational decisions. Topics include the role of planning and control in attaining organizational goals and objectives; the relationship among cost structure, cost behavior, and operating income; traditional and activity-based costing approaches to product costing, differential analysis in decision making; and ethical issues for accountants. Prerequisite: ACTG 343 with a grade of “C-” or better. Prerequisite or corequisite: ACTG 304.

ACTG 483. International Accounting and Financial Reporting. 3 credits. Offered fall.
Designed to develop a fundamental knowledge of the assumptions, environmental considerations and techniques underlying the collection and reporting of financial information on an international scale. Prerequisites: COB 300. Open to international business majors only.

ACTG 490. Special Studies in Accounting. 1-6 credits each semester. Offered fall and spring.
Designed to give capable students in accounting an opportunity to do independent study under faculty supervision. Admission only by recommendation of the instructor and permission of the director.

ACTG 499. Honors. 6 credits. Year course. Offered fall and spring. See catalog section “Graduation with Honors.”

Africana Studies

Cross Disciplinary Studies

GAFST 200. Introduction to Africana Studies. 3 credits. Offered fall and spring.
An introductory survey of basic theoretical concepts to analyze the Black experience, with special focus on the general historical process common to Africa and the African Diaspora.

GAFST 400. Selected Topics in Africana Studies. 3 credits. Offered once a year.
Selected topics are studied in depth. Course may be repeated when content changes.

ARTH/AFST 488. African-American Art. 3 credits. Offered every other year.
This course examines visual arts produced by people of African descent in the United States from the colonial period until the present. Course themes include debates about the relationship between racial identity and artistic production; the complex interchange between African-American art and the cultural traditions of Africa and Europe; black artists’ engagement with popular representations of African-Americans; and the intersection of race with class, gender, and sexuality. Prerequisite: GARTH 205; GAFST 200 or permission of the instructor.

GAFST 489. Africana Studies Senior Research Experience. 1 credit. Offered fall and spring.
In this research-oriented experience, students design and complete research projects relevant to their interests in Africana Studies, as well as connect their projects to previous course work and experiences within the Africana Studies minor. Prerequisites: GAFST 200, senior standing and permission of instructor.

AIRS

College of Education

AIRS 100. Leadership Laboratory. 0 credits. Offered fall and spring.
This course is a mandatory laboratory in leadership and followership development for AFROTC cadets. As a complement to the air science classes, this laboratory focuses on applying leadership principles and
understanding leaders’ responsibilities while emphasizing the benefits of practical experience. JMU students will take AFROTC classes at the University of Virginia for JMU credit. Corequisite: Any Air Force ROTC class.

AIRS 110. The Foundations of the United States Air Force. 1 credit.
Offered fall and spring.

This course introduces the United States Air Force and Air Force Reserve Officers Training Corps. Topics include mission and organization of the Air Force, officer leadership and professionalism, military customs and courtesies, Air Force officer opportunities and communication skills. JMU students will take AFROTC classes at the University of Virginia for JMU credit. Students interested in joining Air Force ROTC must also register for AIRS 100, Leadership Laboratory.

AIRS 120. The Foundations of the United States Air Force. 1 credit.
Offered fall and spring.

This course introduces the United States Air Force and Air Force Reserve Officers Training Corps. Topics include mission and organization of the Air Force, officer leadership and professionalism, military customs and courtesies, Air Force officer opportunities and communication skills. JMU students will take AFROTC classes at the University of Virginia for JMU credit. Students interested in joining Air Force ROTC must also register for AIRS 100, Leadership Laboratory.

AIRS 210. The Evolution of Air and Space Power. 1 credit. Offered fall and spring.

This course examines general aspects of air and space power through a historical perspective, from the first balloons and dirigibles to the space age global positioning systems of the Persian Gulf War. Topics include principles of war, tenets of air and space power, historical Air Force leaders, and employment of air and space power. JMU students will take AFROTC classes at the University of Virginia for JMU credit. Students interested in joining Air Force ROTC must also register for AIRS 100, Leadership Laboratory.

AIRS 220. The Evolution of Air and Space Power. 1 credit. Offered fall and spring.

This course examines general aspects of air and space power through a historical perspective, from the first balloons and dirigibles to the space age global positioning systems of the Persian Gulf War. Topics include principles of war, tenets of air and space power, historical Air Force leaders, and employment of air and space power. JMU students will take AFROTC classes at the University of Virginia for JMU credit. Students interested in joining Air Force ROTC must also register for AIRS 100, Leadership Laboratory.

AIRS 310. Concepts of Air Force Leadership and Management. 3 credits. Offered fall and spring.

This course studies leadership, management fundamentals and professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of Air Force junior officers. The class examines Air Force leadership and management situations, using case studies as a means of demonstrating and applying the concepts under consideration. JMU students will take AFROTC classes at the University of Virginia for JMU credit.

AIRS 320. Concepts of Air Force Leadership and Management. 3 credits. Offered fall and spring.

This course studies leadership, management fundamentals and professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of Air Force junior officers. The class examines Air Force leadership and management situations, using case studies as a means of demonstrating and applying the concepts under consideration. JMU students will take AFROTC classes at the University of Virginia for JMU credit.

AIRS 410. National Security Affairs/Preparation for Active Duty. 3 credits. Offered fall and spring.

This course examines the national security process, regional studies, advanced leadership ethics and Air Force doctrine. Topics include the military as a profession, officer leadership, military justice, civilian control of the military, preparation for active duty and current issues affecting the military profession. JMU students will take AFROTC classes at the University of Virginia for JMU credit.

AIRS 420. National Security Affairs/Preparation for Active Duty. 3 credits. Offered fall and spring.

This course examines the national security process, regional studies, advanced leadership ethics and Air Force doctrine. Topics include the military as a profession, officer leadership, military justice, civilian control of the military, preparation for active duty and current issues affecting the military profession. JMU students will take AFROTC classes at the University of Virginia for JMU credit.

American Studies

Cross Disciplinary Studies

GAMST 200. Introduction to American Studies. 3 credits. Offered fall and spring.

This course will highlight the student’s role in investigating the cultural and political function of representations of America in literature, history, philosophy, religion, popular culture, music and art. Students will gain an understanding of why definitions of American identity matter and learn about the contemporary debates that inform the discipline of American Studies today. Questions about the changing role of national studies in the face of globalization are central.

AMST 490. Special Studies in American Studies. 3 credits. Offered fall and spring.

Independent study of a topic appropriate to the interdisciplinary method of American studies.

Anthropology

Department of Sociology and Anthropology

ANTH 195. Cultural Anthropology. 3 credits (C,R). Offered fall and spring.

An introduction to the nature of culture and its relationship to language, economics, politics, kinship and other institutions in diverse cultures. The course also provides an overview of the theories, methods and ethical responsibilities involved in the study of cultural systems and ethnographic writing.

ANTH 196. Biological Anthropology. 3 credits (B,R). Offered fall and spring.

An introduction to the origins, evolution and genetic variability of humans and their relationship to nonhuman primates. Examination of the fossil record, the relationship between biology and culture, and human genetics are included. Theories and methods used in the study of biological anthropology are also introduced.

ANTH 197. Archaeology. 3 credits (A,R). Offered fall and spring.

An introduction to archaeology through a survey of the major developments in human cultural evolution focusing on the transition from foraging to agricultural and state-level systems. An examination of the origins and nature of Old and New World civilizations and an overview of archaeological methods and theories are also included.

ANTH 201. The Discipline of Anthropology. 1 credit (R). Offered fall and spring.

This required course introduces students to the subdisciplines of cultural, biological, linguistic and archaeological anthropology and the logic of their integration within the larger discipline of anthropology. Students will be introduced to current research questions within anthropology and how they are addressed from the perspective of the various subdisciplines. Prerequisites: Major status or permission of instructor. It is recommended that students have had at least one of the introductory-level ANTH courses (GANTH 195, GANTH 196 or ANTH 197).

GANTH 205. Buried Cities, Lost Tribes: The Rise and Fall of Early Human Societies. 3 credits (A). Offered once a year.

This course takes an archaeological and comparative perspective on the origins of human institutions, including art, architecture, religion, centralized political formations and urban life. The development and collapse of early societies in multiple world regions, including Mesopotamia, Egypt, the Indus Valley, Mesoamerica and the Andes will be explored.

