ACG 2021 Principles of Financial Accounting (3) BU ACC  
Study of basic accounting principles including the recording and reporting of financial activity. The preparation and interpretation of financial statements.

ACG 2071 Principles of Managerial Accounting (3) BU ACC  
PR: ACG 2021 with a grade of C- or better. A study of the accountant’s role in assisting management in the planning and controlling of business activities.

ACG 3074 Managerial Accounting for Non-Business Majors (3) BU ACC  
Does not count towards major or CPA requirements. Not available for credit for Business majors. The study of the uses of accounting data internally by managers in planning and controlling the affairs of organizations.

ACG 3103 Intermediate Financial Accounting I (3) BU ACC  
PR: ACG 2071 with a grade of C or better, not C-. ACG 2021 with a grade of C or better. Theory and methodology underlying financial reporting, including the FASB’s conceptual framework, the accounting process, financial statements, accounting changes, present value applications, and current assets.

ACG 3113 Intermediate Financial Accounting II (3) BU ACC  
PR: ACG 3103 with a grade of C or better, not C-. Continuation of ACG 3103. Topics covered include property, plant and equipment, intangibles, current liabilities, long-term debt, leases, tax allocation, statement of cash flows.

ACG 3341 Cost Accounting and Control I (3) BU ACC  
PR: ACG 3103 with a grade of C or better, not C-. Deals with cost accounting systems for different entities, cost behavior patterns, cost-volume-profit analysis, relevant information for decision making, and budgets and standard costs for planning and control.

ACG 3401 Accounting Information Systems (3) BU ACC  
PR: ACG 3103 with a grade of C or better, not C-. This course provides students with a basic understanding of well-controlled information systems in a variety of technological environments with added emphasis on the collection, processing, and reporting of accounting information.

ACG 4123 Intermediate Financial Accounting III (3) BU ACC  
PR: ACG 3113 with a grade of C or better, not C-. Theory and practice underlying stockholders’ equity, dilutive securities and EPS, derivatives, revenue recognition, post-retirement benefits, error analysis, full disclosure, and other current accounting topics.

ACG 4351 Cost Accounting And Control II (3) BU ACC  
PR: ACG 3103 and ACG 3341 with a grade of C or better, not C-. Application of the material covered in ACG 3341 with specific emphasis on cost allocations, performance measurements, analysis of current cost accounting systems and accounting in today’s environment (given consideration to the influences of the international environment).

ACG 4632 Auditing I (3) BU ACC  
PR: ACG 3113 and ACG 3401. This course provides a sound conceptual foundation of basic auditing process from the perspective of the public accounting profession. Professional standards, ethics, legal responsibilities, and the utilization of technology are addressed.

ACG 4642 Auditing II (3) BU ACC  
PR: ACG 4632 with a grade of C or better, not C-. Further development of material covered in ACG 4632, with special emphasis on additional reporting topics and audit techniques not previously addressed.

ACG 4901 Independent Study (1-3) BU ACC  
PR: Consent of Director. S/U only. Specialized independent study determined by the students’ needs and interests.

ACG 4911 Independent Research (1-4) BU ACC  
PR: Consent of Director. Individual study contract with instructor and director required. The research project will be mutually determined by the student and instructor.

ACG 4931 Selected Topics In Accounting (1-4) BU ACC  
The course content will depend on student demand and instructor’s interest.

ACG 5205 Advanced Financial Accounting (3) BU ACC  
PR: ACG 3113 Accounting for business combinations, preparation of consolidated financial statements, home office/branch relationships, foreign operations and transactions, partnerships.

ACG 5505 Governmental/Not-For-Profit Accounting (3) BU ACC  

ACG 5675 Internal and Operational Auditing (3) BU ACC  
PR: ACG 3113 and ACG 3401. CR: ACG 4632. The objective of Internal and Operational Auditing is to provide students with an opportunity to learn about the theory and practice of internal and operational auditing and to apply relevant audit principles and techniques to selected audit problems.

ADE 4384 Working With The Adult Learner (3) ED EDV  
An investigation of the needs of the adult learner. Identification of principles of adult learning; physiological, psychological, and social characteristics of adult learners, and corresponding implications are explored.

ADV 3008 Introduction to Advertising (3) AS COM  
PR: MMC 2100 and MMC 3602. A study of the structures, functions, and persuasive language of advertising in mass media with attention to social, political, economic, and legal aspects.

ADV 3101 Advertising Creativity (3) AS COM  
PR: ADV 3008 and ECO 1000. Study of copywriting and art direction in the creation of advertising messages for alternative media platforms. Restricted to majors only.

ADV 3103 Radio-Television Advertising (3) AS COM  
PR: ADV 3008. An intensive study and analysis of radio and television for advertising purposes, including copywriting, script and storyboard preparation, time buying and selling techniques, audience research methods, and basic production concepts.

ADV 3200 Advertising Design (3) AS COM  
PR: ADV 3008 (for advertising sequence majors) or VIC 3001 (for other Mass Comm majors). Application of graphic design principles to various areas of advertising. Combining visual and verbal elements effectively.

ADV 3300 Advertising Media Strategy (3) AS COM  
PR: ADV 3008 and ECO 1000. Problems, techniques, strategy of media research, planning, budgeting and effective utilization in advertising.

ADV 3500 Advertising Research (3) AS COM  
PR: ADV 3008. Overview of scientific research methods as used in advertising. Emphasis on the acquisition, analysis,
and evaluation of primary and secondary data, and the principles of survey and experimental research.

**ADV 3700 Retail Advertising Planning and Execution (3) AS COM**
PR: ADV 3008 and ADV 3101. A study of retail advertising, including management decisions, processes, procedures, media planning, production techniques, and problems affecting the development of advertising to fulfill retail objectives.

**ADV 4204 Advanced Advertising Creativity (3) AS COM**
PR: ADV 3101, ADV 3300, ADV 3500, ADV 4600, ECO 1000, MAR 3023. Focused on producing advertising messages, the curriculum integrates: ethics, branding, consumer insight, message strategy, concepting, persuasion, copywriting, design, and presentations. Students learn to execute effective advertising messages.

**ADV 4301 Advanced Media Strategy (3) AS COM**
PR: ADV 3101, ADV 3300, ADV 3500, ADV 4600, ECO 1000, MAR 3023. Emphasizing decision making and critical thinking, this advanced course prepares students for the complexities of advertising media planning, implementation, and evaluation.

**ADV 4310 Digital Media (3) AS COM**
PR: ADV 3101, ADV 3300, ADV 3500, ADV 4600, ECO 1000, MAR 3023. This course focuses on the impact of new communication technologies on consumer behavior and advertising practice. Students will learn the nature of digital media options and how to incorporate them into advertising planning.

**ADV 4600 Advertising Management (3) AS COM**
PR: ADV 3008, ADV 3101, ADV 3300. Application of analytical planning concepts to advertising planning and decision-making. Case study method used to explore advertising and promotional programs; media and creative strategies; consumer, retail, industrial, and public service applications.

**ADV 4710 Portfolio Building (3) AS COM**
PR: ADV 3101, ADV 3300, ADV 3500, ADV 4600, ECO 1000, MAR 3023. This course goes beyond the basics of copy and layout to develop a broader understanding of the creative advertising process. It stresses creativity and organizational ability in portfolio building, along with technical skills in portfolio production.

**ADV 4800 Advertising Campaigns (3) AS COM**
PR: ADV 3101, ADV 3300, ADV 3500, ADV 4600, ECO 1000, and MAR 3023. Advanced advertising course requiring planning and production of complete general advertising campaign, including research, production methods, budgeting, and media schedules.

**ADV 4940 Advertising Practicum (1) AS COM**
PR: CI. For advertising sequence majors. S/U only. Practical experience outside the classroom where the student works for academic credit under the supervision of a professional practitioner. Periodic written and oral reports to the faculty member coordinating the study.

**AFA 2000 Introduction to the Black Experience [In Africa and Its Diaspora] 6A AF CASB (3) AS AFA**
Fundamental perspectives on the nature and significance of the Black Experience in Africa and black communities in the Americas.

**AFA 2380 History and Theory of Genocide CAGC (3) AS AFA**
This course examines the concept of genocide; its origins in human history and the evolution of international law aimed at defining and criminalizing genocide.

**AFA 4150 Africa and the United States 6A SS HP AF (3) AS INT**
An examination of the historical and current political, economic, and cultural relations between the United States and Africa.

**AFA 4313 Black English MW (3) AS AFA**
PR: Junior or Senior standing. This course focuses on linguistic patterns among African Americans in the U.S., South and Central America, and the Caribbean. It examines language in relation to issues of domination, social stratification, economics and political empowerment.

**AFA 4331 Social Institutions and the African American Community (3) AS AFA**
A study of social institutions as they relate to the African American community, with emphasis on social systems operating within and on the African American community.

**AFA 4333 The African Diaspora: Blacks in the Construction of the Americas MW (3) AS AFA**
PR: Junior or Senior standing. This course will examine the historical and geographical distribution of Africans in the diaspora and the political and economic roles they have played in the development of the Western world, with a focus on America. The course takes an interdisciplinary approach. The course is not restricted to majors and is not repeatable for credit.

**AFA 4335 Black Women in America 6A MW CPST (3) AS AFA**
An interdisciplinary survey of the contemporary experience of black women in America, including the African roots, myths, and realities surrounding that experience.

**AFA 4350 African American Community Research MW (3) AS AFA**
This interactive, field experience course introduces students to active and applied research methodologies and the uses of this research in Black urban communities.

**AFA 4500 Slavery in the Americas and the Caribbean MW (3) AS AFA**
This course examines the institution of enslavement in North, South, and Central America, and the Caribbean. It takes an interdisciplinary approach in exploring the social, political, and economic underpinnings of slavery.

**AFA 4502 Middle Passage MW AF HP (3) AS AFA**
The Middle Passage focuses on the trafficking of African peoples from Africa to destinations in the Americas and Europe. Emphasis is placed on the capture, detention, and transport of Africans, and their response to the experience.

**AFA 4900 Directed Readings (2-3) AS AFA**
PR: CI. Independent readings in a particular area of African and African American Studies, selected by student and instructor.

**AFA 4931 Selected Topics in Africana Studies (1-3) AS AFA**
Topics offered are selected to reflect student needs and faculty interests. In depth study in such areas as the Black Student and the American Educational Process; the Black Experience in the Americas; European Expansion in Africa to 19th century; Contemporary Economic Problems in Africa.

**AFA 5935 Issues in Africana Studies (1-4) AS AFA**
Variable topics course focusing on the history, culture, and lived experiences of Africans, African American, and/or
AFR 1101 The Foundation of the United States Air Force Pt 1 (1) US AFR
Intro Air Force Reserve Officer Training Corps (AFROTC) & US Air Force (USAF) includes lessons in officerhood/professionalism and an intro to communication skills. AFR 2001 Lead Lab augments course providing followership and leadership experiences.

AFR 1120 The Foundations of the United States Air Force Pt 2 (1) US AFR
A study of Air Force installations, Core Values, Leadership, Team Building, and Diversity within Armed Forces. AFR 2001 Lead Lab augments course providing followership and leadership experiences, utilizing leadership and management principles.

AFR 1903 Directed Independent Studies (1-4) US AFR
PR: DPR Directed Independent Study.

AFR 2000 Enhanced Physical Fitness Training (0) US AFR
Required of all students in AFR 2000-, 3000-, and 4000-level classes. It meets twice per week for 1 and 1/2 hours. Concentrates on motivational physical fitness, healthy lifestyle and cadet esprit.

AFR 2001 Air Force ROTC Leadership Laboratory (0) US AFR
Leadership Laboratory is required for each of the Aerospace Studies courses. It meets one hour and 45 minutes per week. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student’s leadership potential. Leadership Laboratory involves a study of Air Force customs and courtesies; drill and ceremonies; career opportunities in the Air Force; and the life and work of an Air Force junior officer. Students develop their leadership potential in a practical laboratory, which typically includes field trips to Air Force installations.

AFR 2130 The Evolution of USAF Aerospace Power Part I (1) USAFR
CR: AFR 2000, AFR 2001. A study of air power from balloons and dirigibles through the jet age. Emphasis is on the employment of air power in WWI and WWII and how it affected the evolution of air power concepts and doctrine.

AFR 2140 The Evolution of USAF Aerospace Power Part 2 (1) USAFR

AFR 3220 Air Force Leadership and Management - I (3) US AFR
CR: AFR 2000, AFR 2001. An integrated management course emphasizing the individual as a manager in an Air Force milieu. The individual motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for the development of the junior officer’s professional skills as an Air Force officer (officership). The basic managerial processes involving decision making, utilization of analytic aids in planning, organizing, and controlling in a changing environment are emphasized as necessary professional concepts.

