893 Internship in the Professional Applications of Anthropology Fall, Spring, Summer. 1 to 3 credits.

Supervised professional experience in federal or state agencies, nonprofit organizations, or corporations related to the professional practice of anthropology.

894 Forensic Anthropology Internship in Forensic Pathology

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P:M: (ANP 842) RB: graduate coursework in human anatomy and skeletal biology

Supervised professional internship in postmortem analysis. Students will attend autopsies and learn procedures that are relevant for forensic anthropology. Individual research project.

899 Master's Thesis Research

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to graduate students in Anthropology. Approval of department.

Master's thesis research.

901 Management and Resource

Anthropology Spring of even years. 3(3-0) R: Approval of department.

Issues in the practice of anthropology. Ethical, effective, and efficient conduct and management of applied research in cultural anthropology and archaeology in the private sector, non-profit agencies, and government.

999 Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Approval of department.

ARB

Doctoral dissertation research.

ARABIC

Department of Linguistics and Germanic, Slavic, Asian and African Languages College of Arts and Letters

101 Elementary Arabic I

Fall. 4(4-1)

Basic standard Arabic, Speaking, listening comprehension, reading and writing, with emphasis on developing oral proficiency skills.

102 Elementary Arabic II

Spring. 4(4-1) P.M. (ARB 101) Further work on speaking, listening comprehension, reading and writing of standard Arabic, with continued emphasis on developing oral proficiency skills.

201 Second-Year Arabic I

Fall. 4(4-0) P:M: (ARB 102) Intermediate-level work on speaking, listening comprehension, reading and writing of standard Arabic, with increased emphasis on reading and culture.

202 Second-Year Arabic II Spring. 4(4-0) P:M: (ARB 201)

Istening comprehension, reading and writing standard Arabic, with continued increased emphasis on reading and culture.

290 Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

490 Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491 Special Topics in Arabic Studies

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis.

ARTS AND LETTERS

AL

College of Arts and Letters

191 ROIAL Freshman Seminar

Fall. 2(2-0) R: Open only to ROIAL students. Academic life as a Residential Option in Arts and Letters (ROIAL) student. The nature and roles of the arts and humanities in individual and community lives. Special topics and activities focused on the arts and humanities and designed to build community.

192 Arts and Humanities First-Year Seminar

Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. SA: AL 192H Not open to students with credit in AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H or LBS 133 or MC 111 or MC 112.

Theme based exploration of connections across arts and humanities disciplines. Development of skills necessary for successful study of arts and humanities. Significant writing component including drafting, revising, and editing compositions to develop skills in narration, persuasion, analysis, and documentation. Fulfills Tier I writing requirement.

192H Arts and Humanities First-Year Seminar Fall, Spring. 4(4-0) RB: Designated score on English placement test. R: Open only to freshman Honors College students or approval of college.

Not open to students with credit in AL 192 or ATL 110 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H or LBS 133 or MC 111 or MC 112 or ATL 115.

Theme based exploration of connections across arts and humanities disciplines. Development of skills necessary for successful study of arts and humanities. Significant writing component including drafting, revising, and editing compositions to develop skills in narration, persuasion, analysis, and documentation. Fulfills Tier I writing requirement.

200 Cultural Difference and Study Abroad Fall, Spring. 3(3-0)

Tools for understanding and interacting with individuals from different cultural backgrounds. Awareness of and sensitivity to cultural difference and the role of language study in understanding cultural difference. Preparation for continued study of and exposure to different cultures and languages through study abroad.

201 Writing Tutorial

Fall, Spring. 2(1-2) RB: Grade of 1.0 or 1.5 in Tier I writing course. C: IAH 201 concurrently or IAH 202 concurrently or IAH 206 concurrently.

Development of writing skills involved in learning and in thinking about and critically reading complex texts.

210 Introduction to Web Authoring

Fall, Spring. 3(3-0) P:M: Completion of Tier I writing requirement.

Analyzing, evaluating, and authoring Web sites. Principles of design rhetoric. Practices of Web accessibility.