ANTH 250. Anthropology of the American Southwest. 3 credits (A,C).

Offered fall.

This course examines the development of Southwestern societies from early hunter-gatherers to the Native American communities of today. Major issues of anthropological interest, such as the adoption of agriculture, the development of village life, migration and abandonment, the spread of religious “cults,” the extent of Mesoamerican influence, and the effects of the Spanish conquest are explored.

ANTH 265. Peoples and Cultures of Latin America and the Caribbean. 3 credits (C).

Offered every three semesters.

Anthropological and historical perspectives on the cultures of Latin America and the Caribbean through such themes as colonialism, nationalism, ethnicity, development, aesthetic traditions, gender, religion and urban and rural resistance movements.
ANTH 280. Peoples and Cultures of Sub-Saharan Africa. 3 credits (C). Offered every two semesters.
This is an introductory course emphasizing cultural diversity of sub-Saharan African societies. Basic anthropological concepts are used in analyzing African economics, political systems, marriage patterns and family organization, religious beliefs and the impacts of colonialism and post-colonial development practices.

ANTH 295. Peoples and Cultures of East Asia. 3 credits (C). Offered every three semesters.
This introductory course examines the peoples and cultures of the core East Asian countries—China, Japan, and Korea. The course is organized around anthropological perspectives on topics such as nationalism, consumption, gender, ethnicity and development but also emphasizes the cultural, social and historical characteristics of various groups in these nations in addition to important cultural flows within region.

ANTH 300. Anthropology of Diet and Nutrition. 3 credits (B,C). Offered every three semesters.
An evolutionary and cross-cultural perspective on diet and nutrition in human populations. Focus on how and why people choose what to eat, the range and significance of cross-cultural variability in diet, how diets have changed in the evolutionary and recent past, and the health and social significance of those changes. Prerequisite: Any lower-level course in anthropology or permission of the instructor.

ANTH/SOC 305. Language and Culture. 3 credits (C). Offered once a year.
An introduction to linguistic anthropology. Explores the complex relationships between language and culture through topics such as language acquisition and socialization, language, thought, and worldview; language and identity; multilingualism; how and why languages change; literacy; and the politics of language use and language ideologies.

ANTH 312. The Native Americans. 3 credits (A,C). Offered every three semesters.
A study of the nature of Indian societies occupying different environmental areas of North America at the time of earliest historic contact. Indian groups such as Shawnee, Mandan, Nuunamiut, Natchez, Creek, Iroquois and Sioux will be considered.

ANTH/SCOM 313. Processes of Social and Cultural Change. 3 credits (A,C). Offered spring.
Investigates the procedures through which a society operates and the manner in which it introduces and incorporates changes. Issues considered include belief, innovation, directed change, coercive change, revitalization and revolution.

ANTH 315. Human Evolution. 3 credits (B). Offered every three semesters.
An overview of the fossil record and other evidence for human evolution. Discusses the emergence of the hominids as a lineage distinct from other apes. Provides evidence for the evolution of bipedalism, tool use, hunting/ gathering, major increases in brain size, language, and material culture and the hypotheses that have been developed to explain the emergence of these characteristics. Prerequisites: GANTH 196, or BIO 114 and BIO 124, or permission of the instructor.

ANTH 316. Human Evolutionary Psychology. 3 credits (B). Offered every year.
An exploration of human behavior from an evolutionary perspective. Emphasis is placed on the critical evaluation of adaptive hypotheses purported to explain fundamental human behaviors such as survival and mating strategies, reproduction and parenting, kinship and cooperation, dominance and aggression, cultural evolution, and religion. Prerequisite: GANTH 196 or permission of the instructor.

ANTH 317. Primate Evolutionary Ecology. 3 credits (B). Offered every three semesters.
This course explores the interface between an organism and its environment, illustrated with examples from the primates. Behaviors related to feeding, moving, grouping, and socializing are considered from an evolutionary perspective. Topics to be discussed include feeding ecology, functional anatomy, the ecology of primate social systems, ranging behaviors, community ecology, and the role humans play in shaping primate communities. Prerequisite: GANTH 196 or permission of the instructor.

ANTH 322. Human Variation and Adaptation. 3 credits (B). Offered once every two years.
This course will assess human biology from an evolutionary and anthropological perspective, emphasizing an integrative, holistic understanding. The origin and current distribution of human biological variation will be explored, including geographic, sex and individual variation. Health and disease, growth and development, aging, nutrition, and mental health will also be addressed. Prerequisite: GANTH 196 or permission of the instructor.

ANTH 323. Visual Anthropology. 3 credits (C). Offered once a year.
This course explores the anthropological use of visual data for the description, analysis, communication and interpretation of human behavior. Topics include biological, cross-cultural and historical understandings of vision, the social life of visual things; visual cultural production and consumption; and visuality after colonialism, globalization, and postmodernity.

ANTH 325. Aztec, Maya and Their Predecessors. 3 credits (A, C). Offered every two semesters.
Survey of the Olmec, Toltec, Teotihuacan, Maya and Aztec civilizations and the factors leading to their development, persistence and decline.

ANTH 327. Ancient North American Civilizations. 3 credits (A). Offered every three semesters.
Studies the emergence of Native American societies prior to historic contact. Emphasizes prehistoric developments in the eastern United States.

ANTH/HIST 331. Historical Archaeology. 3 credits (A). Offered spring.
The course introduces students to the purposes, subject matter, methodology and historical background of the discipline of historical archaeology. Building on research issues and methodologies of anthropological archaeology and history, the multidisciplinary aspects of this field are introduced through field trips, projects, guest lectures, readings and classroom presentations. Prerequisite: ANTH 197 or HIST equivalent.

ANTH 333. Celts, Vikings and Tribal Europe: Art and Culture from 500 to 1100 AD. 3 credits (A). Offered every three semesters.
Building on a heritage of indigenous art, art, history, material culture, mythology and literature, the course introduces students to the cultures and traditions of the Celtic, Viking (Norwegian, Danish and Swedish), and Germanic tribal and theocratic cultures that shaped the early civilizations of northern Europe, Britain and Ireland from ca. 500 AD to 1100 A.D.

ANTH 340. The Invention of Race. 3 credits (C). Offered every three semesters.
Examines the historical and cultural construction of race in Western thought. Themes include the origins of racial thinking, the slave trade, race and religion, race and science, the ways race is implicated in colonialism and nationalism, and the relation between race and other social qualities, including gender, class, sexuality and ethnicity.

ANTH 350. Magic, Witchcraft and Religion. 3 credits (C). Offered fall.
Anthropological study of religion in society. The influence of religion on the development of social, legal, governmental and economic aspects of culture is emphasized.

ANTH/SOCI 352. Birth, Death, Sex: Exploring Demography. 3 Credits (B,C).
Fertility (birth) and mortality (death) and their biological and social determinants in cross cultural and evolutionary/historical frameworks. Exploration of the dynamic between the material constraints on and symbolic significance of, reproduction, sexuality and death within a cultural context. Critical examination of population growth as a global “problem.” Basic demographic methods. Prerequisite: Any lower-level course in anthropology or sociology or permission of the instructor.

ANTH 360. Medical Anthropology. 3 credits (B,C). Offered every three semesters.
The evolutionary, ecological and sociocultural context of health and disease. A multi-level, cross-cultural exploration of disease including genetic and macro-level social inputs. Topics include Darwinian medicine, cultural ecology of infectious disease, including emergent diseases, the biology of poverty, maternal-child health and the history of global health problems. Prerequisite: GANTH 195, GANTH 196 or permission of the instructor.

ANTH 364. U.S./Latin American Borders. 3 credits (C). Offered every three semesters.
This course examines the experiences of Latin American migrants to the United States. Stresses the cultural expression of those experiences, globalization and its effects on local communities in Latin America, the U.S. responses to migration and migrants. Prerequisite: One course on Latin America.

ANTH 366. Anthropology of War. 3 credits (A,C). Offered every three semesters.
This course examines the causes, conduct and consequences of warfare in non-state societies using both ethnographic and archaeological data. Case studies drawn from throughout the world are used to examine topics such as the co-evolution of war and society, the impact of colonialism on native warfare, the process of making peace, and claims about the biological “inevitability” of war.