AFR 3231 Air Force Leadership and Management - II (3) US AFR
CR: AFR 2000, AFR 2001. A continuation of the study of Air Force advancement and leadership. Concentration is on organizational and personal values, management of forces in change, organizational power, politics, and managerial strategy and tactics are discussed within the context of the military organization. Actual Air Force cases are used to enhance the learning and communication processes.

AFR 4201 National Security Affairs & Preparation for Active Duty I (3) US AFR

AFR 4211 National Security Affairs & Preparation for Active Duty II (3) US AFR
CR: AFR 2000, AFR 2001. Cont study national sec proc, reg stud Europe, Mid East, Russia (former Soviet Republics), perform feedback, effective performance report writing, enl/off eval sys, ops risk mngmt to prep students for active duty.

AFS 2250 Culture and Society in Africa 6A AF (3) AS AFA
Topics include: African religion, value systems, art and the aesthetics, family and life-cycle, impact of Islam and Christianity and conflict of cultures.

AFS 3153 African Literature Survey 6A LW (3) AS AFA
PR: Junior or Senior standing. Explore the socio-historical, philosophical and political dynamics of African cultures through the study of African oral literature and the reading of African literary texts of various genres.

AFS 3251 Environmental - Cultural Study in Africa SS FA AF (3) AS AFA
PR: AFS 2250 or CI. Study tour. A study of traditional African society and culture, the relationship between life and the environment, and the impact of modernization on the culture and the environment.

AFS 4910 Individual Research (1-3) AS AFA
PR: CI, Department approval. 2000 level introductory course. Course consists of advanced undergraduate research on Africana Studies topic selected by student and professor. Topics vary. The course allows students to develop research skills and independent work discipline.

AMH 2010 American History I HP CAHU HHCP (3) AS HTY
This class is an introductory survey of American history from Columbus and “First Contact” to Reconstruction.
AMH 2020 American History II HP CAHU HHCP (3) AS HTY  
A history of the United States with attention given to relevant developments in the Western Hemisphere from 1877 to the present.

AMH 3110 American Colonial History to 1750 (4) AS HTY  
A study of the evolution of American society from the Age of Reconnaissance to 1750. Attention is given to the transformation from colonies to provinces with emphasis on ethnocultural conflict, religion, labor systems, and political culture.

AMH 3130 The American Revolutionary Era (4) AS HTY  
Emphasis on the causes of the American revolution, the nature of Constitution-making, and the establishment of the federal system. Also examines the significance of loyalty, violence, and slavery in American society from 1750-1789.

AMH 3140 The Age of Jefferson (4) AS HTY  
A comprehensive study of American society and political culture from 1789-1828. Focuses on demographic trends, party systems, expansionism, Indian policy, labor, and ethno-cultural conflicts.

AMH 3160 The Age of Jackson (4) AS HTY  
The United States from 1828-1850, with emphasis on social and political conflict. Consideration of evangelicalism, reform, labor movements, urbanization, and political activity in the antebellum era.

AMH 3170 The Civil War and Reconstruction (4) AS HTY  
An examination of political, social, and economic climate of the 1850’s that led to the American Civil War. The course does focus upon the war itself in its military, diplomatic, and political consequences through the end of the Reconstruction (1877).

AMH 3201 The United States, 1877-1914 (4) AS HTY  
A study of America from the end of Reconstruction to World War I. Ranging over political, social, and international developments, the course covers industrialization, immigration, unions, reform, feminism, race relations and imperialism.

AMH 3231 The United States, 1914-1945 (4) AS HTY  
The United States from World War I to the end of World War II. Covering political, social and international developments, the course examines the lives of Americans, including minorities and women, during war, prosperity, and the Great Depression.

AMH 3270 The United States since 1945 (4) AS HTY  
A study of America’s role in the Cold War, in Vietnam, and in the post-Cold War era. Also examines domestic developments, such as the consumer culture, protest movements, and abuses of political power.

AMH 3403 The South since 1865 (4) AS HTY  
Southern history since the surrender at Appomattox. Topics covered include Reconstruction, the Populist revolt, race relations, demagoguery and disfranchisement, Southern women, and the Civil Rights Movement.

AMH 3421 Early Florida (4) AS HTY  
A history of colonial Florida under the Spanish and English. Florida as an area of discovery, colonization, and imperial conflict; the emergence of Florida within the regional setting.

AMH 3423 Modern Florida (4) AS HTY  
An historical survey of Florida from the territorial period to the modern era. An examination of the social, political, and economic changes occurring in Florida between 1821 and the 1980s.

AMH 3500 American Labor History (4) AS HTY  
A study of American workers from the colonial period to the present. Examines the changing nature of work, its effects on workers (including minorities and women), and their responses as expressed in strikes, unions, and political action.

AMH 3510 U.S. Diplomatic History to 1898 6A (4) AS HTY  
The development of American Foreign Relations in the Agricultural era.

AMH 3511 U.S. Diplomatic History in the 20th Century (4) AS HTY  
A history of American Foreign Relations in the Industrial era.

AMH 3530 Immigration History (4) AS HTY  
A study of the composition and character of the “American” people with emphasis on the period from 1840s to the 1920s. Examines old world backgrounds of immigrants and their responses to the new world’s social, economic and political conditions.

AMH 3540 United States Military History (4) AS HTY  
A study of American military policy and practices from colonial days to the present. Attention is given both to tactics and to strategy in the unfolding formulation and development of American armed might.

AMH 3545 War and American Empire (4) AS HTY  
The U.S. evolved in 200 years from 13 colonies to the number one power in the world. To achieve this goal we utilized war to achieve empire. This course will examine the link between American War and empire from the Revolution through Viet Nam.

AMH 3561 American Women I (4) AS HTY  
A study of women in the evolution of American society from European origins to 1877. Women’s roles in the family, economy, politics, wars, and reform movements will be examined.

AMH 3562 American Women II (4) AS HTY  
A study of women in the evolution of American society from 1877 to the present. Women’s roles in the family, economy, politics, immigration, wars, religion and reform movements will be examined.

AMH 3571 African American History to 1865 HP CAHU HHCP (3) AS AFA  
This course surveys the history of people of African-descent in the U.S. from the beginning of the Atlantic Slave Trade to 1865. Major topics include the rise & fall of slavery, ethnic & racial identities, resistance, gender, culture, and community.

AMH 3572 African American History since 1865 HP CAHU HHCP (3) AS AFA  
This course explores the history of African Americans since 1865. Major topics include the struggle for equality, class and gender dimensions of the Black freedom struggle, and the varied approaches in the fight against oppression and inequality.

AMH 4601 Early American History and Archaeology (6) AS HTY  
This course is a five week long summer practicum in early American historical archaeology. The class brings together historical research, material culture studies, and historical
AML 3031 American Literature From the Beginnings to 1860 (3) AS ENG
A study of representative works from the period of early settlement through American Romanticism, with emphasis on such writers as Cooper, Irving, Bryant, Hawthorne, Emerson, Melville, Thoreau, and Poe, among others.

AML 3032 American Literature From 1860 to 1912 (3) AS ENG
A study of representative works of selected American Realists and early Naturalists, among them Whitman, Dickinson, Twain, James, Howells, Crane, Dreiser, Wharton, Robinson, Dunbar, and Johnson.

AML 3051 American Literature From 1912-1945 (3) AS ENG
A study of poetry, drama, and fiction by such writers as Pound, Stein, Fitzgerald, Hemingway, Faulkner, Porter, Toomer, Cummings, Williams, Anderson, Steinbeck, Wright, West, Stevens, Henry Miller, and others.

AML 3413 Historical Perspectives in Early American Literature HP (3) AS ENG
Examines American literature from the Colonial Period to the Civil War as a manifestation of geographical, political, social, and intellectual forces. Will not be counted toward the English major.

AML 3604 African American Literature 6A LW WRIN (3) AS ENG
A study of black American literature from the nineteenth century to the present, including the works of such writers as W.E.B. DuBois, Jean Toomer, Langston Hughes, Richard Wright, Ralph Ellison, LeRoi Jones, and Nikki Giovanni.

AML 3630 U.S. Latino/Latina Literature in English (3) AS ENG
PR: ENC 1101 and ENC 1102. This 3000-level literature course surveys American English literature by Latino/Latina writers (with Spanish American ancestry). Authors may include Piri Thomas, Sandra Cisneros, Esmeralda Santiago, Luis Valdez, Tomas Rivera, Oscar Hijuelos, etc.

AML 4111 Nineteenth-Century American Novel (3) AS ENG
A study of the American novel from its beginnings through 1900, including such novelists as Cooper, Hawthorne, Melville, James, Twain, Crane, and Dreiser, among others.

AML 4121 Twentieth-Century American Novel (3) AS ENG
A study of major trends and influences in American prose fiction from 1900 to the present, including works by such writers as Hemingway, London, Wharton, Fitzgerald, Faulkner, West, Mailer, Bellow, Ellison, Donleavy, Updike, Vonnegut, and others.

AML 4261 Literature of the South (3) AS ENG
A study of the major writers of the Southern Renaissance, including writers such as Faulkner, Wolfe, Caldwell, Hellman, McCullers, O’Connor, Warren, Styron, Tate, Davidson, and Dickey.

AML 4300 Selected American Authors (3) AS ENG
The study of two or three related major authors in American literature. The course may include such writers as Melville and Hawthorne, Hemingway and Faulkner, James and Twain, Pound and Eliot, Stevens and Lowell, etc. Specific topics will vary. May be taken twice for credit with different topics.

AML 4303 Zora Neale Hurston: Major Works 6A MW LW (3) AS AFA
PR: Junior or Senior standing. The course focuses on the life, works, and times of Zora Neale Hurston as a major Harlem Renaissance figure and a renown Florida writer.

AML 4624 Black Women Writers 6A LW (3) AS AFA
Black women writers focuses on the literature of women of Africa and the African Diaspora. It examines the social, historical, artistic, political, economic, and spiritual lives of Africana women in context of a global community.

AMS 2030 Introduction to American Studies SS HP CAHU HHCP (3) AS AMS
An overview of American Studies, the interdisciplinary study of American culture. Analysis of the arts and literature, including music; social issues; popular culture; material culture; cultural diversity; and social change.

AMS 2201 Colonial American Culture HP (3) AS AMS
An examination of cultural patterns in America as they developed between 1600 and 1780 with an emphasis on the texture of everyday life.

AMS 2212 Nineteenth-century American Culture HP (3) AS AMS
An examination of cultural patterns in America from 1776 to 1900 with an emphasis on the texture of everyday life.

AMS 2270 Twentieth-century American Culture HP CAHU HHCP (3) AS AMS
An examination of cultural patterns in America from 1900 to the present with emphasis on the texture of everyday life.

AMS 2363 Issues in American Civilization (1-4) AS AMS
An examination of selected topics such as natural environment and the quality of life, sports and American society, popular music, American communities, vigilante tradition, jazz music, role of the family, American success myth, youth in America. Topic varies.

AMS 3001 American Culture 1880-1915 6A HP (4) AS AMS
Integration of major aspects of American life between the 1880s and World War I.

AMS 3210 Regions of America HP (4) AS AMS
The pattern of American culture as revealed through an examination of selected writings and other pertinent materials dealing with selected American regions. Topic varies.

AMS 3230 America During the 1920s and 1930s 6A CAHU (3-4) AS AMS
Course provides an interdisciplinary examination of American culture during the turbulent interwar years, 1919 through 1941. Students will examine how the arts, advertising, fashion, and social behavior registered changing cultural values.

AMS 3260 American Culture, 1830-1860 6A HP (4) AS AMS
Examines the patterns of American culture in the years leading up to the Civil War. Topics include religion and social reform, race relations, and the impact of industrialization.

AMS 3302 Architecture and the American Environment (3) AS AMS
By means of slides, lectures and discussion, this course examines 350 years of American architectural history. Architectural styles, aesthetics and the relation between a building and its social environment are stressed.
ANG 5395 Visual Anthropology (3) AS ANT
This course will identify the myths surrounding Southern women, discern their sources and purposes, and contrast them with history.

AMS 3700 Racism in American Society SS HP CASB (3) AS AMS
This course will help students understand the extent and causes of racism, anti-Semitism and prejudice in the U.S. They will learn how prejudice arises, the roots of racism, and its effects on society using lectures and videos.

AMS 3930 Selected Topics in American Studies (1-4) AS AMS
Offerings include Cultural Darwinism in America, America Through Foreign Eyes, and The Female Hero in American Culture.

AMS 4152 Film in American Culture (3) AS AMS
Surveys the contributions to the American culture of major films from the perspectives of genres and styles, critical methodologies and theories. Variable topics such as: region, subject, or period of time. Repeatable up to 9 credit hours with change of topic.

AMS 4804 Major Ideas in America MW CPST (3) AS AMS
Investigates the role of one or more influential ideas in American culture, for example: individualism, identity, community, dissent, reform, utopianism, democracy. Emphasizes the critical analysis of a variety of primary texts. Topic varies.

AMS 4910 Individual Research (1-4) AS AMS
The content of the course will be governed by student demand and instructor interest. Instructor approval required prior to registration.