250 Career Strategies for Arts and Letters Students

Fall. 1(2-0) RB: Declared major preference in the College of Arts and Letters. R: Open only to undergraduates in the College of Arts and Letters.

Identify, explore, and prepare for suitable career options. Topics include self-assessment, career development strategies, and job search skills.

291 ROIAL Sophomore Seminar

Fall. 2(2-0) P:M: (AL 191) R: Open only to ROIAL students. Not open to freshmen.

Continuation of the Freshman Seminar (AL 191). The role of art in different cultures. What "humanities" means in different cultures and communities and the ways in which the arts and humanities contribute to making us all part of a global community. Expansion from the role of arts and humanities in local communities to comparative study of "arts" and "humanities" across cultures.

292 Introduction to Ancient Studies Fall, 2(1-2) Interdepartmental with Classical

Fall. 2(1-2) Intercepartmental with Classical Studies; History of Art; History.

Methods and current trends in the study of the Greek and Roman world. Visits to library and museum collections.

308 Invention in Writing

Spring. 3(3-0) P:M: Completion of Tier I writing requirement.

Theory and practice of invention in writing. Strategies and theories of generating and exploring thought in civic and professional writing contexts.

320

Technical Writing Fall, Spring. 3(3-0) P:M: Completion of Tier I writing requirement.

Principles and practices of effective writing in the workplace. Technical, scientific, and electronicwriting. Includes mediated audience and organizational needs, visual rhetoric, information design, electronic publication, ethics, technical style, usability testing, and team writing.

341 Writing Nature and the Nature of Writing Fall. 3(3-0) Interdepartmental with Fisheries and Wildlife. P:M: Completion of Tier I writing requirement.

Writing- and reading-intensive course focusing on the language of scientists, poets, essayists, naturalists, environmentalists, and biologists, and on their various responses to and representations of the natural environment.

360 Visual Rhetoric

Spring. 4(4-0) P:M: Completion of Tier I writing requirement.

Visual literacy, design, and rhetoric. Effects of visual elements in print and online documents. Intensive writing and design.

Interdisciplinary Perspectives in the Arts 390H and Humanities

Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to Honors College students and to other students with approval of College of Arts and Letters.

In-depth selected topics in the arts and humanities drawing on materials and methods of several disciplines.

400

Study Abroad in Arts and Letters Fall, Spring, Summer. 2 to 8 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Not open to freshmen. Approval of college.

Supervised study of selected topics in the arts. languages, history, philosophy, and religious studies, in relation to particular cultural sites, museums and institutions.

415 **Digital Rhetoric**

Fall. 3(3-0) P:M: Completion of Tier I writing requirement.

Rhetorical, social, political, economic, and ethical dimensions of electronic writing and publishing. Rhetorical dynamics of computer-mediated writing spaces such as the Internet, World Wide Web, email, and synchronous chat.

455 Portfolio Seminar

Fall, Spring. 3(3-0) P:M: Completion of Tier I writing requirement.

Workshop for students preparing professional document portfolios in print and digital formats, including application materials for career, graduate study, and professional positions.

485 **Museum Studies**

Fall. 3(3-0) Interdepartmental with History of Art. Administered by Department of Art and Art History. R: Not open to freshmen or sophomores. Not open to students with credit in AL 485.

Activities, functions and organization of museums; the changing role of museums as cultural institutions.

487 Approaches to Museum Education

Spring, Summer. 3(3-0) Interdepartmental with History of Art. Administered by Department of Art and Art History. R: Open only to juniors or seniors or graduate students. Not open to students with credit in AI 487

Theoretical and practical approaches to the design and development of interpretive materials and programs within museums. Design and development of research and projects.

488 **Museum Curatorial Practices**

Fall, Summer. 3(3-0) Interdepartmental with History of Art. Administered by Department of Art and Art History. RB: (HA 485) R: Open only to juniors or seniors or graduate students.

Methods and practices for the development, care, and use of museum collections in research, education, and exhibition activities.