ANTH/SOCI 388. Contemporary American Culture. 3 credits (C). Offered occasionally.
This course analyzes contemporary American society in relation to popular culture and mass media. Cultural expressions found in music, literature, theatre, film, television, cyberspace and sports will be examined with respect to values, sentiments, identity constructions and lived experiences of differentially situated social actors.

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ANTH 370. Topics in the Anthropology of Gender. 3 credits (C). Offered occasionally.
This course examines the many ways in which gender is constructed and negotiated in different historical and social contexts. Topics will vary with the instructor to include both cultural and bicultural perspectives.

ANTH 373. Anthropological Perspectives on Environment and Development. 3 credits (C). Offered spring.
This seminar provides a history of key ideas and figures in environmental anthropology, as well as examines why this field is, by necessity, interdisciplinary. Within this context, we will use specific case studies to examine ways in which the concepts and theories of “development” and “environment” have been produced, perpetuated, manipulated and challenged in different geographic and politico-economic circumstances. Prerequisite: GANTH 195 or permission of the instructor.

ANTH 375. History of Theory in Sociocultural Anthropology. 3 credits (C,R,W). Offered fall and spring.
An examination of the major theoretical traditions in social and cultural anthropology. Important theoreticians and the historical contexts in which their work emerged are discussed. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisites: GANTH 195 and junior standing.

ANTH/SOCI 390. Topics in Cultural Studies. 3 credits (C).
This course explores contemporary culture through a “cultural studies” lens, an interdisciplinary perspective interested in using empirical knowledge to encourage more just human relations. Specific topics of investigation will vary by semester, but each course will cover cultural studies’ intellectual history and its application to cultural expressions found in everyday life, film, music and text.

ANTH 391. Study Abroad. 1-6 credit hours (A,B,C,F). Offered summer.
Designed to encourage students to enhance their academic programs through studying abroad. Arrangements must be made with a faculty member who will direct the study with preparatory instructions and final requirements. Prerequisite: Permission of department head.

ANTH 395. Special Topics in Anthropology. 3 credits (May be A,B or C). Offered occasionally.
Examination of selected topics which are of current importance to anthropology. May be taken for a maximum of six hours credit toward the major.

ANTH 405. Topics in Linguistic Anthropology. 3 credits (C). Offered occasionally.
Examines current issues in the anthropology of language. Topics vary by semester, but each course will include hands-on analysis of social interaction and/or investigation of contemporary case studies of language policy, ideologies, and use.

ANTH 410. Spatial Analysis for Anthropologists. 4 credits (A,B and C). Offered every three semesters.
The course teaches students how to identify and solve anthropological problems with spatial dimensions. Hands-on experience is stressed in the acquisition, analysis, and display of spatial data using Geographic Information Systems software. Topics include the mapping of race and ethnicity, the spatial distribution of cultural variables, and human modification and use of the landscape. Prerequisite: GANTH 195, GANTH 196 or ANTH 197.

ANTH 415. Anthropological Genetics. 3 credits (B). Offered fall.
Surveys the theory and methods of evolutionary genetics as applied to human evolution and human diversity. Emphasizes human evolution as illuminated by genetics, as well as the intersection of human genetics with social issues such as racism, bioethics, and eugenics. Prerequisite: GANTH 196.

ANTH 430. Primate Conservation Biology. 3 credits (B). Offered every three semesters.
A discussion-based course that examines the impact of human activities on biodiversity, with an emphasis on the primates. Concepts and theories in conservation biology will be explored and applied to understanding the threats to wild primates and evaluating conservation strategies. Cultural and political perspectives and philosophical and ethical arguments for conserving biodiversity will also be considered. Prerequisite: GANTH 196 or BIO 124 or permission of the instructor.

ANTH 435. Ethnographic Genres and Methods. 4 credits (C,F). Offered spring.
Explores ethnographic methods and conventions of ethnographic writing through close reading, analysis and production of ethnographic texts. Students develop critical skills in assessing ethnographic practice by examining how ethnographies are shaped by authors’ fieldwork experiences, intellectual traditions and theoretical perspectives. Students engage in fieldwork and craft their own ethnographic accounts. Prerequisite: ANTH 375.

ANTH/HIST 436. Afro-Latin America. 3 credits (C). Offered occasionally.
Latin America and the Caribbean were the first and largest parts of the Western Hemisphere to be populated by Africans. Afro-Latin America examines cultural formations Africans brought to these regions. Beginning with an overview of the slave trade, it examines the histories of Africans and African-descent people throughout Latin America, as well as contemporary Afro-Latin American culture(s). Prerequisites: One course in either Latin American or Africana studies (any discipline); upper-division status or permission of instructor.

ANTH 485. Archaeology: Methods of Analysis and Interpretation. 4 credits (A,F). Offered spring.
A review of the nature of inquiry, recent theory and the means by which archaeologist acquire, analyze, and interpret their data. In addition to practical training in methods of analysis used in contemporary practice, students will gain experience in designing, conducting and reporting archaeological research. Prerequisites: GANTH 195 and ANTH 197.

ANTH 485. Anthropology Course Assistantship. 1-6 credits, only 3 of which can apply to the major (May be A,B or C). Offered fall and spring.
Students participate as course assistants in anthropology. Assistantships provide students with a sense of what it is like to teach an anthropology course by allowing them to work closely with faculty members through different phases of course preparation, presentation and evaluation. Assistantships also allow for a deeper understanding of course material by providing opportunities for student assistants to lead discussion and to help their peers review the material outside of the classroom. Prerequisites: Students must have junior/senior standing, must have earned a grade of “B” or better in the course for which s/he will serve as assistant, and may register by faculty invitation only.

ANTH 486. Internship in Anthropology. 1-6 credits (May be A,B or C). Offered fall and spring.
Designed to encourage students to enhance their academic programs by employing and refining anthropological skills through internships in public or private agencies. Arrangements must be made with a faculty member who will oversee the internship. Prerequisite: By permission only.

ANTH 490. Special Studies in Anthropology. 1-3 credits (May be A,B or C). Offered fall and spring.
Course offers students an opportunity to do independent study under staff supervision. Prerequisite: Admission only by recommendation of the instructor and permission of the department head.

ANTH/ARTH/HIST 492. American Material Culture. 3 credits (A). Offered every two semesters.
A broad introduction to the multidisciplinary “field” of material culture studies through readings, written assignments, in-class exercises and field trips. The course introduces ways of looking at and learning from objects and examines how scholars from several disciplines have used material culture in their work. Prerequisite: HIST 395. Instructor’s permission required to waive HIST 395 prerequisite for non-history majors.

ANTH 494. Field Techniques in Archaeology. 4 B credits (A,F). Offered summer.
Laboratory course directed at teaching students the basic field techniques and procedures of historic and prehistoric archaeology. Classroom lectures will present techniques and relevant aspects of method and theory.

ANTH/HIST 496. Research Thesis. 3 credits (A). Offered fall and spring.
Students will gather, analyze and interpret archaeological/historical data over two semesters. Students will work on a project that demonstrates theory, research design, data gathering and analysis, culminating in a written thesis. The course meets the capstone requirement for the historical archaeology minor but is also available to students in history and anthropology. Prerequisite: Junior or senior standing.

ANTH 499 A,B,C. Honors. 3 credits. Year course (May be A,B or C). Offered fall and spring.
An independent research topic initiated and completed by qualified senior majors who want to graduate with distinction.

Arabic

Department of Foreign Languages, Literatures and Cultures
ARAB 101. Elementary Arabic I. 4 credits. Offered fall.
The fundamentals of modern standard Arabic through listening, speaking, reading and writing. Practice in pronunciation and development of comprehension. One hour’s work a week in language laboratory. Student will receive no credit for course if he/she has had two or more years of the language in high school.

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ARAB 102. Elementary Arabic II. 4 credits. Offered spring.
The fundamentals of modern standard Arabic through listening, speaking, reading and writing. Practice in pronunciation and development of comprehension. One hour per week in the language laboratory. If student has had two or more years of the language in high school he/she will not receive credit for the course. Prerequisite: ARAB 101.

ARAB 111. Intensive Arabic I. 6 credits. Offered May.
The fundamentals of Arabic through intensive listening, speaking, reading and writing. This four-week course is the equivalent of ARAB 101-102.