AMS 4930 Selected Topics in American Studies (1-4) AS AMS
PR: Senior in American Studies or CI. Offerings include the social implications of American painting, Technology in Twentieth Century America, American Environmental Problems, Popular Culture in America, American Military Experience, and Labor in America.

AMS 4935 Senior Seminar in American Studies (4) AS AMS
PR: Senior in American Studies or CI.

AMS 4940 Internship in American Studies (1-2) AS AMS
A structured, out-of-class learning experience designed to provide first-hand, practical training in careers related to American Studies. Restricted to American Studies majors. Repeatable up to 4 credit hours.

ANG 5486 Quantitative Methods in Anthropology (3) AS ANT
PR: Graduate Standing. This course is an introduction to quantitative methods for the anthropologist covering both classical statistical approaches and exploratory data analysis, using computers with statistical software.

ANG 5901 Directed Reading (1-4) AS ANT

ANG 5910 Individual Research (2-4) AS ANT
PR: DPR. Contract required prior to registration. S/U. Individual guidance in selected research project.

ANG 5937 Seminar In Anthropology (2-4) AS ANT
PR: Senior or GS. Topics to be chosen by students and instructor.

ANT 2000 Introduction to Anthropology SS AF CASB (4) AS ANT
The cross-cultural study of the human species in biological and social perspective. Surveys the four major branches of anthropology: physical anthropology, archaeology, linguistic anthropology, and cultural anthropology.

ANT 2410 Cultural Anthropology SS AF CAGC (3) AS ANT
Students are exposed to methods and concepts for cross cultural study of the world’s peoples. Case studies demonstrate variations in human adaptation and encourage an understanding of and appreciation for diverse cultures and their values.

ANT 2511 Biological Anthropology NS CANL (3) AS ANT
This is an overview of biological anthropology. It covers areas such as evolutionary theory and genetics (critical thinking and scientific process), human variation (diversity), and epidemiology (environment). It also has a historical component.

ANT 2511L Biological Anthropology Laboratory (1) AS ANT
CR: ANT 2511 This is a lab companion to an overview of biological anthropology. The students will be doing laboratories which are relevant to the class topics covered in the lecture hall in ANT 2511.

ANT 3005 The Anthropological Perspective AF (3) AS ANT
For non-anthropology majors only. May not be counted for credit toward an anthropology major. Presents the basic concepts of anthropology as they are relevant to contemporary life. Aims at enabling the student to understand the anthropologist’s cross-cultural view of the human species as adapting through biosocial means to life on this planet.

ANT 3101 Archaeology SS CAGC HHCP (3) AS ANT
PR: ANT 2000 recommended for Anthropology Majors/Minors. Focuses on critical thinking about the past, archaeological research. Methods, theory, web resources, and scientific analysis in the study of world prehistory, from human origins to modern times.

ANT 3610 Anthropological Linguistics SS (3) AS ANT
The comparative study of language in its cultural context, especially emphasizing the role of language in the cultural interpretation of physical and social reality.

ANT 4012 Fantastic Archaeology MW (3) AS ANT
PR: Junior standing or above. Mysteries including the Lost Continent of Atlantis, Ancient Astronauts, Piltdown Man, Psychic Archaeology, Noah’s Ark, and the Shroud of Turin
will be examined, while emphasizing skills in critical thinking that have much wider practical applications.

**ANT 4014 Anthropology of American Culture (3) AS ANT**
PR: ANT 2410 This course examines American culture from an anthropological perspective. Various sources and methods will be used in formulating our portraits including readings, films, fieldwork, and personal experiences.

**ANT 4034 Theories of Culture (3) AS ANT**
PR: Senior standing with major in anthropology or DPR. The major concepts that form the anthropological view of humanity are viewed in historical perspective. Basic ideas of the western philosophical tradition are analyzed from the Greeks to the 19th century when they became incorporated into the new discipline of anthropology. 20th century anthropological developments on these themes are considered.

**ANT 4142 Old World Archaeology (3) AS ANT**
PR: ANT 3101 or DPR. The archaeology of Europe, Asia and Africa, from the earliest humans through the emergence of state-level societies in many parts of the Old World. The course will focus on comparative aspects of economic, social, political, and religious organization in the prehistoric Near East, Egypt, China, the Aegean, Europe and Africa.

**ANT 4143 European Archaeology (3) AS ANT**
PR: ANT 3101 or DPR. The archaeology of Europe, from the first Paleolithic inhabitants to the fall of Roman civilization. The course will focus on ancient material culture while emphasizing social and economic questions such as the emergence of modern humans, the adoption of agriculture, the development of complex societies, and the rise of civilization.

**ANT 4147 Environmental Archaeology (3) AS ANT**
PR: ANT 3101 or DPR. This course examines environmental constraints on ancient human societies, and how human activities have impacted the environment in the last several thousand years. Presentation of the methods used to reconstruct prehistoric environments will be followed by case studies from Florida, Central and South America, Easter Island, the Mediterranean and the Near East.

**ANT 4153 North American Archaeology (3) AS ANT**
PR: ANT 3101 or DPR. An examination of the evidence regarding the human settlement of North America from its beginnings through the development of aboriginal culture to the period of European conquest. Emphasis on the comparative study of material culture at selected sites from all time periods. No field work is involved.

**ANT 4158 Florida Archaeology (4) AS ANT**
PR: ANT 3101 or DPR. Culture history and culture process over 10,000 years from the time of the first people in Florida (Paleo-Indians) through the elaborate Weeden Island and Safety Harbor burial and temple mound cultures to the Spanish entrada and consequences of European conquest. Review of temporal and spatial relationships within the entire eastern U.S. and elsewhere. May be part of a summer (or other semester) field school, combined with Field Methods in Archaeology and Laboratory Methods in Archaeology.

**ANT 4163 Mesoamerican Archaeology (3) AS ANT**
PR: ANT 3101 or DPR. The chronological sequence from its beginnings through Protohistoric development is described and analyzed. Cultures such as the Maya, Aztec, Mixtec, Zapotec, Olmec, and Toltec are included, with emphasis on the environmental setting and the relationship between cultural ecology and the growth of civilization.

**ANT 4165 South American Archaeology (3) AS ANT**
PR: ANT 3101 or DPR. Describes and analyzes the sequence of cultural development in prehistoric South America. Cultures such as the Inca, Chavin, Moche, Wari, Chimú are included. Emphasis on the environmental setting and the relationship between cultural ecology and the growth of civilization.

**ANT 4172 Historical Archaeology MW (3) AS ANT**
PR: ANT 3101 or DPR. A survey and analysis of archaeology focused on the historic period. Laboratory research with data recovered from historic sites in addition to class work.

**ANT 4180 Laboratory Methods in Archaeology (2-4) AS ANT**
PR: ANT 3101 or DPR. Data and materials recovered from archaeological survey and excavation are processed in the laboratory; includes artifact cleaning, cataloguing, identification, and analysis; soil flotation; reconstruction and conservation of artifacts, mapmaking, etc. May be offered as part of a summer (or other semester) field session. May be combined with Florida Archaeology and Field Methods in Archaeology.

**ANT 4181 Museum Methods (4) AS ANT**
PR: ANT 3101 and DPR. Design, preparation and installation of exhibits in the Department of Anthropology Teaching Exhibit Gallery. Emphasis on theory, research, design, and construction. Discussion of museum-related issues such as administration and curation.

**ANT 4183C Archaeological Science (4) AS ANT**
PR: ANT 3101 or DPR. Focuses on cross-cultural methods and techniques regarding the collection, classification, and analysis of such materials as myths, jokes, games, and items of material culture. Oceanic and Native American societies are surveyed.

**ANT 4241 Anthropology of Religion 6A MW WRIN (3) AS ANT**
PR: ANT 2000, ANT 2410. The cross-cultural study of the symbols of belief will be considered. Ritual behavior, religious practitioners, and religious activities in traditional and modern societies will be discussed. Ritual behavior, religious practitioners, and symbols of belief will be considered.

**ANT 4231 Folklife 6A (3) AS ANT**
PR: ANT 2410 or DPR. Focuses on cross-cultural methods and techniques regarding the collection, classification, and analysis of such materials as myths, jokes, games, and items of material culture. African (or African-derived), Oceanic and Native American societies are surveyed.

**ANT 4241 Anthropology of Religion 6A MW WRIN (3) AS ANT**
PR: ANT 2000, ANT 2410. The cross-cultural study of the social and cultural aspects of religion will be explored. Religious activities in traditional and modern societies will be discussed. Ritual behavior, religious practitioners, and symbols of belief will be considered.

**ANT 4285 Oral History (3) AS ANT**
PR: ANT 2410 or DPR. A survey of the history, methods, and current applications of oral history research, primarily in the anthropological study of culture, but with reference to allied disciplines. Students will become familiar with oral history through intensive analysis of selected case studies as well as guided field projects.

**ANT 4302 Gender in Cross-Cultural Perspective MW CPST HHCP (3) AS ANT**
PR: an anthropology or a women's studies class. Examines roles of women, men, other genders and social, economic,
and political aspects of sex and gender, from a biocultural, 4-field anthropological perspective, emphasizing non-Western societies and cross-cultural comparison in past and present.

**ANT 4312 North American Indians (3) AS ANT**
PR: ANT 2410 or DPR. An examination of the evidence for the origin and antiquity of human beings in North America and of patterns of regional development until the period of contact with European colonists. Emphasis on varieties of ecological adaptation, social, political and religious systems, enculturation and worldview, folklore and visual art.

**ANT 4316 Ethnic Diversity in the United States MW (3) AS ANT**
PR: ANT 2410 or DPR. Special concerns include ethnic diversity in American society, historical and contemporary diversity in values, experiences, and lifestyles, and an examination of policies and problems affecting ethnic groups in the United States.

**ANT 4323 Mexico and Central America (3) AS ANT**
PR: ANT 2410 or DPR. Restricted to Anthropology majors, LACS certificate students, juniors and seniors only. Focuses on the history, contemporary values and interpersonal relationships, and patterns of rural and urban life in Mesoamerica. Guatemala and Mexico are emphasized.

**ANT 4340 The Caribbean 6A MW (3) AS ANT**
PR: ANT 2410 or DPR. Restricted to junior and senior CAS majors. Main themes include: the depopulation of the aboriginal population and the resettlement of the area via slavery, indenture, and migration; contemporary ethnic heterogeneity; economic problems of Third World microstates; development of a modern social and political consciousness. Religious diversity, music, the graphic arts, and the literature of the contemporary Caribbean will also be surveyed.

**ANT 4390 Visual Anthropology (3) AS ANT**
PR: ANT 2410 and DPR. The use of photographic techniques for the cross-cultural recording and analysis of human activities. The study of ethnographic photography as both art and science, and the production of an anthropological study that expresses the goal of “visual literacy.” Review and evaluation of the uses of visual techniques and the evidence they provide to the social scientist.

**ANT 4401 Exploring Cross-Cultural Diversity MW CPST (3) ASANT**
This course will address a variety of challenging issues related to the general topic of cross-cultural diversity in contemporary American life.

**ANT 4403 Environmental Anthropology (3) AS ANT**
PR: ANT 2410 or DPR. Explores cultural, social, political, and economic dimensions of contemporary environmental problems. Emphasis placed on the links between local-level environmental degradation and broader regional and global forces.

**ANT 4432 The Individual and Culture 6A MW (3) AS ANT**
PR: ANT 2410 or DPR. The relationship between the individual and society is studied cross-culturally. Main themes include child-rearing practices, psychosomatic illness and curing. Discussion of theories and models of personality development with special reference to their applicability to the emerging field of cross-cultural mental health planning.

**ANT 4442 Urban Life and Culture (3) AS ANT**
PR: ANT 2410 or DPR. The cross-cultural study of urbanization, urbanism and human problems associated with metropolitan environments. Emphasis on the ethnography of city life and its relationship to the practical applications of urban research.

**ANT 4462 Health, Illness, and Culture (3) AS ANT**
PR: ANT 2410 or DPR. The study of health and human behavior in cross-cultural perspective. Main themes include: the impact of disease on the development of human culture; comparative studies of curing practices; medical systems in their relationship to ideology. Emphasis on understanding the role of medicine, and the behavior of both practitioners and patients in modern societies.

**ANT 4495 Methods in Cultural Research (3) AS ANT**
PR: DPR. Restricted to juniors and seniors. The stages in the development and execution of ethnological research are discussed and practiced. Literature search, hypothesis formulation, selection of data collection techniques, elicitation of information, data analysis, and report presentation are stressed. Research design models from the case literature are studied and supervised research in the local community is designed and carried out.

**ANT 4516 Human Variation (3) AS ANT**
PR: ANT 2511 or DPR. An overview of evolution and biological variations of human races. Anatomical, morphological, and physiological patterns are surveyed geographically. Cultural influences on racial biology are explored.