491 Special Topics

Fall, Spring, Summer. 1 to 4 credits. student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of college.

Special topics supplementing regular course offerings proposed by faculty on group study basis.

492 **Special Topics in Museum Studies**

Fall, Spring, Summer. 1 to 3 credits. student may earn a maximum of 6 credits in enroliments for this course. Interdepartmental with History of Art. Administered by Department of Art and Art History. R: Open only to juniors or seniors or graduate students. Special topics supplementing regular course

offerings.

493A Arts and Letters Internship

Fall, Spring, Summer. 2 to 8 credits. student may earn a maximum of 8 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement. RB: 12 credits in the major. R: Not open to freshmen or sophomores. Approval of college.

Supervised preprofessional field experience in the arts and humanities.

493C **Museum Internship**

Fall, Spring, Summer. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. History of Art. Interdepartmental with Administered by Department of Art and Art History. R: Not open to freshmen or sophomores. Approval of college.

Activities, functions and organization of a museum.

494 Museum Exhibitions: Theory and Development

3(2-2) Interdepartmental with Spring. History of Art. Administered by Department of Art and Art History. R: Open only to juniors or seniors or graduate students. Not open to students with credit in AL 486.

Theoretical and practical approaches to the planning, design, development, installations, and evaluation of museum exhibitions. Field trip required.

Research-Mentoring in Black American 495 and Diasporic Studies

Fall, Spring. 3(3-0) RB: Courses in African American Literature, African American History, African American Language Use, other courses in the Black American and Diasporic Studies Program. R: Open only to students in the Specialization in Black American and Diasporic Studies.

Focus on readings and research in the human arts and sciences. Each student works with a black American and diasporic studies faculty mentor in the student's area of study. Training in knowledge creation, production and dissemination.

820 **Humanistic Perspectives on Health**

Fall. 3(3-0) R: Open only to students in the M.A. program in Health and Humanities,

Multidisciplinary perspectives on health care and medicine, emphasizing linkages among the humanistic and scientific disciplines.

Proseminar in Comparative Literature 821

Fall. 3(3-0) Interdepartmental with English; Linguistics and Languages; Romance Languages. R: Open only to graduate students in the College of Arts and Letters.

History and practice of comparative literature including foundational concepts and current directions.

822 Methods of Comparative Literature

Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with English; Linguistics and Languages; Romance Languages. R: Open only to graduate students in the College of Arts and Letters.

studies in international literary tradition, Case reception, and transmission. Approaches to genre and period. History and aesthetics of reception.

823 Seminar in Comparative Literary Criticism

Fall. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with English; Linguistics and Languages; Romance Languages. R: Open only to graduate students in the College of Arts and Letters.

Theory and practice of comparative literary criticism, with attention to the development of critical approaches and to current topics in the critical literature.

825 **Museum Internship**

Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with English; Linguistics and Languages; Romance Languages. R: Open only to graduate students in the College of Arts and Letters.

Critical theory of comparative literature, including comparative studies in rhetorical theory and discourse analysis.

829 Capstone Seminar in Health and Humanities

Spring. 2(2-0) R: Approval of college. Peer review of master's theses completed or near completion. Recent works in interdisciplinary approaches to health and humanities.

830 Introduction to African American and African Studies I

Fall. 3(3-0) RB: Courses in African American or African Studies. R: Open to students in African American and African Studies.

Varied approaches to the study of African peoples and the origins and evolution of the Black experience in the United States. Critical examination of the social, economic, and cultural conditions of blacks in the United States.

831 Introduction to African American and African Studies II

Spring. 3(3-0) RB: Courses in African American or African Studies. R: Open to students in African American and African Studies.

Comparative examination of the global black experience. Exploration of the intersecting experiences of blacks, Latinos, Asian and Pacific Islanders, and American Indians in the United States.

832 Supervision Seminar in African American and African Studies

Spring. 3(3-0) R: Open only to Ph.D. students in African American and African Studies.

Supervision and mentoring for doctoral students in African American and African Studies who are working with undergraduate students in AL 495.