ARAB 212. Intensive Arabic II. 6 credits. Offered May.
A thorough review of grammar, vocabulary building, conversation, composition and reading at the intermediate level. This four-week course is the equivalent of ARAB 231-232. Prerequisite ARAB 102 or ARAB 111 or permission of instructor.

ARAB 231. Intermediate Arabic I. 3 credits. Offered fall.
A thorough review of first-year grammar and vocabulary building. Conversation, composition and reading will be chosen to reach competency at the lower intermediate level Arabic. Prerequisite: ARAB 102 or ARAB 111 or permission of instructor.

ARAB 232. Intermediate Arabic II. 3 credits. Offered spring.
A thorough review of grammar and vocabulary building, conversation, composition and reading. Prerequisite: ARAB 231 or permission of instructor.

ARAB 300. Arabic Grammar and Communication. 3 credits. Offered fall.
Intensive training in grammatical structures and their application to oral and written communication. Instruction is in Arabic. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisite: ARAB 212 or ARAB 232 or permission of the instructor.

ARAB 307. A History of Islamic Civilization, 600-1600 A.D. 3 credits. Offered fall.
A study of society, economics, politics, culture, and the arts of the Islamic world from the rise of Islam to the establishment of the gunpowder empires (Ottoman, Safavid, and Mughal). Instruction is in English.

ARAB 308. Contemporary Islamic Civilization. 3 credits. Offered spring.
A study of society, economics, politics, culture and the arts of the Islamic world, with a focus on the Arabic-speaking regions, from 1700 A.D. to the present. Instruction is in English.

ARAB 320. Arabic Oral and Written Communication. 3 credits. Offered spring.
Intensive training in the use of modern, everyday Arabic with emphasis on conversation and composition. Readings in Arabic will provide a context for discussion and writing. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 330. Business Arabic. 3 credits. Offered fall or spring.
A study of commercial and trade vocabulary and customs in conjunction with practice in commercial communication, including letter writing, interviews and interpretations. Instruction is in Arabic. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 339. Literatures of the Islamic World 600-1500 A.D. 3 credits.
Offered fall and spring.
Overview of Arabic and Persian literature from the rise of Islam until the 16th century A.D. Taught in English. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 340. Intermediate Arabic Conversation. 3 credits. Offered periodically.
Course emphasizes oral communication at the intermediate level. Students will use the vocabulary they have learned in the previous Arabic language classes. In addition, students will acquire new vocabulary from in- and out-of-class conversational situations. Prerequisite: ARAB 212 or ARAB 232 or permission of the instructor.

ARAB 371. Advanced Arabic Grammar and Translation. 3 credits.
Offered fall or spring.
Arabic/English translation applied in several fields. In this course students analyze the main grammatical differences between Arabic and English with the focus on producing accurate and idiomatic translations into both languages. Prerequisites: ARAB 300 or permission of the instructor.

ARAB 400. Advanced Arabic Writing and Conversation. 3 credits. Offered spring.
Discussions and writings deal with topics of current interest. Prerequisite: ARAB 300.

ARAB 410. Media Arabic. 3 credits. Offered spring or spring.
An introduction to the vocabulary and language of Arabic press media and to the history of mass media in the Arabic speaking world. The focus is on print and Internet media, although media broadcasting in other forms is also covered. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 446. Special Topics in Arabic Literature. 3 credits. Offered fall or spring.
Study of a particular topic in Arabic Literature. May cover all or specific Arabic literature genre. May be repeated if content changes. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 447. Special Topics in Arabic Civilization and Culture. 3 credits.
Offered fall or spring.
Students will study a particular topic in the civilization and/or culture of Arabic countries. Course may be repeated if content changes. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 448. Special Topics in Arabic Linguistics. 3 credits. Offered fall or spring.
Students will study a particular topic in Arabic linguistics. Topics could include an introduction to Arabic socio-linguistics and psycholinguistics. Course may be repeated if content changes. Prerequisite: ARAB 300 or permission of the instructor.

ARAB 490. Special Studies in Arabic. 3 credits. Offered fall or spring.
Special topics or independent studies in Arabic. Prerequisite: Permission of the instructor.
ART 230. Weaving and Other Fiber Arts (0, 9). 3 credits.
Introduction to and practice in basic weaving and other fiber arts. Emphasis will be placed on floor loom weaving and surface design on the fabric. Prerequisites: ART 102 and ART 104.

ART 240. Metal and Jewelry (0, 9). 3 credits.
An introduction to designing and executing jewelry and related objects through various fabrication and finishing techniques, and the exploration of metal as a medium of personal aesthetic expression. Prerequisites: ART 102 and ART 104.

ART 252. Introductory Painting (0, 9). 3 credits.
Introduction to basic materials and techniques in oil or acrylic painting. This class extends previous practice with design and drawing through introductory experiences in painting. Prerequisites: ART 102 and ART 104.

ART 260. Introductory Photography: Black and White (0, 9). 3 credits.
A creative approach to photography with emphasis on understanding materials and techniques. (Students must provide a fully manual 35mm camera and a light meter which may be built into the camera or separate.) Prerequisites: ART 102 and ART 104.

ART 270. Printmaking: Screenprint (0, 9). 3 credits.
An introduction to the history and techniques of screenprinting. Lectures, demonstrations and projects will involve photographic and nonphotographic stencils, related digital processes and color registration. Prerequisites: ART 102 and ART 104.

ART 272. Printmaking: Relief, Intaglio and Monotype (0, 9). 3 credits.
An introduction to the history and techniques of relief, intaglio and monotype printing. Lectures, demonstrations and projects will involve oil based and water soluble inks, linocut, woodcut, wood engraving, collagraph, drypoint, engraving, line etching, aquatint, softground, color registration and related photographic processes. Prerequisites: ART 102 and ART 104.

ART 274. Printmaking: Lithography (0, 9). 3 credits.
An introduction to the history and techniques of lithography printing. Lectures, demonstrations and projects will involve stone and plate lithography, color registration and related photographic processes. Prerequisites: ART 102 and ART 104.

ART 280. Sculpture (0, 9). 3 credits.
Problems in three-dimensional form using traditional and modern techniques. Processes of modeling in clay, mold making, casting, carving in wood and stone, and welded metal sculpture are explored. Prerequisite: ART 106.

ART 304. Methods of Art Criticism. 3 credits.
The practical analysis and interpretation of works of art through oral and written forms. Emphasis is on the practice of art criticism in public settings such as the school classroom, art museum and college art studio. Formerly ARED 304.

ART/PHIL 305. Seminar in Aesthetics. 3 credits.
Readings and discussions in the persistent philosophical problems of the arts centering on consideration of the work of art, the artist and the audience. Prerequisites: GART 200, GARTH 205, GARTH 208 or GPHIL 101.

ART 310. Special Effects. 3 credits.
A studio and lecture course exploring various techniques for creating computer graphics events. Special effects may include smoke, fire, explosions, rocket/comet trails, lava, particles, hard and soft body dynamics, shattered objects and more. Prerequisites: ART 102 and ART 104.

ART 320. Intermediate Ceramics: Molds & Casting (0, 9). 3 credits.
Mold-making systems and processes for ceramic slip casting and press molding. Conceptual issues of multiples, reproductions and material transformation discussed. Also suitable for students wanting to utilize molds with other materials in their artistic production. Prerequisites: ART 220 or ART 222.

ART 322. Intermediate Ceramics: Surface Development (0, 9). 3 credits.
Research and experimentation with ceramic materials and finishes, glaze formulation, and application for finishing ceramic artwork. Forming processes may include any combination of the potter's wheel, handbuilding and mold making. Prerequisite: ART 220 or ART 222 or permission.

ART 330. Intermediate Weaving and Other Fiber Arts (0, 9). 3 credits.
Introduction to surface design techniques such as painting and printing on fabric. Further work may be in this area (in which case no prerequisites apply) or in weaving or other fiber techniques. Prerequisite: ART 230.

ART 340. Intermediate Metal and Jewelry (0, 9). 1-3 credits, repeatable.
An intermediate course offering further exploration of metal as a medium of personal aesthetic expression as well as more advanced technical experience and experimentation. Prerequisite: ART 240.

ART 350. Figure Drawing (0, 9). 3 credits.
An introductory course with problems stressing the fundamental skills, approaches and concepts involved in drawing the human figure. Prerequisites: ART 104 and ART 108.