**ANT 4520C Forensic Anthropology (4) AS ANT**
PR: ANT 2511 or DPR. This course is designed to familiarize students with forensic anthropology through lectures and lab work. Students will learn human skeletal biology for personal identification and cause of death. This course is restricted to majors and is not repeatable.

**ANT 4586 Prehistoric Human Evolution NS (3) AS ANT**
PR: ANT 2511 or DPR. A survey of the fossil record from the early primates through the ascent of Homo sapiens sapiens, focusing on the human lineage. Biosocial patterns and cultures of the past are also covered.

**ANT 4620 Language and Culture 6A (3) AS ANT**
PR: ANT 3610 or DPR. Examines the relationships between language and culture in cross-cultural perspective. Explores the extent to which languages shape the world views of their speakers. Emphasis on the nature and degree of fit between linguistics and other cultural systems of knowledge.

**ANT 4701 Applied Anthropology (3) AS ANT**
PR: ANT 2410 or DPR. A review of approaches applying the anthropological perspective to contemporary human problems. Particular emphasis placed on public policy issues in United States society. Discussion of the historical development of applied anthropology, problems of economic development of the Third World, and the ethics of applied research and intervention.

**ANT 4750 Language and Social Interaction 6A (3) AS ANT**
PR: ANT 3610 or DPR. Examines the role of language and other modes of communication in the social settings of speech communities. Student field projects focus on the
cross-cultural description and analysis of patterns of communication in ethnographic contexts.

**ANT 4824 Archaeological Field Methods (4-12) AS ANT**
PR: ANT 3101 and DPR. Offered as all or part of a summer (or other semester) field session. May or may not be combined with Florida Archaeology and Laboratory Methods in Archaeology. Students learn appropriate methods of archaeological survey, excavation, data and materials recovery, recording, and processing.

**ANT 4901 Directed Reading (1-4) AS ANT**

**ANT 4905 Individual Research (2-4) AS ANT**
PR: DPR. S/U only. Individual guidance in a selected research project. Contract required prior to registration.

**ANT 4930 Special Topics in Anthropology (2-4) AS ANT**
PR: Variable depending on topic or DPR. Topics to be chosen by students and instructor permitting newly developing disciplinary special interests to be explored.

**ANT 4932 Honors Seminar (4) AS ANT**
PR: Admission to the honors program in anthropology and DPR. Seminar designed to provide the honors student with an opportunity to present, discuss and defend his/her own research and to explore in-depth topics in several areas of anthropology.

**ANT 4935 Rethinking Anthropology 6A (3) AS ANT**
PR: Anthropology Major/Minor. This course is the senior seminar in anthropology. The objectives are to reflect upon and integrate major material covered in previous courses, to reflect upon the status on the discipline of anthropology, and to allow students to determine where they see themselves within the discipline. We will reflect upon the four fields of anthropology and ethics, as well as key issues such as evolution, race, and culture, and students are encouraged to integrate their knowledge from previous classes.

**ANT 4940 Directed Internship Including Practicum (2-4) AS ANT**
PR: DPR. S/U only. Individual guidance in a selected internship. Contract required prior to registration. Majors and non-majors. May be repeated for credit; max 6 total hours.

**ANT 4970 Honors Thesis (3) AS ANT**
PR: Admission to the honors program, completion of the honors seminar and DPR. S/U only. The student under the supervision of a faculty member will formalize, conduct, analyze, and report in writing a research project in anthropology.

**APK 4136 Exercise Prescription for Strength & Conditioning (3) MEATH**

**ARA 1120 Modern Arabic I (4) AS WLE**
CR: ARA 1120L. An intensive study of basic skills: pronunciation, listening comprehension, speaking and some composition.

**ARA 1120L Modern Arabic I Laboratory (1) AS WLE**
CR: ARA 1120. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously.

**ARA 1121 Modern Arabic II (4) AS WLE**
PR: ARA 1120 or its equivalent. CR: ARA 1120L. A continuation of ARA 1120. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

**ARA 1121L Modern Arabic II Laboratory (1) AS WLE**
CR: ARA 1121. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

**ARA 2220 Modern Arabic III (4) AS WLE**
PR: ARA 1121 or the equivalent. For language students who intend to attain basic proficiency.

**ARA 2221 Modern Arabic IV (4) AS WLE**
PR: ARA 2220 or the equivalent. Continuation of ARA 2220. Practice of writing, speaking and listening skills for language students who intend to attain basic proficiency.

**ARA 4905 Directed Study (1-5) AS WLE**
Departmental approval required. S/U only. Permits study options in Arabic not available in regularly scheduled curriculum at departmental discretion.

**ARA 4930 Selected Topics (1-5) AS WLE**
Departmental approval required. Course permits classes in Arabic not available in the regularly scheduled curriculum at departmental discretion.

**ARC 2131 Introduction to Architectural Design and Graphics FA (4) TA ARC**
An introduction to fundamental “critical thinking” and graphic communication skills in architecture.

**ARC 2211 Introduction to Architecture HP FA (3) TA ARC**
An introduction to the analysis and interpretation of the architecture and urban design of various cultures.

**ARC 2701 Architectural History I HP FA (3) TA ARC**
Overview of the built environment from prehistory through the Middle Ages. Buildings and cities in their geographical, topographical, political, aesthetic, social, technological and economic context.

**ARC 2702 Architectural History II HP FA (3) TA ARC**
Overview of the built environment from the Middle Ages to the present. Buildings and cities in their geographical, topographical, political, aesthetic, social, technological and economic context.

**ARC 2932 Selected Topics (1-4) TA ARC**
Selected topics will include architectural diagramming, freehand drawing, model making, photography, and computer graphics. Courses are intended for non-majors and are repeatable.

**ARC 4784 The City 6A MW (3) TA ARC**
This course examines the history of the city, as both idea and reality, with a particular focus on Western cities, and the 20th century. The course is open to undergraduates and students in the Graduate Architecture Program.

**ARC 4931 Selected Topics in Architecture and Community Design (2-4) TA ARC**
Variable topics will be offered for pre-professional studies for students in the Liberal Studies Major/ALA Degree Program and as electives for other undergraduates.
PR: CC. Introduction to the application of computer technology in current architectural practice. The exploration of available software, programs, and computer services for word processing, information handling, specification writing, feasibility analysis, cost estimating, economic performance and life cycle cost analysis, project management (network programming and analysis), computer graphics, computer aided design and drafting.

ARC 5175 Computer Technology (3) TA ARC
PR: CC. Introduction to the man-made environment. The study and profession of architecture. The various facets of the process of shaping the built environment as it manifests itself in the different roles and specialization of the experts involved the process, and in the various academic courses that prepare the architect for practice.

ARC 5216 The Building Arts (3) TA ARC
PR: DPR. Survey of major schools of thought in design theory, methods of design and problem-solving, and design research. The nature of the design activity and its recurring difficulties. The nature and different types of problems. Traditional approaches to problem-solving and design in architecture; recent systematic as well as intuitive approaches to problem-solving based on developments in other fields. Scientific method; the systems approach and design.

ARC 5256 Design Theory (3) TA ARC
PR: DPR. First of two semester Design Fundamentals/Design Graphics sequence focusing on design abstractions and analysis of the factors influencing conceptual design. Emphasis is placed on ordering principles, pattern recognition and utilization, and figure-ground relationships. Development of craftsmanship, drawing as a means to design, and perceptual acuity are stressed.

ARC 5361 Core Design I (9) TA ARC
PR: CC. First of two semester Design Fundamentals/Design Graphics sequence focusing on design abstractions and analysis of the factors influencing conceptual design. Emphasis is placed on ordering principles, pattern recognition and utilization, and figure-ground relationships. Development of craftsmanship, drawing as a means to design, and perceptual acuity are stressed.

ARC 5362 Core Design II (9) TA ARC
PR: ARC 5361, CC. Second of a two semester Design Fundamentals/Design Graphics sequence focusing on synthesis of design concepts and application of ordering principles in architectural design. Emphasis is placed on developing an understanding and awareness of architectural elements and compositions. Students examine the work of significant architects and use it as a basis for design exploration. Graphic documentation, diagramming, and model studies are stressed.

ARC 5363 Core Design III (6) TA ARC
PR: ARC 5362, ARC 5467, ARC 5587, ARC 5731. CO: ARC 5689. Study of the various phases of the building delivery and design process, and of different approaches to ordering that process in a systematic fashion. The student will use one such systematic approach in the investigation and development of design solutions for a project of moderate scale and complexity. Studies of built form ordering principles, mass/void relationships, scale and proportion, color, texture, contextual relationships, meaning/imagery, and building technology (awareness of structural organization, services networks, construction processes and materials). Aspects of human behavior as design determinants.

ARC 5364 Advanced Design A (6) TA ARC
PR: ARC 5363. CP: ARC 5588, ARC 5467. Application of orderly design processes to building projects of moderate complexity and scale. Continued investigation of the relationship between human behavior and the environment. Analysis and integration of site relationships into the development of design solutions. Legal aspects of zoning, building codes, and regulations regarding access for accessibility, fire escape, etc.

ARC 5365 Advanced Design B (6) TA ARC
PR: ARC 5363. CP: ARC 5588, ARC 5467. Investigation of the interaction between user requirements, environmental determinants, site and urban context conditions, technological factors, and design intentions in the development of design solutions for projects of medium scale and complexity. The analysis, design, and coordination of the various resulting systems, including structural, circulation, service networks, space zoning and use, environmental control systems at the interface between interior and exterior of a building. Representation of these relationships and systems in diagrams and models, and their manifestation in design and construction details.

ARC 5366 Advanced Design C (6) TA ARC
PR: ARC 5363. CP: ARC 5588, ARC 5467. Design of multi-purpose buildings of medium to large scale and complexity. Issues of community and neighborhood design as they relate to the design of buildings. Restoration and adaptive re-use of existing historic buildings. Focus on thinking through as well as documenting the complete building system and process.

ARC 5467 Materials and Methods of Construction (3) TA ARC
PR: ARC 5470, CC. Overview of properties of primary construction materials and systems that make up building structures and enclosures. Emphasis on elements and assemblies relative to various climates, technologies, costs, building codes, and craftsmanship.

ARC 5470 Introduction to Technology (3) TA ARC
Introduction to architectural technology, including structures, materials and methods of construction, and environmental controls. Overview of building systems and components and their integration into architectural design projects.

ARC 5587 Structures I (3) TA ARC
PR: Calculus, Physics, and ARC 5470, CC. Review of static and mechanical principles of materials. Analysis and evaluation for appropriate selection of structural systems and elements. Analysis and design of timber and steel structures, based on moment, shear, and deflection. Fundamentals of wind and seismic design as they apply to wood and steel construction. Truss analysis, beam and column behavior.

ARC 5588 Structures II (3) TA ARC

ARC 5689 Environmental Technology (3) TA ARC
PR: ARC 5467 and ARC 5470. Comprehensive overview of mechanical systems for buildings including: water and waste: fire protection and suppression; heating, cooling
and controls; electric power distribution and illumination; communications; transportation systems, and acoustics.

**ARC 5731 Architectural History I (3) TA ARC**
Overview of the built environment from prehistory through the Middle Ages. Buildings and cities in their geographical, topographical, political, aesthetic, social, technological, and economic context. Varieties of methodological approaches to the analysis of historical architecture. The focus will be on the built environment of Europe and the Mediterranean basin.

**ARC 5732 Architectural History II (3) TA ARC**
Overview of the built environment from the Renaissance to the present. Buildings and cities in their geographical, topographical, political, aesthetic, social, technological, and economic context. Study of various methodological approaches to the analysis of historic architecture, and development of student’s own approach. Emphasis will be on the built environment of Europe and America.

**ARC 5789 Modern Architecture History (3) TA ARC**
PR: CC, CI. Exploration of the philosophic, economic, aesthetic, social, historical and moral imperatives used by modern architects and historians in their attempt to design the appropriate physical environment for a new social order. The course will investigate the writings and works of the proponents of the modern style of architecture and study the “New Architecture” as defined by those who broke tradition and expressed the new era using modern construction materials and techniques.

**ARC 5793 History Abroad (3) TA ARC**
PR: CC. Summer study abroad. Location and description varies from year to year.

**ARC 5794 Florida Architectural History (3) TA ARC**
An examination of the environmental, sociological, technological, political, economic, cultural, and other factors that influenced the discovery, growth, and urbanization of Florida as manifested by its architecture.

**ARC 5920 Architectural Design Studio Abroad (5) TA ARC**
PR: CC. Summer study abroad. Location and description varies from year to year.

**ARC 5931 Special Studies in Architecture (1-5) TA ARC**
PR: CC. Variable titles offered on topics of special interest.

**ARE 3044 Experiential Basis of Artistic Mind (3) TA ART**
Designed to awaken the language of image and metaphor, with emphasis on the internal and expressive aspects of art as well as their application in the schools and the community.