840 Writing in the Sciences

Fall, Spring, Summer. 2(2-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Natural Science. Administered by Natural Science.

Discussion and critique of students' writing in peer response workshop groups

881 Special Topics in Teaching with Technology in Arts and Humanities

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Familiarity with Macintosh or Windows platform.

Teaching with technology in the arts and humanities. Implications of technology for learning strategies and course design, disciplinary and crossdisciplinary applications of technology, testing on the Web, implications of broader access to knowledge for student research and writing, and distance learning.

890 Independent Study

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of college.

Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.

893 Museum Internship

Fall, Spring, Summer. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with History of Art. Administered by Department of Art and Art History. R: Open only to juniors or seniors or graduate students.

Activities, functions and organization of a museum.

893A Internship in African American and African Studies

Fall, Spring, Summer. 1 to 2 credits. RB: Courses in African American or African Studies. R: Open to students in African American and African Studies.

Field work in an organization or institution in the Black Diaspora. Direct and practical involvement in the community.

898 Master's Research

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course.

Directed research in support of Plan B Master's program requirements

899 Master's Thesis Research-Plan A

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 15 credits in all enrollments for this course.

Directed research leading to a master's thesis, used in partial fulfillment of plan A master's degree requirements.

999 Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 50 credits in all enrollments for this course. Doctoral dissertation research

Doctoral dissertation research.

ASIAN LANGUAGES ASN

Department of Linguistics and Germanic, Slavic, Asian and African Languages College of Arts and Letters

290 Independent Study

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department.

Special projects in an Asian Languages arranged by an individual student and a faculty member in areas supplementing regular course offerings.

291 Special Topics in Asian Languages

Fall. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. Not open to students with credit in ASN 491.

Special topics supplementing regular course offerings proposed by faculty on a group study basis.

401 East Asian Cultures (W)

Fall. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (IAH 211B) and completion of Tier I writing requirement. SA: AL 401

Selected topics in the history and culture of China, Japan, and Korea. Topics vary.

464 Studies in the Literature of Asia and the Asian Diaspora (W)

Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. Interdepartmental with English. P:M: Completion of Tier I writing requirement.

Selected writers, genres, themes, or regions in Asian and Asian diasporic literature.

490 Independent Study

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to juniors or seniors. Approval of department.

Special projects in Asian Languages arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491 Special Topics in Asian Languages

Fall, Spring. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to juniors or seniors. Approval of department. Special topics supplementing regular course

offerings proposed by faculty on a group study basis.

ASTRONOMY AND ASTROPHYSICS

AST

Department of Physics and Astronomy College of Natural Science

101 The Celestial Clockworks Spring. 1(1-0)

Relationship between ancient skylore and timekeeping. Establishment of a calendar and celestial navigation. Development of the Greek horoscope as a time recorder and coordinate system.

207 The Science of Astronomy

Fall. 3(3-0) P:M: (PHY 231 or concurrently or PHY 231B or concurrently or ISP 205 or concurrently or PHY 181B or concurrently or PHY 183 or concurrently or PHY 183B or concurrently or LBS 271 or concurrently or PHY 231C or concurrently) and (MTH 116 or concurrently or MTH 114 or concurrently or LBS 117 or concurrently) Not open to students with credit in AST 201.

In-depth study of one topic in astronomy with emphasis on key discoveries. Topics may be cosmology, the solar system, and the life of stars. Observing with portable telescopes.

301 Junior Research Seminar

Fall, Spring. 1(1-0) P:M: Completion of Tier I writing requirement.

Preparation and presentation of a review paper on a current topic in astronomy or astrophysics.

303 Planetary System Astronomy

Fall of even years. 3(3-0) P:M: (PHY 183 or PHY 193H or PHY 183B) and (MTH 132 or MTH 152H or LBS 118) SA: AST 201

Origin and nature of the solar system. Planets of the solar system and other star systems. Asteroids, meteorites, and comets. Determination of time and celestial coordinates.