ART 352. Intermediate Painting. 3 credits.
Intermediate experiences in materials and techniques in oil, acrylic and non-traditional painting media. This class extends previous experiences introduced in ART 252, with a focus on developing a more personal iconography and content. A variety of materials, techniques, surfaces, and philosophies of working are discussed in lecture, demonstration, and in both individual and group critique. Prerequisite: ART 252.

ART 354. Watercolor (0, 9). 3 credits.
Study of and practice in transparent and opaque watercolor techniques. Prerequisites: ART 102 and ART 104.

ART 360. Intermediate Photography: Experimental Black and White (0, 9). 3 credits.
Intensive exploration of advanced black and white photography using alternative cameras, pinhole, a variety of film speeds and papers, and sequential concepts. Prerequisite: ART 260.

ART 362. Intermediate Photography: Digital (0, 9). 3 credits.
An intensive exploration of digital photography with an introduction to digital camera techniques, combinations of traditional and digital photographic methods, image manipulation, and modes of output. Prerequisite: ART 260.

ART 364. Intermediate Photography: Large Format (0, 9). 3 credits.
An exploration of medium format and view camera techniques, film exposure, and advanced black and white printing. Prerequisite: ART 260.

ART 380. Intermediate Sculpture (0, 9). 3 credits.
A study in casting techniques for sculpture using the lost wax process. Foundry operations, cold cast methods, ceramic shell and fiberglass are also explored. Prerequisite: ART 280.

Independent activity at the intermediate level, such as research or studio practice, under faculty supervision. Projected studies in any area of the school's offering must be arranged with the instructors who will direct them. Offered only with the consent of the instructor.

ART 392. Topics in Art. 3 credits.
Study of selected topics in art at the intermediate level. May be repeated when course content changes. See MyMadison for current topics.

ART 410. Advanced Animation (0, 9). 3 credits, repeatable.
An advanced study of the complex aspects of natural human movement and expressions as they relate to the field of 3-D computer animation. This is a lecture/studio class in which complex character modeling and animation will be explored. The goal is to create original models that move and express themselves similarly to those found in the movie industry. Prerequisite: ART 210.

ART 420. Advanced Ceramics: Portfolio Development (0, 9). 1-3 credits, repeatable.
Self-directed, focused course of study with supervision of the instructor. This course is the culmination of ceramic study, resulting in a body of work suitable for exhibition and that is representative of the student's research and development. Prerequisites: ART 320 and ART 322 or permission.

ART 430. Advanced Fiber Arts (0, 9). 1-3 credits, repeatable.
A series of fiber projects selected by the student with the approval of the instructor. Prerequisite: ART 330.

ART 440. Advanced Metal and Jewelry (0, 9). 1-3 credits, repeatable.
A series of metal arts projects selected by the student with the approval of the instructor. Prerequisite: ART 340.

ART 450. Advanced Figure Drawing. 1-3 credits, repeatable.
An advanced drawing course stressing inventive and in-depth approaches to portraying the human figure. Prerequisite: ART 350.

ART 452. Advanced Painting (0, 9). 1-3 credits, repeatable.
Advanced problems in media selected by the student with the advice of the instructor. Prerequisite: ART 352.

ART 454. Advanced Watercolor (0, 9). 1-3 credits, repeatable.
Advanced problems in the use of watercolor and related water-based media. Prerequisite: ART 354.

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Art History

School of Art, Design and Art History

GARTH 205. Survey of World Art I: Prehistoric to Renaissance. 3 credits.
Offered fall and spring.
An introduction to the art and architecture of the world from cave painting through European pre-Renaissance art. Includes ancient through medieval art in Europe and the Near East, as well as Asian and African arts.

GARTH 206. Survey of World Art II: Renaissance to Modern. 3 credits.
Offered fall and spring.
Introduction to art and architecture of the world from the Renaissance through Modern ages. Includes European Renaissance, Baroque, Enlightenment, 19th and 20th centuries, as well as Asian and African arts.

ARTH 210. African Art and Culture in the Humanities. 3 credits.
An interdisciplinary introduction to African art and culture with topics focusing on life ways, music, religion, philosophy, art, literature and cinema. This course provides a strong background for upper-division course work in the arts of African and the African Diaspora, as well as for students pursuing degrees in history and anthropology. May be counted as GHUM 252.

ARTH 300. Art History Seminar. 3 credits.
Exploration of various methodological approaches in the history of art, including connoisseurship, iconography, formalism, psychological studies and interpretations of art and society. Students will examine contrasting interpretations of major works of art. Seminar format. Fulfills the College of Visual and Performing Arts writing-intensive requirement for the major.
Prerequisite: GARTH 205 or permission of the instructor.

ARTH 303. History of Design. 3 credits.
This course is an investigation into the domains of graphic and industrial design. The material will explore these disciplines through reading, lecture and an acquired visual literacy of the contextual, ideological and intellectual perspectives.

ARTH 304. History of Photography. 3 credits.
A survey of photography as an art form from its discovery to the present day. Emphasis is on 20th-century developments and recent contemporary trends.

ARTH 305. History of Decorative Arts. 3 credits.
A history of the decorative arts in Europe and America from c. 1200 to c. 1930. This course provides a stylistic and contextual analysis, concentrating on domestic furnishings, including textiles, furniture, metals, ceramics and glass. Prerequisite: GARTH 205 or GARTH 206.
ARTH 310. African Art: The Sahara and Northern Sahel. 3 credits. An introduction to the arts and cultures of northern and northwestern Africa. The diverse, rich heritage of Africa's arts will be explored through the major style areas of Saharan and northern sub-Saharan Africa including prehistoric rock arts, Egypt, northern Africa, Christian northeastern Africa and Islamic North Africa.

ARTH 312. African Art: Sub-Saharan. 3 credits. A survey of the arts and cultures of sub-Saharan Africa, focusing on the major style areas of the continent. Coverage will include: the historic sites of Nigeria, the Guinea Coast, and central, eastern, and southern Africa. Prerequisite: GARTH 205 or GARTH 206.

ARTH 313. Masterpieces of Italian Renaissance Art. 3 credits. (Semester in Florence only). A survey of Italian Renaissance painting and sculpture (1280-1550), including the works of Giotto, Donatello, Masaccio, Fra Angelico, Botticelli, Leonardo and Michelangelo. Weekly visits to the Uffizi, San Marco, the Accademia and other Florence museums.

ARTH 314. Masterpieces of Spanish Art. 3 credits. (Semester in Salamanca only). A survey of art in Spain from prehistoric cave painting through 20th-century art. Emphasis is given to 17th-18th century Baroque and modern artists including El Greco, Velasquez, Goya, Gaudi and Picasso. Visits to Altamira, the Alhambra, the Prado, Toledo, Santillana del Mar and other sites.

ARTH 316. Masterpieces of British Art. 3 credits. (Semester in London only). Survey of painting and sculpture in Britain (1550-1860) concentrating on 18th/19th-century painting. British art is viewed in the context of European civilization. Weekly visits to London museums including the Portrait Gallery, Sir John Soane's House, the Wallace Collection and the Tate Gallery.

ARTH 320. Travel Study in Art History. 3 credits. Art history credit is available to students participating in formal travel study programs with an emphasis on art history. Students maintain a journal with an emphasis on their art history experiences and write a research paper.

ARTH 322. Ancient Art. 3 credits. A comparative study of major examples of art and architecture from the ancient world. Certain selected topics in pottery, painting and numismatic arts will be studied in depth. Prerequisite: GARTH 205.

ARTH 332. Islamic Art and Architecture. 3 credits. This course will consider art from the age of the prophet Muhammad through the sixteenth century. The political and cultural contexts in which Islamic art developed will lay the foundations for understanding later traditions. These may include the role of the mosque in Muslim society, calligraphy and illustrated books; palace building and the arts of luxury; and modes of figural representation, including issues of gender. Prerequisite: GARTH 205.


ARTH 346. Italian Renaissance Art. 3 credits. A survey of the development of Italian Renaissance art and architecture 1300-1550, including the revival of classical art, the development of Humanism, the invention of perspective and the formation of the High Renaissance style. Prerequisite: GARTH 206.

ARTH 380. Nineteenth Century Art. 3 credits. A study of European art (1750-1890) concentrating on Neoclassicism, Romanticism, Realism, Impressionism and Post-Impressionism in France. Prerequisite: GARTH 206.