**ARE 3354 Art Teaching Strategies I (3) TA ART**
PR: ARE 3044. A combination of theory, philosophy and practice in both public and private learning centers to provide the student with a variety of teaching concepts and media exploration in art education and to further enable the student to understand stages of young people, three to eighteen.

**ARE 4313 Art For the Child and You (3) TA ART**
Art and the intellectual, creative, emotional, and aesthetic growth of children.

**ARE 4341 Art Teaching Strategies II (3) TA ART**
Media and the learning process will be explored through photographic arts, cinematography and video systems. Teaching strategies and media criticism for application at elementary and secondary levels.

**ARE 4443 Crafts Workshop in Art Education (3) TA ART**
PR: ARE 3044. The study and practice of processes and media involved with the exploration and expression of cultural traditions and individual ideas through crafts.

**ARE 4642 Community Arts (3) TA ART**
PR: ARE 3044. Explores the arts as infrastructure through identification, Exploration and experimentation of/with unique community spaces, populations and new environments for and learning in the arts.

**ARE 4909 Directed Study: Art Education (1-3) TA ART**
PR: Senior standing. Directed study contract required. Designed to extend teaching competencies in the field of art education.

**ARE 4936 Senior Seminar in Art Education (2) TA ART**

**ARE 4940 Internship: Art Education (1-12) TA ART**
CR: ARE 4936. S/U only. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours.

**ARH 2050 History of Visual Arts II HP FA CAFA CAHU HHCP (3) TA ART**
Survey of World Art to AD 1300. Introduction to problems of analyzing and interpreting the art of various cultures without making the Western perspective a privileged one.

**ARH 2051 History of Visual Arts II HP FA CAFA CAHU HHCP (3) TA ART**
Survey of World Art since 1300. Introduction to problems of analyzing and interpreting the art of various cultures without making the Western perspective a privileged one.

**ARH 3001 Introduction To Art HP FA CAFA HHCP (4) TA ART**
This online course investigates the histories of art, asking a range of questions about periods, cultures, styles of art making. We explore the experience of viewing art, inquiring into its many forms and definitions, historically and in the present.

**ARH 3475C Contemporary Issues in Art HP FA MW (4) TA ART**
PR: DPR. Focuses upon the productions, themes and processes of artists working in the present time. This course will investigate the relationship of materials and media used by contemporary artists to the subject and content of artists’ productions/products as well as conceptual processes.

**ARH 4115 Ancient Egyptian and Near Eastern Art (4) TA ART**
PR: ARH 2050 recommended but not required. A study of the art and cultures of ancient Egypt and the Near East, from the prehistoric period through the conquests of Alexander the Great.

**ARH 4130 Greek Art (4) TA ART**
PR: ARH 2050 or EUH 2011 recommended but not required. A comprehensive study of ancient Greek sculpture, painting, architecture, and other artistic media from the Bronze Age through the Hellenistic period.

**ARH 4151 Roman Art (4) TA ART**
PR: ARH 2050 or EUH 2011 recommended but not required. A comprehensive study of ancient Roman sculpture, painting, architecture, and other artistic media from the founding of Rome through the reign of Constantine.
ARH 4170 Greek and Roman Art (4) TA ART
A comprehensive study of Aegean, Mycenaean, Etruscan, Greek and Roman painting, sculpture and architecture.

ARH 4200 Medieval Art (4) TA ART
PR: DPR. A comprehensive study of early Christian, Byzantine and Medieval painting, sculpture, architecture and manuscript illumination.

ARH 4301 Renaissance Art (4) TA ART
PR: DPR. A comprehensive study of Renaissance and Mannerist painting, sculpture and architecture in Italy and Northern Europe.

ARH 4318 Venetian Art (4) TA ART
PR: DPR. Major monuments of Venetian art are examined to elucidate the importance of Venice as the crossroads of cultural exchange between Islam, Byzantium, and the West, and the importance of Venetian art to the history of art and art criticism.

ARH 4350 Baroque and Rococo Art (4) TA ART
PR: DPR. A comprehensive study of the painting, sculpture and architecture in France, Italy, Spain and the Netherlands in the seventeenth and early eighteenth centuries.

ARH 4430 Nineteenth Century Art (4) TA ART
PR: ARH 2051. A comprehensive study of nineteenth century painting, sculpture and architecture in America and Europe. Gender-multicultural issues and methodologies in 19th century art are emphasized.

ARH 4450 Twentieth Century Art (4) TA ART
PR: ARH 2051. A comprehensive study of painting, sculpture and architecture from Cezanne to the present in Europe and the United States. Required of all art majors.

ARH 4455 Modern Political Iconography MW (4) TA ART
PR: DPR. The course explores art in which political themes are considered to be the source and determinant of aesthetic decisions. The dominant iconographic theme is the iconography of revolution, rebellion, and other forms of political struggle in 20th Century art and film.

ARH 4520 African Art (4) TA ART
PR: DPR. A combination of survey, comparative study and in-depth analysis of African sculpture, mainly from West and Central Africa. Emphasis on diversity of forms and contexts, functions, symbolism and meanings.

ARH 4530 Asian Art (4) TA ART
PR: Departmental Approval. An introduction to concepts of the arts of China, Japan and other Far Eastern countries.

ARH 4547 Buddhist Art (4) TA ART
PR: DPR. This course examines one important aspect of Asian artistic production. Buddhist Art begins in India and travels via the Himalayas and Southeast Asia to East Asia, touching on artistic expression of major principles and practices, changes in art as the religion comes in contact with pre-existing cultures, and modern artistic practice.

ARH 4557 Chinese Art (4) TA ART
PR: DPR. Chinese Art proceeds chronologically, from the Neolithic era up to the contemporary art world. The course considers cultural, linguistic, technical, philosophic, political and religious influences on the art works produced by this ancient society.

ARH 4710 History of Photography 6A MW HHCP WRIN (4) TA ART
PR: ARH 2051. Comprehensive overview of the history of photography from its inception to the present day with an emphasis on the relationship of photography to the visual arts and popular culture.

ARH 4721C History of Printmaking 6A (3) TA ART
The history of Western printmaking from the Middle Ages to contemporary times, with an emphasis on artmaking technology and research, cultural perspectives and theoretical/critical analytical capabilities. The course is open to majors and non-majors. It is not repeatable for credit.

ARH 4724 History of Graphic Design 6A (4) TA ART
This course surveys the design profession and the graphic design discipline. Students will explore graphic styles from the turn of the century to contemporary works, highlighting the innovations of influential designers throughout history.

ARH 4744 Selected Topics In The History of Film (4) TA ART
In-depth investigation of a selected period, development, or school in the history of film as art.

ARH 4800 Critical Studies In Art History 6A (4) TA ART
PR: Two advanced Art Histories. Specialized intensive studies in art history. Specific subject matter varies. To be announced at each course offering.

ARH 4890 Paris Art History (4) TA ART
PR: Minimum 8 hours of art history at the undergraduate level or equivalent. CI. This course will explore issues central to the history and criticism of art through the rich visual culture of Paris. Themes will include art and national identity, orientalism, the avant-garde and the role of the museum in the evolution of modern art.

ARH 4930 Art History: Selected Topics (2-4) TA ART
Lecture/discussion course designed to offer areas of expertise of visiting scholars or specific interests of resident faculty.

ARH 4937 Seminar In The History Of Art History (4) TA ART
PR: Four courses in Art History at the 4000 level, DPR. An examination of the origins of Art History as a discipline and changing nature of Art History from Vasari to the present.

ARH 5451 Cultural and Intellectual History of Modern Art (4) TA ART
PR: CI. A course in which theories of modern artists and of critics and historians of Modernism are treated as a part of general cultural and intellectual history.

ARH 5813 Methods of Art History (4) TA ART
Must be taken during the student's first two semesters in the M.A. program. This course introduces students to various methods which art historians have used to analyze the form and content of individual works of art, and to various modes of historical explanation.

ARH 5836 Collection and Exhibition Management (3) TA ART
PR: Art Advisor’s Approval. This class will introduce students to the basic principles of collections care and management and to the intellectual and practical tasks of preparing an exhibition. Sessions will include art handling, registration and condition reporting, preparing works of art for transit, environmental standards for collections storage and exhibition, and the professional responsibilities of the curator.

ART 2201C Concepts and Practices I 6A FA CAFA (4) TA ART
Introduce students to diverse art studio practices and concepts where topics include forms of communication, sourcing inspiration, and critical theory. Studio projects are
ART 2203C Concepts and Practices II (6) FA, CA, FA (4) TA ART
PR: ART 2201. Continuation of ART 2201 building on diverse art studio practice and concepts including crafting an artistic self, measuring success, and examining the artists role. Art projects are augmented by lecture, discussion, reading, writing and critiques.

ART 2301C Beginning Drawing (3) TA ART
PR: Majors Only. Projects exploring the methods, media, and concepts of drawing.

ART 2400C Beginning Printmaking (3) TA ART
PR: Majors Only. This course is designed as an introduction to the medium of printmaking. It concentrates on the technical production of various print media including: intaglio, relief, monoprint and serigraphy (screen printing).

ART 2500C Beginning Painting (3) TA ART
PR: Majors Only. Projects in painting with emphasis on the exploration of methods and media and the development of individual concepts.

ART 2701C Beginning Sculpture (3) TA ART
PR: Majors Only. Projects in sculpture with emphasis on contemporary theory and issues, the development of individual concepts and the exploration of materials, tools and processes.

ART 2750C Beginning Ceramics (3) TA ART
PR: Majors Only. An introduction to the use of ceramic materials as a means of self expression and critical exploration.

ART 2930 Selected Topics in Art (2-4) TA ART
PR: Majors Only. The content of this course will be determined by student demand and instructor interest. Open University offerings under this number may not be counted for degree credit for art majors.

ART 3310C Intermediate Drawing (3) TA ART
PR: ART 2301C. Permit required. Majors Only. An extension of the skills and concepts introduced in Beginning Drawing with an emphasis on individual experimentation and the development of advanced critical and technical skills in the discipline. Repeatable up to 15 hours.

ART 3380C Selected Topics in Drawing (3) TA ART
PR: ART 2203C, ARH 2050, ARH 2051, ART 2301C, ART 3310C. Majors Only. Selected Topics in Drawing is an intermediate course providing focused exploration of content specific to the discipline. It furthers the development of skills and critical discourse in the field. Majors only. Repeatable up to 15 hours.

ART 3403C Intermediate Printmaking (3) TA ART
PR: ARH 2050, ARH 2051, ART 2301C, ART 2201C, ART 2203C, ART 3310C, ART 2400C. This course concentrates on developing intermediate skills in printmaking with particular emphasis on conceptual topics. The course is intended for majors. Repeatable up to 15 hours.

ART 3461C Selected Topics in Printmaking (3) TA ART
PR: ART 2203C, ARH 2050, ARH 2051, ART 2301C, ART 3310C, ART 2400C, ART 3401C. Majors Only. Selected Topics in Printmaking is an intermediate course providing focused exploration of content specific to the discipline. It furthers the development of skills and critical discourse in the field. Majors only. Repeatable up to 15 hours.

ART 3465 Digital Printmaking (3) TA ART
PR: ART 3612C or ART 2400C. Majors Only. An investigation of printmaking using the computer as a design interface between electronic and traditional printmaking processes. Repeatable up to 9 hours.

ART 3513C Selected Topics in Painting (3) TA ART
PR: ART 2201C, ART 2203C, ART 2301C, ART 2500C, ART 3310C, ARH 2050, ARH 2051. Majors only. An extension of the skills and concepts introduced in Beginning Painting with an emphasis on individual experimentation and the development of advanced critical and technical skills in the discipline. Repeatable up to 15 hours.

ART 3530C Intermediate Painting (3) TA ART
PR: ART 2201C, ART 2203C, ART 2301C, ART 2500C, ART 3310C, ARH 2050, ARH 2051. Majors only. An extension of the issues and practices involved in the creation of experimental computer art. The course focuses on an interdisciplinary approach to electronic media.

ART 3613C Intermediate Digital Video and Electronic Arts (3) TA ART
PR: ART 2201C, ART 2203C, ART 2301C, ART 3310C, ART 3612C, ARH 2050, ARH 2051. An intermediate exploration of the issues and practices involved in the creation of experimental computer art. The course focuses on an interdisciplinary approach to electronic media while developing individual creative growth. Repeatable up to 15 hours.

ART 3635 Selected Topics in Electronic Media (3) TA ART
PR: ART 2203C, ARH 2050, ARH 2051, ART 2301C, ART 3310C, ART 3612C, ART 3613C. Majors Only. Selected Topics in Electronic Media is an intermediate course providing focused exploration of content specific to the discipline. It furthers the development of skills and critical discourse in the field. Majors only. Repeatable up to 15 hours.

ART 3709C Intermediate Sculpture (3) TA ART
PR: ART 2201C, ART 2203C, ART 2301C, ART 3310C, ARH 2050, ARH 2051. This course expands upon the principles and processes introduced in Beginning Sculpture, developing a higher level of technical competence and critical sophistication. Repeatable up to 15 hours.