ARTH 370. History of Interior Design. 3 credits. Survey of the evolution of design in interiors from ancient to modern times with emphasis on period and furniture styles and architectural backgrounds.

ARTH 372. Modern Art from 1900-1945. 3 credits. A survey of European and American painting and sculpture from 1890 to the present day. Cubism and its off-shoots. Surrealism, American Abstract Expressionism, Pop art, Conceptual Conceptual art and Realism are among the movements studied. Prerequisite: GARTH 206.

ARTH 376. Modern Architecture. 3 credits. Survey of architecture from 1851 to the present day. Thematic investigations will include regional, philosophical and technical developments in architectural space. Architects may include Labrouste, Berlage, Wagner and Richardson, through Wright, Mies, Le Corbusier, to the avant-garde Murcutt, Siza, Nouvel and Mockbee. Prerequisite: GARTH 206.

ARTH 380. American Art to 1870. 3 credits. American painting, sculpture, architecture and decorative arts from the Colonial period through 1870. Topics will include Colonial portraiture, African-American aesthetics, the definition of folk art, nationalism and landscape painting, and the question of American exceptionalism. The course will also introduce students to problems of interpretation in current scholarship. Prerequisite: GARTH 206.

ARTH 382. American Art from 1870. 3 credits. American painting, sculpture, architecture and decorative arts from 1870 to 1945. This course will address topics such as the American Renaissance, the Harlem Renaissance, Chicago School architecture, masculinity in Western American art, notions of decay in turn-of-the-century art and American modernism. It will also introduce methodological debates in current scholarship. Prerequisite: GARTH 206.

ARTH 389. Topics in Art History. 3 credits. Study of selected topics in art, art education, art history, graphic design, interior design or industrial design at the intermediate level. May be repeated when course content changes. See MyMadison for current topics.

ARTH 390. Independent Studies in Art History. 1-3 credits. Independent activity at the intermediate level, such as research or studio practice, under faculty supervision. Projected studies in any area of the school's offering must be arranged with the instructors who will direct them. Offered only with the consent of the director.

ARTH/HIST 394. Introduction to Museum Work. 3 credits. A study of the philosophy and practice of museum work including the areas of exhibit design, conservation registration, education and administration. Subject is taught from the perspective of the museum profession and is applicable to diverse discipline and types of collections.

ARTH/HIST 396. Introduction to Public History. 3 credits. An introduction to the varied and interdisciplinary "field" of public history, such as community/local history, historic preservation, archives, historical archaeology, museum studies, business and policy history, documentary editing and publishing, and documentary films, through readings, class discussions, occasional guest speakers and occasional field trips.

ARTH 403. Topics in Italian Art. 3 credits. (Semester in Florence only). Topics in Italian art may include studies of major artists or themes of Italian art, design and architecture from ancient times to the present. Topics may include the history of conservation and restoration, food culture and its representations or Italian cinema. May be repeated when course content changes.

ARTH/HIST 406. Monticello. 3 credits. A seminar on the architecture and material culture of Thomas Jefferson's Monticello. The course will examine the house's design, artwork, decorative arts, mechanical devices, landscape/garden design and Mulberry Row. Topics will include African-American artisans at the Monticello joinery, Jefferson's Indian Hall and European and African-American domestic life in the Federal Period. Required field trips.

ARTH/HIST 408. The Museum: Histories and Controversies. 3 credits. This seminar centers on art museums in the United States. Topics include the historical development of museums, related cultures of display, recent debates on institutional mission and responsibility and contemporary artists who employ the museum as medium, subject matter or site. Required field trips. Prerequisite: GARTH 206.

ARTH 418. Modern and Contemporary African Art. 3 credits. This course examines the rise of Modern and Contemporary art movements throughout Africa, from 1959 to the present. As colonial influence diminished, important artists, art schools and exhibition tactics have emerged. Developments in painting, sculpture, photography, video and film illustrate the tensions and triumphs of contemporary African nations. Course work centers on a substantial research paper based on primary source material. Additional assignments required for graduate level course.

ARTH 419. Topics in African Art. 3 credits. Offering varies. Topics in African art will deal with the current thematic or methodological issues such as contemporary African arts and artists, arts of the African Diaspora, a particular media (such as architecture or the textile arts), portraiture and identity, the royal arts of Africa, African film and performance, or gender in the arts of Africa. See MyMadison for current topics. Prerequisite: GARTH 205, GARTH 208 or ARTH 210.
ARTH 424. Arts of Ancient Egypt. 3 credits.
A study of the arts and culture of Ancient Egypt (c. 3000 B.C. to c. 300 B.C.). This course will focus on the art and architecture of the Old and New Kingdoms and also examine the enduring fascination with this unique artistic heritage from the excavations of Napoleon to the present. Prerequisite: GARTH 205 or GARTH 206.

ARTH 430. Far Eastern Art. 3 credits.
A survey of East Asian art from prehistoric times to 19th century colonialism. Emphasis is on the areas of major production: India, China and Japan, with less attention to such centers as Cambodia, Siam and Korea. Prerequisite: GARTH 205 or GARTH 206.

ARTH 439. Topics in Medieval Art. 3 credits. Offering varies.
Topics in Medieval Art may include the study of major buildings and artistic monuments in the medieval Mediterranean and in Western Europe, art in service of empire building, medieval audiences and modes of reception, and the afterlives of monuments into the contemporary period. Prerequisite: GARTH 205.

ARTH 442. Art of Later Middle Ages. 3 credits.
A study of Western European arts and architecture in the later Middle Ages with concentration on Romanesque and Gothic styles (1000-1400). Examines church construction and allied arts around the millennium and the development of Gothic architecture, sculpture and painting in France, Italy and England. Prerequisite: GARTH 205.

ARTH 444. Gothic and Gothic Revival Architecture. 3 credits.
Survey of Gothic architecture in France, England and Italy 1150-1500 and its influence in England and America 1750-1910. Examines the design of major cathedrals and regional European Gothic styles. Explores their influence upon Walpole, Pugin, Ruskin and other champions of Gothic Revival. Prerequisite: GARTH 205 or GARTH 206.

ARTH 446. Renaissance Art and the East. 3 credits.
This seminar explores artistic exchange between the Christian west and competing cultures in the east from c. 1250-1600, focusing on the powers of Italy and their interaction with the Islamic dynasties, the Mamluks of Egypt and the Ottomans in Turkey, as well as the Christian state of Byzantium. Special topics of interest may include palace architecture and imperial ceremony; urban planning; portraiture and caricature; the exchange of luxury goods; and the use of art as a diplomatic tool. Prerequisite: GARTH 206.

ARTH 448. Studies in Leonardo and Michelangelo. 3 credits.
Seminar that examines the artworks of Leonardo da Vinci and Michelangelo Buonarroti. Discusses issues such as the artist's creative process, the development of the artist's style, the patron's role in artwork and interrelationships between the artist's visual and literary works. Prerequisite: GARTH 206.

ARTH 449. Topics in Renaissance Art. 3 credits. Offering varies.
Topics in Renaissance Art may include studies of major Italian or Northern Renaissance artists, the development of linear perspective, the Renaissance tomb chapel, or art and politics of the Protestant Reformation. Prerequisite: GARTH 206.

ARTH 450. Baroque Art. 3 credits.
A survey of European art and architecture of the 17th century. This course will focus on Baroque art and its cultural context in Italy, France, Britain and Holland. Prerequisite: GARTH 206.

ARTH 452. Eighteenth Century Art. 3 credits.
Survey of the major European artistic movements of the 18th century. This course will focus on the development of the Rococo and Neo-classical styles in architecture, sculpture and painting. Prerequisite: GARTH 206.

ARTH 459. Topics in Seventeenth and Eighteenth Century Art. 3 credits. Offering varies.
Topics in this course may include studies of particular artists such as Rembrandt, Caravaggio or Watteau, studies of particular styles such as the Rococo or thematic studies such as the history of garden design or the development of art theory. See MyMadison for current topics. Prerequisite: GARTH 205, GARTH 206 or a course in medieval and renaissance studies.

ARTH 464. Romanticism and Enlightenment. 3 credits.
This seminar examines European art of the Romantic period, c. 1770-1830. Course themes include the representation of nature, art and the emergence of the nation-state, sensibility and the rise of historicism. In addition to visual culture, attention will be devoted to significant philosophical and literary texts from the period. Prerequisite: GARTH 205, GARTH 206 or a course in medieval and renaissance studies.

ARTH 466. Art and Nationalism. 3 credits.
Advanced seminar examining the intersection between art and nationalism from the late-eighteenth century to the present. Topics may include propaganda, monuments and the construction of national memory. Particular attention will be devoted to the shifting nature of commemorative practice throughout the modern period. Prerequisite: GARTH 205 or GARTH 206.

ARTH 469. Topics in Nineteenth Century Art. 3 credits. Offering varies.
Topics in nineteenth century art may include studies of major artists, such as Caspar David Friedrich or Eduard Manet, specific artists groups like the pre-Raphaelite brotherhood, or thematic issues such as the relationship between art and nationalism. See MyMadison for current topics. Prerequisite: GARTH 206.

ARTH 471. Commemoration and Controversy: Public Art in America. 3 credits.
This course examines the socio-historical, political, cultural, and philosophical dimensions of public art in American society, from the Early Republic to the present day. Topics may include: the nature of public art, its uses and functions, as well as civic and official attitudes towards art in the public sphere. Issues of censorship, propaganda, and the “culture wars” of the 1980s and 90s will be highlighted. Prerequisite: GARTH 206.

ARTH 472. Modern Art Since 1945. 3 credits.
A study of the many developments and trends in American and European art since 1945. This course will focus on such movements as abstract expressionism, pop, conceptual art, installation art, video, film and computer art with an understanding of the theoretical basis of those movements and the development of the art market during this period. Prerequisite: GARTH 206.

ARTH 474. The New Media and Contemporary Art. 3 credits.
Advanced seminar that addresses the impact of cultural politics and technology on how we make, evaluate and “speak” about art. Focus on a variety of media including video, multi-media installations, conceptual art, computer generated imagery, virtual “reality,” contemporary film and digital photography. Prerequisite: ARTH 372 or ARTH 472.

ARTH 479. Topics in Twentieth Century Art. 3 credits. Offering varies.
Topics in twentieth century art may include studies of contemporary painters (i.e., Gerhard Richter), sculptors (i.e., Kiki Smith or Mona Hatoum), performance and video artists (i.e., Bill Viola) or thematic issues such as the relationships between art, technology and gender/racial politics. See MyMadison for current topics. Prerequisite: ARTH 372 or ARTH 472.

ARTH 484. Art of the Americas. 3 credits.
Art of indigenous peoples in the Americas (Mesco, Central, South and /or North) before European contact. The course will examine domestic and state architecture, painting, textiles, ceramics, metalwork, and earthworks within the context of geographic, religious and social issues. Other topics include museum display, repatriation and western taxonomies.

ARTH/AFST 488. African-American Art. 3 credits.
This course examines visual arts produced by people of African descent in the United States from the colonial period until the present. Course themes include debates about the relationship between racial identity and artistic production; the complex interchange between African-American art and the cultural traditions of Africa and Europe; black artists’ engagement with popular representations of African-Americans; and the intersection of race with class, gender, and sexuality. Prerequisite: GARTH 206 or GARTH 208. ARTH 200.

ARTH 489. Topics in Art History. 3 credits. Offering varies.
Study of selected topics in art history at the advanced level. May be repeated when course content changes. See MyMadison for current topics.

ARTH 490. Independent Studies in Art History. 1-3 credits, repeatable.
Independent activity, such as research or studio practice, under faculty supervision. Projected studies in any area of the school’s offering must be arranged with the instructors who will direct them. Offered only with consent of the instructor.

ARTH/ANTH/HIST 492. American Material Culture. 3 credits.
A broad introduction to the multidisciplinary “field” of material culture studies through readings, written assignments, in-class exercises and field trips. The course introduces ways of looking at and learning from objects in their work. Prerequisite: HIST 395. Instructor’s permission required to waive HIST 395 prerequisite for non-history majors.

ARTH/HIST 493. Historic Preservation. 3 credits.
An introduction to the philosophy and techniques of historic preservation, guidelines for restoration, state and national register forms and procedures.

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Astronomy

Department of Physics and Astronomy

*ASTR 120. The Solar System. 3 credits. Offered once a year.
An introductory course in astronomy, which includes the following topics: motions of celestial objects, eclipses, historical development, the nature of light, telescopes, properties and evolution of the solar system.

*ASTR 121. Stars, Galaxies and Cosmology. 3 credits. Offered once a year.
An introductory course in astronomy which includes the following topics: the Sun, stellar properties, stellar evolution, black holes, the Milky Way, galactic evolution, quasars, cosmology.

ASTR 220. General Astronomy I: The Night Sky, the Solar System and Stars. 3 credits. Offered once a year.
ASTR 220Gis the first in a two-course sequence in general astronomy intended for students with a background in physics. Topics covered include: appearance and movements of the night sky; astronomical coordinate systems and timekeeping; seasons, eclipses and planetary configurations; planetary motions and gravitation; fundamental forces; electromagnetic radiation and its detection; content, structure, formation and evolution of our solar system; observations and models of the Sun, stellar interior models; stellar magnitudes and spectra, classifications; Hertzsprung-Russell diagram. Prerequisite: PHYS 140 or PHYS 240.

ASTR 221. General Astronomy II: Star Systems, the Interstellar Medium and Cosmology. 4 credits. Offered once a year.
ASTR 221 is the second in a two-course sequence in general astronomy intended for students interested in science. Topics covered include: stellar evolution; variability and high-energy phenomena in stars and multiple-star systems; content, structure, and dynamics of the Milky Way; external galaxies, quasars and AGN; large-scale structure and the distance scale of the universe; the Big Bang model and alternative cosmologies, possible geometries and eventual fates of the universe; the solar system; stellar evolution; black holes, the Milky Way, galactic evolution, quasars, cosmology.

ASTR 320. Astronomical Techniques. 3 credits. Offered on demand.
An overview of modern astronomical techniques with an emphasis on quantitative data collection and analysis. The design and use of various astronomical devices will be covered. Topics will include visible light telescopes and radio telescopes as well as CCD data collection in addition to other current astronomical techniques. Data reduction software will also be addressed. Prerequisites: ASTR 220 and ASTR 221.

ASTR 321. Searching for Life in the Universe. 3 credits. Offered spring.
A study of the search for life in the universe, with emphasis on teacher preparation. Topics include how life on earth can guide the search, conditions for life within our solar system, extrasolar planets that may be conducive to life, possible radio communications with other civilizations and technologies necessary for search. Significant time is spent developing student lesson plans. Prerequisites: GSCI 161, GSCI 162, GSCI 163 and GSCI 164.

ASTR 322. Stellar Evolution. 3 credits. Offered on demand.
A study of the life cycle of stars. Topics include the origins of stars, the life cycle of stars, observations of stars and their properties, stellar evolution, black holes, the Milky Way, galactic evolution, quasars, cosmology.

ASTR 397. Topics in Astronomy. 1-4 credits. Offered on demand.
Topics in astronomy at an intermediate level. May be repeated for credit when course content changes. Topics selected may dictate prerequisites. Students should consult instructor prior to enrolling for course. Prerequisite: Permission of the instructor.

ASTR 398. Independent Study in Physics or Astronomy. 1-3 credits, repeatable to 4 credits. Offered on demand.
An individual project related to some aspect of physics or astronomy. Must be under the guidance of a faculty advisor. A student may not earn more than a total of four credits for PHYS 398 and ASTR 398.

ASTR 497. Topics in Astronomy. 1-4 credits. Offered on demand.
Topics in astronomy at the advanced level. May be repeated for credit when course content changes. Topics selected may dictate prerequisites. Students should consult instructor prior to enrolling for course. Prerequisite: Permission of the instructor.

ATH 304A. Lower Quarter Evaluation (2, 2). 3 credits. Offered fall.
This course systematically focuses on orthopedic and neurological evaluation including functional testing of athletic injuries. The lower quarter consists of the lower extremity, pelvis and lumbar spine. Other topics include management of internal injuries and sudden death related to athletic participation. Prerequisite: ATEP 208 and admission to the clinical component of the athletic training curriculum.