ART 3712C Multiples, Molds, and Bronzecasting (3) TA ART
PR: ART 2701C and ART 3704C. Majors Only. Continued studies and projects in sculpture with an emphasis on the nature of multiples explored through advanced mold making and bronzecasting. This course may not be repeated for credit. The conceptual implications of the multiple will be taught through reading, lecture, discussion and demonstration.

ART 3735 Selected Topics in Sculpture (3) TA ART
PR: ART 2203C, ARH 2050, ARH 2051, ART 2301C, ART 3310C, ART 2701C, ART 3704C. Majors Only. Selected Topics in Sculpture is an intermediate course providing...
focused exploration of content specific to the discipline. It furthers the development of skills and critical discourse in
the field. Repeatable up to 15 hours.

**ART 3761C Intermediate Ceramics (3) TA ART**
problems in ceramics and emphasis on the exploration of
methods and media and the development of individual
concepts. Repeatable up to 15 hours.

**ART 3781C Selected Topics in Ceramics (3) TA ART**
PR: ART 2203C, ARH 2050, ARH 2051, ART 2301C, ART
3310C, ART 2750C, ART 3761C. Majors only. Selected
Topics in Ceramics is an intermediate course providing
focused exploration of content specific to the discipline. It
furthers the development of skills and critical discourse in
the field. Majors only. Repeatable up to 15 hours.

**ART 3843C Site, Installation, and Performance (3) TA ART**
PR: ART 2701C and ART 3704C. Majors Only. Continued
studies and projects in sculpture with an emphasis on site-
specific sculpture, installation and performance. A critical
and cultural awareness of contemporary issues and media
in sculpture will be developed through studio projects
assigned readings, discussions, critiques and
demonstrations. The course may not be repeated for credit.

**ART 3935 Studio Techniques: Selected Projects (2) TA ART**
PR: DPR. Concentration in specialized technical data and
process. Repeatable.

**ART 3939 The Real World (3) TA ART**
Restricted to studio majors. Offers studio students the
opportunity to analyze their experiences as art majors and
explore options available to visual artists upon completion
of their degree.

**ART 4320C Advanced Drawing (3) TA ART**
PR: 15 hours of Intermediate courses in the discipline and
a 3.25 major GPA or DPR. Majors Only. Continued projects
in drawing. Repeatable.

**ART 4402C Advanced Printmaking (3) TA ART**
PR: 12 hours of Intermediate courses in the discipline and
a 3.25 major GPA or DPR. Majors Only. This course is
designed as an advanced printmaking studio and
emphasizes content and meaning in visual imagery. The
student is encouraged to work in a specific printmaking
medium (intaglio, relief, lithography or screen printing) and
develop a cohesive series of images. Repeatable.

**ART 4520C Advanced Painting (3) TA ART**
PR: 12 hours of Intermediate courses in the discipline and
a 3.25 major GPA or DPR. Majors Only. Continued projects
in painting. Repeatable.

**ART 4614C Advanced Digital Video and Electronic Arts (3) TA ART**
PR: 12 hours of Intermediate courses in the discipline and
a 3.25 major GPA or DPR. Majors Only. Advanced exploration
of issues and practices involved in the creation of
experimental computer art. The course continues as
interdisciplinary approach to electronic media with a focus on
individual and group projects. Repeatable.

**ART 4616 Computer Animation (4) TA ART**
Exploration of issues and practices involved in the creation
of computer animations, focused on individual creative
growth.

**ART 4634C Visual Design for the Internet (3) TA ART**
Restricted to majors. This upper level course builds upon
the concepts students encountered in the introductory level
graphic design courses and focuses upon web content
creation and animation techniques.

**ART 4710C Advanced Sculpture (3) TA ART**
PR: 12 hours of Intermediate courses in the discipline and
a 3.25 major GPA. Majors Only. Continued problems in
sculpture. Repeatable.

**ART 4782C Advanced Ceramics (3) TA ART**
PR: 9 hours of Intermediate courses in the discipline and
a 3.25 major GPA or DPR. Majors Only. Continued problems
in ceramics. Repeatable.

**ART 4806 Theme Studio (3) TA ART**
PR: Majors Only. All preparation courses plus course in
Studio Workshop I.

**ART 4814 Paris Art Studio (3) TA ART**
PR: ART 2201C or equivalent. This course will explore
contemporary and historic Paris as a subject and source
for artmaking, drawing upon a range of concepts and
strategies that emphasize imaginative encounters with its
space, streets, museums, architecture and people.

**ART 4900 Directed Reading (1-4) TA ART**
PR: CI. Registration by contract only. A course of reading
and study in an area of special concern governed by
student demand, instructor interest and/or department
requirements. Registration is by contract only. Repeatable.

**ART 4905 Directed Study (1-4) TA ART**
PR: CI, DPR. Registration by contract only. Independent
studies in the various areas of Visual Arts. Course of study
and credits must be assigned prior to registration.
Repeatable.

**ART 4925 Media Workshop: Design Production (3) TA ART**
PR: Graphic design majors only. This upper level technology
course will develop in-depth understanding of graphic
software and print production techniques. Students will
review software programs, file preparation requirements,
and print production standards.

**ART 4930 Selected Topics In Art (2-4) TA ART**
PR: DPR. The content of this course will be determined by
student demand and instructor interest. Open University
offerings under this number may not be counted for degree
credit for art majors. Repeatable.

**ART 4940 Extended Studies (1-4) TA ART**
Extended Studies requires students to engage in art-
related activities that expand upon their traditional academic
experience. It is by contract and may involve internship and/
or foreign studies. The course is restricted to majors. Not
repeatable.

**ART 4970C Senior Thesis (4) TA ART**
PR: DPR, CI. The creation of a coherent body of advanced
level artwork that is supported by a written document
describing processes working procedures, research,
context and content of the artwork itself. The course is
restricted to majors, and is required of all B.F.A. candidates.

**ART 5390C Drawing (4) TA ART**
PR: ART 4320C, CI, DPR. Advanced problems in various
drawing techniques. Emphasis on individual creative
expression. Repeatable.

**ART 5422C Lithography (4) TA ART**
PR: ART 4402C, CI, DPR. Advanced problems in various
lithographic techniques. Emphasis on individual creative expression. Repeatable.

ART 5448C Intaglio (4) TA ART
PR: CI. Registration by contract only. Investigations into more complex intaglio processes including photoengraving and color printing procedures. Emphasis on personal conceptual development in graphic media.

ART 5580C Painting (4) TA ART
PR: CI. Registration by contract only. Research in painting

ART 5740C Sculpture (4) TA ART

ART 5790C Ceramics (4) TA ART
PR: ART 2750C, DPR. Advanced problems in the various ceramic techniques, including throwing and glaze calculation. Repeatable.

ART 5910 Research (1-4) TA ART
PR: CI, DPR. Registration by contract only. Repeatable.

ART 5936 Studio Techniques: Selected Projects (2) TA ART
PR: DPR. Concentration in specialized media or processes. Repeatable.

ASH 2270 Southeast Asian History HP AF CAHU HHCP (3) AS HTY
This course examines the origins and development of Southeast Asian history over the past two millennia. Southeast Asia is comprised of Burma, Thailand, Laos, Cambodia, Vietnam, Malaysia, Singapore, Brunei, Indonesia, the Philippines, and East Timor.

ASH 3404 Modern China SS HP AF CAHU HHCP (3) AS HTY
Political, economic, and social history of China from the time of the first major Western contacts (17th-18th Centuries) through the consolidation of socialism in the late 1950’s, and the Great Leap Forward.

ASL 2140C Basic American Sign Language (4) BC CSD
PR: DPR. Introduction to American Sign Language (ASL) as used in the deaf community. General discussion of ASL structure and introduction to various manual communication systems and philosophies. Emphasis on building a basic vocabulary. One hour of laboratory course work is included. Open to all majors.

ASL 2150C Intermediate American Sign Language (4) BC CSD
PR: ASL 2140C, DPR. A continuation of the basic course which expands the student’s signing skills and introduces American Sign Language (ASL) idioms. Provides a greater opportunity for skill development in ASL structure and idiomatic usage. One hour of laboratory course work is included.

ASL 3514 American Deaf Culture (3) BC CSD
PR: ASL 4161C. An overview to American Deaf Culture, including its norms, values and belief systems. This course will also provide insight to deaf history in North America, and the importance of ASL to the culturally Deaf community.

ASL 4161C Advanced American Sign Language (4) BC CSD
PR: ASL 2150C, DPR. A continuation of the study of American Sign Language (ASL) at the advanced skill level. Added emphasis on idioms, body language, and facial expression as an integral part of ASL. An hour of laboratory course work is included.

ASL 4201C American Sign Language 4 (4) BC CSD
PR: ASL 4161C. This course is a continuation of the study of American Sign Language (ASL) at the highly advanced level. It provides added emphasis on skill development of the language, including storytelling and poetry. One-hour laboratory course work is included.

ASL 4301C Structure of Sign Language (4) BC CSD
PR: ASL 2140C and ASL 2150C. This course is a basic introduction of semiotic and linguistic consideration of American Sign Language (ASL). It includes aspects of phonology, morphology, syntax, semantics, and discourse of ASL. A one-hour laboratory is incorporated into the coursework.

ASL 4405 Sign Language Codes (3) BC CSD
PR: CI. A review of the sign systems (SEE I, SEE II, LOVE, and Signed English) used to code messages through the use of sign. The student will have the opportunity to practice one of the sign systems.

ASL 4435 Fundamentals of Fingerspelling (2) BC CSD
PR: DPR. A concentrated study of technique in fingerspelling emphasizing clarity and rhythm in expression as well as receptive understanding.

ASN 3012 Japan Today SS (3) AS INT
Area study courses are multi-disciplinary in nature and deal with one or more countries of a region. Each course combines some measure of political, economic, historical, religious, geographic, anthropological, and sociological analysis in dealing with salient features and current problems.

ASN 3014 China Today AF (3) AS INT
Area study courses are multi-disciplinary in nature and deal with one or more countries of a region. Each course combines some measure of political, economic, historical, religious, geographic, anthropological, and sociological analysis in dealing with salient features and current problems.

ASN 3030 The Middle East AF (3) AS INT
Area study courses are multi-disciplinary in nature and deal with one or more countries of a region. Each course combines some measure of political, economic, historical, religious, geographic, anthropological, and sociological analysis in dealing with salient features and current problems.

AST 2003 Astronomy of the Solar System NS CANP (4) AS AST
AST2003 is an introduction and overview of the astronomy of the solar system. It is designed to complement AST2004 to give a comprehensive overview of the science of astronomy.

AST 2004 Stellar Astronomy and Cosmology NS CANP (4) AS AST
AST2004 is an introduction and overview of the Stellar astronomy and Cosmology. It is designed to complement AST2003 to give a comprehensive overview of the science of Astronomy.

AST 2032C Illustrative Astronomy (3) AS AST
Constellations, use of small telescopes, etc., apparent motions of celestial objects, comets and meteors, seasons, weather. Current events in the space program. Planetarium and open sky demonstrations.
AST 3033 Contemporary Thinking in Astronomy NS (3) AS
AST
PR: Junior or Senior Standing or Ci. Seminar designed to assist the layman, with no scientific background, in comprehending contemporary developments in Astronomy. Necessary background material is provided by the instructor and a text. Topics covered in recent years include the space program, pulsars, x-ray astronomy, black holes, extra-terrestrial life, interacting galaxies, cosmology.

AST 3044 Archaeoastronomy (3) AS
AST
PR: Jr. or Sr. Standing or Ci. Astronomical concepts and observational techniques used by prehistoric/ancient peoples for detecting change of seasons, constructing calendars, predicting eclipses, etc. Particular attention is given to Stonehenge, and to works of N.A. Indians, the Maya and Aztecs, and the Egyptians. Lec.-Lab.

AST 3652 Navigation (3) AS
AST
PR: Some knowledge of geometry, algebra, and trigonometry. Timekeeping, use of sextant, constellations, celestial navigation with minimum equipment, spherical astronomy.

AST 3930 Selected Topics in Astronomy (1-4) AS
AST
PR: Ci. Course content will depend upon the interest of the faculty member and student demand.

AST 5506 Introduction to Celestial Mechanics (3) AS
AST
PR: MAC 2313 or MAC 2283 and some knowledge of differential equations, or Ci. The two-body problem, introduction to Hamiltonian systems and canonical variables, equilibrium solutions and stability, elements of perturbation theory.

AST 5932 Selected Topics in Astronomy (1-5) AS
AST
PR: Senior or advanced junior standing or Ci. Intensive coverage of special topics to suit needs of advanced students.

BCH 3023 Introductory Biochemistry (3) AS
CHM
PR: CHM 2200 or CHM 2211 and BSC 2010. Introduction to the chemistry and intermediary metabolism of biologically important substances.

BCH 3023L Basic Biochemistry Laboratory (2) AS
CHM
CR: BCH 3023. Practical work in determination and characterization of important biomolecules. Lec.-Lab.

BCH 4034 Advanced Biochemistry (3) AS
CHM
PR: BCH 3023. An advanced undergraduate course emphasizing such topics as metabolic regulation, DNA and RNA structure and function, receptors, channels, antibodies, and contraction.

BCH 5045 Biochemistry Core Course (3) AS
CHM
PR: Either CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410 or graduate standing. A one-semester survey course in biochemistry for graduate students in chemistry, biology, and other appropriate fields and for particularly well-qualified undergraduates.

BCH 5105 Biochemistry Laboratory Rotations (1-3) AS
CHM
A course in which first year graduate students rotate through selected professor’s laboratories to learn techniques, become familiar with ongoing research in the Department and facilitate the selection of a mentor.

BME 4406 Engineering of Biological Systems (3) EN
ECH
PR: CHM 2210 (majors) or Consent of Instructor (non-majors). This course is designed to convey the basics of biological systems and the roles that engineers play in industrial biology to engineering students (primarily) and to students that are majoring in other sciences. Not repeatable for credit. For majors and non-majors.

BME 5040 Pharmaceutical Engineering (2) EN ECH
PR: Senior or graduate standing in engineering or Ci. Introduction to pharmaceutical engineering, including dosage forms (tablets, capsules, powders, liquids, topical forms, and aerosols), excipients, regulatory issues, clinical studies, and good manufacturing practices.

BME 5320 Theory and Design of Bioprocesses (3) EN ECH
PR: Senior standing in engineering or Ci. Open to majors and non-majors with Ci. Introduction to biotechnology, including applied microbiology, enzyme technology, biomass production, bioreactor design, and transport processes in biosystems.

BME 5748 Selected Topics in Biomedical Engineering (1-3) ENECH
Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems.

BME 5910 Directed Research in Bioengineering (1-3) EN ECH
PR: Ci. Directed research in an area of biomedical engineering or engineering biotechnology.

BME 5937 Selected Topics in Biomedical Engineering (1-3) ENECH
PR: Senior or GS standing in Engineering or Ci. Open to non-engineering students with Ci. Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems. May be taken by non-engineering students with Ci. Repeatable as subjects vary.

BMS 4402 Principles of Human Pharmacology NS (3) ME
MSG
Not available on S/U basis. Pharmacodynamics (effects), pharmacokinetics (absorption, distribution, metabolism, excretion) and side effects/toxicity of drugs. Designed to provide basic understanding of mechanism of drug action resulting from modifying biologic processes.

BMS 5005 Professions of Medicine: Foundations of Doctoring (1-19) ME
MSG
This three-week course placed at the beginning of the medical school curriculum will introduce the students to principles that will be used through the entire medical school education and beyond. Basic scientists and clinicians present information in an integrated approach. Topical areas include: use of information resources (library/computer), the medical article, intro to evidence based medicine, effective study techniques, intro to the physical exam, cultural diversity, ethics and professionalism, and state of the art presentation. The course will use both large and small group learning techniques and students will demonstrate achievement of knowledge.

BMS 5015 Clinical Diagnosis and Reasoning (var.) ME
MSG
This course aims to provide the student with the opportunity to “think like a physician." It will provide the venue to integrate clin diagnosis/reasoning strategies with complementary aspects of clin problem solving/phys diagnosis/evidence based medicine.
BMS 5190 Anatomy by Diagnostic Testing (1-20) ME MSG
Describing normal human anatomy in three dimensions (frontal, coronal, and axial), using contrast medical and imaging modalities available for diagnostic radiologists. Course will be oriented to organ systems describing anatomy of the organ and its vasculature and topographic anatomy. It will include didactic lecture series and a standing display of images for self-studies. Plain radiographs, contrast studies of gastrointestinal and urinary tract, arteriograms, computed tomograms, magnetic resonance, and ultrasound scans of body organs will be displayed.

BOT 3152C Field Botany (3) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2111, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3714. A field course emphasizing Identification and classification of native and naturalized flowering plants of Florida including historical, climatic, and floristic aspects of plant communities. Fieldwork required. Lecture and Laboratory.

BOT 3373C Vascular Plants: Form and Function (4) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2111, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712. Study of agents that are produced by plants and that are toxic or psychoactive in human beings or are useful as remedies. Lecture only.

BOT 4223C Plant Anatomy (3) AS BIN
PR: BOT 3373C and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 & CHM 2211. Comparative studies of tissue and organ systems of fossil and present-day vascular plants. Functional and phylogenetic aspects stressed. Lec.-lab.

BOT 4434C Mycology (3) AS BCM
PR: BOT 3373C or MCB 3020C and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 & CHM 2211. A survey of the fungi with emphasis on their taxonomy, morphology, physiology and economic importance. Lec.-lab.

BOT 4503 Plant Physiology (3) AS BIN
PR: BOT 3373C and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and PHY 2053. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 & CHM 2211. Fundamental activities of plants; absorption, translocation, transpiration, metabolism, growth and related phenomena. Lecture only.

BOT 4503L Plant Physiology Laboratory (1) AS BIN
CP: BOT 4503. Laboratory portion of Plant Physiology.

BOT 4810C Economic Botany (3) AS BIN
PR: BOT 3373C. Study of the uses of plants by man for food, chemicals, fibers, and medicines.

BOT 5185C Marine Botany (4) AS BIN
PR: BOT 3373C, PCB 3043 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and CI. CP: CHM 2211. A field course in marine plants with emphasis on ecology and functional morphology. Fieldwork will stress the ecological aspects of plants in the subtropical marine environment of Florida. Fieldwork required. Lecture and Laboratory.

BOT 5725C Evolution of Flowering Plants (3) AS BIN
PR: BOT 3373C and BOT 4152C or CI. A study of the evolution and phylogeny of the Angiosperms; the origin and nature of early angiosperms, “primitive” angiosperms today; evolutionary processes leading to the origin of genera, families and orders, trends of specialization in the angiosperms; phylogenetic analysis, cladistics, traditional approaches, new approaches; readings from the current and historical literature. Lec/Lab.

BSC 1005 Biology for Life NS CANL (3) AS BIN
A comprehensive introduction to living systems, including the scientific basis of biology, cell structure and function, genetic mechanisms, human anatomy and physiology, and ecological and evolutionary processes.

BSC 1020 The Biology of Humans NS CANL (3) AS BCM
This non-science majors course deals with the principles and applications of human biology. Topics include: scientific literacy, cell structure and function, anatomy and physiology, genetics, infectious diseases, and biotechnology.

BSC 2010 Cellular Processes NS CANL (3) AS BCM
PR: CHM 2045. CPR: BSC 2010L. This course deals with biological systems at the cellular and subcellular levels. Topics include an introduction to biochemistry, cell structure and function, enzymes, respiration, mitosis and meiosis, genetics and gene expression.

BSC 2010L Cellular Processes Laboratory (1) AS BCM
CR: BSC 2010. Laboratory portion of Biology I Cellular Processes relating to cellular and subcellular structure and function. Mitosis, meiosis, and Mendelian genetics will be stressed.

BSC 2011 Biodiversity NS CANL (3) AS BIN

BSC 2011L Biodiversity Laboratory (1) AS BIN
CR: BSC 2011. Laboratory portion of Biology II Diversity relating to organismal structure and function. Microscopy, as well as, plant and animal development will be stressed.

BSC 2022 Biology of Aging (3) AS BCM
An introduction to the basic biology of aging. Emphasis will be placed on understanding basic principles of biology relevant to time and the aging process which begins at birth. May be taken by majors for free elective credit.

BSC 2025 Food: Personal and Global Perspectives NS (3) AS BIN
May be taken by biology majors for free elective credit. The application of basic biological principles to human nutritional problems; to learn how various cultures achieve adequate nutrition and how environmental changes impact both personal and global nutrition.
BSC 2035 Sex and Today’s World NS (3) AS BIN
The application of basic biological principles to female and male sexual behavior and reproduction; current social problems are treated from a biological perspective. May be taken by majors for free elective credit.

BSC 2050 Environment NS CANL (3) AS BIN
A comprehensive introduction to the environment, including the scientific basis of ecology, population growth, community and ecosystem ecology, biodiversity, resource use and availability, energy production water, air and land pollution.

BSC 2085 Anatomy and Physiology I for Health Professionals NS CANL (3) NU NUR
CR: BSC 2085L. Introduction to the normal structure, function and selected pathological conditions for physiologic systems. Focus on understanding how the body functions in preparing for careers in nursing or health-related professions.

BSC 2086 Anatomy and Physiology II for Nursing and other Healthcare Professionals (1) NU NUR
PR: BSC 2085 and BSC 2085L. CR: BSC 2086L. Introduction of normal structure, function and selected pathological conditions for physiologic systems. Focus on understanding how the body functions in preparing for careers in nursing or health-related professions.

BSC 2093C Human Anatomy and Physiology I (4) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L and CHM 2045. Basic biochemistry, cell structure and function, tissues, anatomical terminology, anatomy and physiology of the integumentary, skeletal, muscular, and nervous systems. Lecture and Laboratory.

BSC 2094C Human Anatomy and Physiology II (4) AS BIN

BSC 2932 Selected Topics in Biology (1-4) AS BIN
The course content will depend on student demand and instructor’s interest.

BSC 2933 Honors Seminar II: Philosophy and Ethics of Science (3) AS BIO
PR: BSC 2011, BSC 2011L, BSC 2932, & CHM 2045 & CI.

Enrollment is limited to Department of Biology Honors Students. Introduction to the nature of science. Historical perspectives, modes of reasoning, science vs. pseudoscience, science as an intellectual process, ethics, and resolving dilemmas.

BSC 2934 Honors Seminar III: Scientific Approaches (3) AS BIO
PR: BSC 2933, CI. Enrollment is limited to Department of Biology Honors Students. The course will begin to familiarize students with the process of conducting scientific research.

BSC 2938 Honors Seminar I (1) AS BIO
PR: BSC 2010, BSC 2010L & CHM 2045. CR: BSC 2011, BSC 2011L. Enrollment is limited to Department of Biology Honors students. Course is designed to introduce Honors students to various research fields and current research in the Department. Faculty members present research seminars and discuss their work.

BSC 3312 Marine Biology (3) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course, or STA 2203. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712. A survey of the marine environment, the types of organisms found inhabiting a variety of marine habitats, and the adaptations of the organisms to those habitats. Emphasis is placed on shallow water Florida environments. Lecture only.

BSC 4057 Environmental Issues MW (3) AS BIN
Not for major’s credit. Study of biological, economic, ethical, legal, political and social issues relating to current environmental problems.

BSC 4313C Advanced Marine Biology (4) AS BIN
PR: BSC 3312C A detailed analysis of marine environment in the Tampa Bay or surrounding area. Field and laboratory work will provide direct experience with the system.

BSC 4434 Bioinformatics (3) AS BCM
PR: PCB3063. CPR: PCB3023 This lecture-based, nonrestrictive course covers basics of molecular bioscience data management/analysis. Focus is on general computational methods, their bio-basis, and how to evaluate analysis results. Qualitative algorithm descriptions are included.

BSC 4905 Independent Study (1-3) AS BIO
PR: CI. S/U only. May be taken by majors for free elective credit. Specialized independent study determined by the student’s needs and interests. The written contract required by the Department of Biology specifies the regulations governing independent study.

BSC 4910 Undergraduate Research (1-4) AS BIO
PR: CHM 2210 and MAC 1105 or higher MAC course or STA 2203 or CI. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 and CHM 2211. S/U only. Junior standing and 3.0 GPA required. Individual investigation with faculty supervision. Written contract by Department is necessary prior to registration.

BSC 4932 Honors Seminar IV (1) AS BIO
PR: BSC 2934 and BSC 4910 or MCB 4910; CI: CHM 2211. The course serves as a formal introduction to the presentation of scientific research. It is taken in the semester prior to completion of a student’s own research project and the writing of the Biology Honors Thesis.

BSC 4933 Selected Topics In Biology (1-4) AS BIO
PR: CI. The course content will depend on student demand and instructor's interest.

BUL 3320 Law And Business I (3) BU GBA
PR: BUL 3320 and either BSC 2931 or BSC 4932. Legal problems in marketing of goods, nature of property, sales of personal property, securing of credit granted, nature and use of negotiable instruments.

BUL 3321 Law And Business II (3) BU GBA
PR: BUL 3320. Legal problems in marketing of goods, nature of property, sales of personal property, securing of credit granted, nature and use of negotiable instruments.

BUL 5332 Law and the Accountant (3) BU GBA
PR: BUL 3320 or CI. A comprehensive study of commercial law as it affects the practice of accounting.

CAP 4034 Computer Animation Fundamentals (3) EN ESB
PR: COP 4530. An introductory course to computer animation. Topics include storyboarding, camera control, hierarchical character modeling, inverse kinematics, keyframing, motion capture, dynamic simulation, and facial animation.