ATH 304B. Upper Quarter Evaluation (2, 2). 3 credits. Offered spring.
This course systematically focuses on orthopedic and neurological evaluation including functional testing of athletic injuries. The upper quarter consists of the upper extremity, head, neck and thorax. Other topics include management of crisis situations and facial injuries related to athletic participation. Prerequisite: ATEP 304A.

ATH 305. Rehabilitation in Athletic Training: Lower Extremity (2, 2). 3 credits. Offered spring.
This course explains the rehabilitation process of lower extremity muscular and joint injuries related to athletic activities. Additional topics include rehabilitation facility design, budget preparation and pre-season assessment. Prerequisite: BIO 290 and admission to the clinical component of the athletic training curriculum.
ATEP 305. Therapeutic Modalities (3, 2). 4 credits. **Offered fall.**
This course provides a thorough overview of tissue injury, inflammatory response, healing process and neurophysiology applied to musculoskeletal injuries. Theory, application and clinical decision-making processes through therapeutic modalities during rehabilitation will be emphasized. Documentation, purchasing and maintenance are also addressed. **Prerequisite:** ATEP 205 and admission to the clinical component of the athletic training curriculum.

ATEP 307. Acute Care of Injuries and Illnesses. 3 credits. **Offered fall.**
This course is designed for student athletic trainers to meet the educational competencies for national accreditation in the following areas: development of risk management/emergency action plans, primary assessment of athletic injuries, emergency care of athletic injuries, immediate care of spine injuries, prevention of injuries associated with the physically active, utilization of diagnostic tools and an overall understanding of protective equipment. **Prerequisite:** Admission to clinical component of athletic training curriculum.

ATEP 350. Measurements and Testing in Athletic Training. 2 credits. **Offered fall.**
The purpose of this course is to introduce and develop proficiency with measurement techniques frequently used in athletic training. Students will learn clinical evaluation techniques such as manual muscle testing, goniometry, volumetric measurements and girth measurements. How these measures are used in research will also be presented. **Prerequisite:** Admission to clinical component of athletic training curriculum.

ATEP 355. Infectious Disease Control. 1 credit. **Offered spring.**
Discussion includes theories of origins, statistics and characteristics of the causative pathogen, incubation, illness patterns, transmission, prevention and treatment of infectious and noninfectious disease. Emphasis is placed on STDS, HIV, Hepatitis and OSHA regulations. **Prerequisite:** Admission to clinical component of athletic training curriculum.

ATEP 376. Pharmacology for Athletic Trainers. 2 credits. **Offered fall.**
This course is designed for students to understand knowledge, skills and values that an entry-level certified athletic trainer must possess in pharmacological applications, including awareness of the indications, contraindications, precautions and interactions of medications, and the governing regulations related to physically active individuals. **Prerequisite:** Admission to clinical component of athletic training curriculum.

ATEP 377. General Medicine in Athletic Training. 2 credits. **Offered spring.**
This course is designed for students to understand knowledge, skills and values that an entry-level certified athletic trainer must possess in order to recognize, treat and refer when dealing with general medical conditions and disabilities related to athletes or others involved in physical activity. **Prerequisite:** Admission to clinical component of athletic training curriculum.

ATEP 378. Assessment Skills in Athletic Training. 1 credit. **Offered spring.**
The purpose of this course is to develop knowledge and assessment skills related to general medical conditions. In addition, this course will cover body composition, bone density and quality of life outcome measurement tools. **Prerequisite:** Admission to clinical portion of athletic training education program. **Corequisite:** ATEP 377.

ATEP 392. Level II Practicum in Athletic Training. 3 credits. **Offered fall.**
This course focuses on clinical performance and application of didactic knowledge. Clinical rotations, clinical competencies, invoices, case studies and professional journals are included in course content. Sport specific activities and clinical applications involving palpation and wound care are key components of this course. August preseason orientation and clinical participation required. **Prerequisite:** Admission to clinical component of athletic training curriculum.

ATEP 393. Level III Practicum in Athletic Training. 2 credits. **Offered spring.**
This course focuses on clinical performance and application of didactic knowledge. Clinical rotations, clinical competencies, invoices, case studies and professional journal are included in course content. Sport specific activities and clinical applications involving manual muscle testing and equipment fitting are key components of this course. **Prerequisite:** ATEP 392.

ATEP 405. Rehabilitation in Athletic Training: Upper Extremity. 3 credits. **Offered fall.**
This course explains the rehabilitation process of upper-extremity muscular and joint injuries related to athletic activities. Additional topics include prevention of athletic injuries and aquatic rehabilitation. **Prerequisite:** ATEP 305.

ATEP 406. Organization and Administration in Athletic Training. 3 credits. **Offered spring.**
This course is an overview of managerial issues including legal concerns, OSHA guidelines, budgeting/purchasing and staffing. In addition, this course provides a variety of experiences culminating in the knowledge and skills needed to meet entry-level competencies set by the National Athletic Trainers’ Association. **Prerequisite:** Permission of the instructor.

ATEP 494. Level IV Practicum in Athletic Training. 2-3 credits. **Offered fall.**
This course focuses on clinical performance and application of didactic knowledge. Clinical rotations, clinical competencies, invoices, case studies, and professional journal are included in course content. Sport specific activities and clinical applications involving orthopedic testing and emergency internal abdominal/chest evaluation are key components. **Prerequisite:** ATEP 393.

ATEP 495. Level V Practicum in Athletic Training. 2 credits. **Offered spring.**
This course focuses on clinical performance and application of didactic knowledge. Clinical rotations, clinical competencies, invoices, case studies and professional journal are included in course content. Sport specific activities and clinical applications involving cranial nerve assessment and neurological evaluation are key components of this course. **Prerequisite:** ATEP 494.

**Biology**

Department of Biology

GBIO 103. Contemporary Biology (3, 0). 3 credits.
An in-depth exploration of selected biological concepts connected to current, relevant topics and emphasizing an understanding of science as a way of obtaining knowledge. Not available for major or minor credit in biology or biotechnology. **Formerly GSCI 103.** Students may not receive credit for both GSCI 103 and GBIO 103.

*BIO 114. Organisms (3, 3). 4 credits. **Offered fall and spring.**
An exploration of how diverse life forms carry out fundamental processes that sustain life, including acquiring and using essential molecules, growing and reproducing, responding to environmental stimuli and maintaining a stable internal environment. Labs will introduce students to the scientific method in a series of investigative lab and field experiences.

*BIO 124. Ecology and Evolution (3, 3). 4 credits. **Offered fall, spring and summer.**
In this course students will learn about variation within populations, the mechanisms of evolution, phylogeny and classification, population and community ecology, animal behavior and ecosystems dynamics. Labs will include investigations in laboratory and field settings. **Prerequisite:** Grades of “C-” or better in BIO 114 and either CHEM 131 or CHEM 120.

*BIO 201. Trelawny Learning Community Seminar. 1 credit. **Offered fall.**
Introduction to the biology major and biological research for first-year students in the Trelawny Learning Community. In addition to lab/field work with faculty or graduate students for 2-3h per week, students attend a weekly seminar. Seminar includes research skill and team-building exercises, guest speakers, and case studies geared toward a career in science. Faculty and students interact with community members to provide perspectives on the major and research in a scientific network. **Prerequisite:** Membership in the Trelawny Learning Community. **Corequisite:** BIO 114.

*BIO 202. Trelawny Learning Community Seminar II. 2 credits. **Offered spring.**
The second part of the research skills seminar for first-year students in the Trelawny Learning Community. Students will have already begun research projects during fall semester, and will continue their projects into spring semester while continuing to build research skills. Students will take part in community, campus, and social events and gain experience helping to run a research-based event. **Prerequisite:** BIO 201. **Corequisite:** BIO 124.

*BIO 203/ISAT 165. Viral Discovery (0, 3). 1 credit. **Offered fall.**
This course is an exploratory laboratory experience, designed for incoming freshmen. In the course, the students will learn about the life cycle and ecology of viruses infecting bacteria. Soil samples will be collected, and techniques for isolation and purification of the viruses will be performed by the students. Isolated viruses will be visualized using electron microscopy. The genomic material will be isolated and prepared for nucleic acid sequencing.

*BIO 204/ISAT 166. Viral Genome and Bioinformatics (0, 4). 2 credits. **Offered spring.**
This is a computer-based laboratory experience, designed for those students completing the Viral Discovery course. Students will learn how to identify genes in a viral genome, compare the predicted proteins with known