CAP 4063 Web Application Design (3) EN ESB
PR: COP 4530. Analysis, design, and development of software that operates on web servers and web browsers, supporting multiple concurrent users.

CAP 4401 Image Processing Fundamentals (3) EN ESB
PR: COP 4530. Practical introduction to a range of fundamental image processing algorithms. Extensive programming, with emphasis on image analysis and transformation techniques. Image transformation and manipulation.

CAP 4410 Computer Vision (3) EN ESB
PR: COP 4530. Introduction to topics such as image formation, segmentation, feature extraction, matching, shape recovery, texture analysis, object recognition, and dynamic scene analysis.

CAP 4660 AI Robotics (3) EN ESB
PR: COP 4530; CR: COT 4400. A.I. methods for mobile robots (ground/aerial/underwater). Understand:(1)3 paradigms of AI robotics;(2)major ways to organize and combine behaviors in behavior-based systems;(3)major path planning;(4)simultaneous localization and mapping (SLAM) algorithms.

CAP 5171 Curriculum Construction: Business Education (3) EDEDV
Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation.

BUL 3320 Law And Business I (3) BU GBA
This course covers the nature of legal and societal institutions and environments, and major aspects of public, private, UCC and related business law.
CBH 4004 Comparative Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. The study of the evolution of behavior, similarities, and differences in capacities for environmental adjustment and for behavioral organization among important types of living beings.

CCE 4031 Construction Management (3) EN EGX
PR: EGN 3613C. Fundamentals of construction management. Topics include: general definitions, organizational roles, types of contracts, analysis of labor and equipment, cost estimating, contractor cash flow analysis, planning and scheduling, project control, construction administration, quality and safety management, and use of computer software in construction management.

CCE 5035 Construction Management & Planning (3) EN EGX
PR: EGN 3613C. Fundamentals of construction management. Topics include: general definitions, organizational roles, types of contracts, analysis of labor and equipment, cost estimating, contractor cash flow analysis, planning and scheduling, project control, construction administration, quality and safety management, and use of computer software in construction management.

CCJ 3014 Crime and Justice in America SS CASB (4) BC CJP
This course is a non-technical survey of the nature of crime in the United States and the ways in which our society seeks to deal with juvenile and adult offenders and victims of crime.

CCJ 3024 Survey of the Criminal Justice System SS (3) BC CJP
An introduction to the structure and operation of law enforcement, prosecution, the courts, and corrections. Also includes brief coverage of major reported crimes.

CCJ 3117 Theories of Criminal Behavior (3) BC CJP
PR: Junior standing, CCJ 3024 or CI. Provides a basic understanding of the complex factors related to crime, with concentration on principal theoretical approaches to the explanation of crime.

CCJ 3621 Patterns of Criminal Behavior (3) BC CJP
PR: Junior standing. Reviews the nature and extent of the crime problem. The course will concentrate on major patterns of offender behavior including crimes against the person, property crimes, violent crimes, economic/white collar offense, syndicated (organized) crimes, consensual crimes, female crime, political crime, and will examine criminal career data.

CCJ 3701 Research Methods in Criminal Justice I (3) BC CJP
PR: Junior standing, CCJ 3024 or CCJ 3610 or CI. Introduces the student to some of the fundamentals of knowledge-generating processes in criminal justice.

CCJ 3706 Applied Statistics in Crime (3) AP CJP
This course is designed as a beginning undergraduate level statistics course for criminology majors. In addition to learning how and when to apply appropriate statistical tests, students will learn a number of basic statistical concepts. Majors Only.

CCJ 4450 Criminal Justice Administration (3) BC CJP
PR: Junior standing, CJJE 4114 or CJJT 4100 or CI. This course is designed to provide an in-depth examination of both the practical and theoretical aspects of the administration of criminal justice agencies. The major focus will be on law enforcement and correctional agencies.

CCJ 4604 Abnormal Behavior and Criminality (3) BC CJP
PR: Junior standing, CCJ 3610 or CI. A systematic introduction to the relationship between mental illness and criminality, with focus on psychiatric labeling of deviant behavior and its implications for the handling of the criminal offender.

CCJ 4700 Statistical Research Methods in Criminal Justice II (3) BC CJP
PR: Junior standing, CCJ 3024 or CCJ 3610 or CI. Beginning with the scientific method, the tools commonly used to analyze criminal justice data will be emphasized. Recommended for students who intend to continue their education beyond the B.A. Required of students attending the MA program in CCJ at USF.

CCJ 4900 Directed Readings (1-3) BC CJP
PR: Junior standing, CCJ 3024, CCJ 3610, CCJ 3621, CI. S/U only. (a) Students wishing to enroll must make arrangements with a faculty member during the semester prior to actually taking the course.(b) A minimum of four 4 CCJ courses must have been completed satisfactorily prior to enrollment.(c) First consideration will be given to Criminology majors.(d) Individual faculty members may add additional requirements at their discretion. No more than six hours of CCJ 4900, CCJ 4910 or any combination of the two will be accepted toward the minimum number of hours required for the major. This course is specifically designed to enable advanced students the opportunity to do in-depth independent work in the area of criminal justice. Each student will be under the close supervision of a faculty member of the program.

CCJ 4910 Directed Research (1-3) BC CJP
PR: Junior standing, CCJ 3024, CCJ 3610, CCJ 3621, CI. S/U only. (a) Students wishing to enroll must make arrangements with a faculty member during the semester prior to actually taking the course.(b) A minimum of four 4 CCJ courses must have been completed satisfactorily prior to enrollment.(c) First consideration will be given to Criminology majors.(d) Individual faculty members may add additional requirements at their discretion. No more than six hours of CCJ 4900, CCJ 4910 or any combination of the two will be accepted toward the minimum number of hours required for the major. This course is designed to provide students with a research experience in which they will work closely with faculty on the development and implementation of research projects in the area of criminal justice.

CCJ 4930 Critical Issues in Policing (3) BC CJP
PR: Junior standing, CCJ 3024 or CJJE 4114 or CI. Focuses on some of the most critical issues in law enforcement today including: understanding and controlling police use of deadly force; police deviance; police prejudice and discrimination; violence-prone police officers; substance abuse by police officers; and administrative review of alleged police brutality.

CCJ 4933 Selected Topics in Criminology (3) BC CJP
PR: Junior standing, CCJ 3024, CCJ 3621, CCJ 3610 or CI. Lecture course. Topic varies and is designed to address a wide variety of issues in criminology and criminal justice. Open to non-majors with CI.
CCJ 4934 Seminar in Criminology (3) BC CJP
PR: Senior standing, CCJ 3024, CCJ 3621, CCJ 3117 and CI. These variable topic seminars are used for the in-depth study and discussion of the relationships among culture, gender, ethics, age, society, and criminal behavior. Such examinations may include the options the criminal justice does (or does not) have to deal with these interactions, and the ethics and efficacy of the system's response. Open to non-majors with CI.

CCJ 4940 Internship For Criminal Justice Majors (3) BC CJP
PR: Senior standing, CCJ 3024, CCJ 3610, CCJ 3621. S/U only. No more than 9 hours of CCJ 4940 will be accepted toward the elective hours required for the major. The internship will consist of placement with one or more of the agencies comprising the criminal justice system. This course will enable the students to gain meaningful field experience related to their future careers. The three-hour block of credit will require a minimum of ten hours of work per week during a fall or spring term, fifteen hours per week in summer, within the host agencies in addition to any written work or reading assignments. See requirements for the B.A. degree in Criminology for the number of hours required.

CCJ 4970 Honors Thesis (3) BC CJP
PR: CCJ 4934 (honors section), CCJ 4910 The student, under the direction of a faculty member, will formalize, conduct, analyze, and report in writing a research project in the Department of Criminology. The course is not repeatable. Majors only.

CDA 3101 Computer Organization for Information Technology (3) AS EIT
PR: Any Physics course and CGS 3303, or CI. Elements of the computer are discussed in terms of the physical and conceptual design of memory, processors, busses and I/O elements. Organization of the system is cast in a meta-language that captures the logical and physical nature of the computer.

CDA 3103 Computer Organization (3) EN ESB
PR: PHY 2049 or PHY 2054 and DPR. Introduction to computer hardware, logic elements and Boolean algebra, computer arithmetic, the central processing unit, assembly language programming, input/output, and memory.

CDA 3201 Computer Logic and Design (3) EN ESB
PR: CDA 3103, COP 3514; CR: CDA 3201L and Degree Program Admission. CSE and EE majors. Others by special permission. Advanced coverage of Boolean Algebra, introduction to minimization of combinational logic circuits, analysis and synthesis of sequential circuits, testing of logic circuits and programmable logic devices.

CDA 4203 Computer System Design (3) EN ESB
PR: CDA 3201, CDA 3201L. Design Methods, Top-Down design, Building Blocks, Instruction and addressing models, minicomputer design, interfacing.

CDA 4203L Computer System Design Lab (1) EN ESB
CR: CDA 4203. This lab introduces the student to the concept of system design. Several projects are given including building timing circuits, memory-based and communication circuits, and microcomputer-based designs.

CDA 4205 Computer Architecture (3) EN ESB
PR: CDA 3201, CDA 3201L. Principles of the design of computer systems, processors, memories, and switches. Consideration of the register transfer representation of a computer, ALU's and their implementation, control units, memory and I/O, and the hardware support of operation systems.

CDA 4213 CMOS-VLSI Design (3) EN ESB
PR: CDA 3201, CDA 3201L. Covers analysis and design of CMOS processing technology, CMOS logic and circuit design, layout timing and delay, and power and thermal issues. CMOS transistor theory. VLSI system design, case studies and rapid prototype chip design.

CDA 4213L CMOS-VLSI Design Lab (1) EN ESB

CDA 4253 Field Programmable Gate Array System Design and Analysis (3) EN ESB
PR: CDA 3201, CDA 3201L. Covers analysis and design of digital systems using VHDL simulation. Provides experience with field programmable logic gates and gate arrays. Introduces the requirements for field programmable systems; testing of circuitry, and analysis of system design.

CDA 5416 Introduction to Computer-Aided Verification (3) ESB
PR: CDA 3201, COT 3100, COT 4400, EEL 4851C. This course introduces basic concepts of formal verification. Topics include formal specification, algorithms, and methodologies for scalable verification. It is only for CSE majors or non-majors with permission from the instructor, not repeatable.

CEG 4011 Geotechnical Engineering I (3) EN ESB
PR: EGN 3353, EGN 3331. Fundamental and experimental concepts in soil mechanics with emphasis on soil properties, soil moisture, soil structure, and shearing strength.

CEG 4011L Geotechnical/Transportation Laboratory (1) EN ESB
CR: CEG 4011. Demonstrates and experiments verifying theoretical bases of Geotechnical and Transportation Engineering. One hour lecture and two laboratory hours per week.

CEG 4012 Geotechnical Engineering II (3) EN ESB
PR: CEG 4011. Design of retaining walls, earth slopes, foundations to control settlement, soil stabilization and foundations subjected to dynamic loads. Computer applications to soil mechanics will be covered.

CEG 4850 Capstone Geotechnical/Transportation Design MW CPST (3) EN ESB

CEG 5115 Foundation Engineering (3) EN ESB
PR: CEG 4011 or CI. Design of shallow foundations, cantilevered and anchored retaining walls, piling, drilled

CEN 3722 Human Computer Interfaces for Information Technology (3) AS EIT
Human-Computer Interface is the study of people, computer technology and the ways these influence each other. The basic foundations of HCI in terms of psychology, computer systems and their integration into design practice are discussed in the course.

CEN 4023 Software System Development (3) EN ESB
PR: COP 4530. Analysis, design, and development of software systems using objective methodology with object oriented programming and advanced software development tools (such as integrated development environments).

CEN 4031 Software Engineering Concepts for Information Technology (3) AS EIT
PR: EEL 4854 or CI. Concepts associated with production of high quality software. Students will participate in a software development team.

CEN 4072 Software Testing (3) EN ESB
PR: COP 2510, COP 4530. The course provides the fundamental principles and tools for testing and validating large-scale software systems. The course is open to majors as well as non-majors.

CEN 4721 User Interface Design (3) EN ESB
PR: COP 4530. An examination of factors influencing the usability of a computer system. Topics include input and output devices, graphic and multi-media interfaces, formats for interaction/communication between computer and user, and the evaluation of usability.

CES 3102 Structures I (3) EN EGX
PR: EGN 3331. Analysis of simple structural systems, both determinate and indeterminate. Moment area theorems; influence lines; introduction to steel design.

CES 4141 Finite Element Analysis I (3) EN EGX

CES 4561 Computer Aided Structural Design (3) EN EGX
PR: CES 4141. Computer aided structural analysis and design using existing finite element program, static dynamic loading.

CES 4605 Concepts of Steel Design (3) EN EGX
PR: CES 3102. Introduction to steel design and AISC Manual of Steel Construction: Design of tension members; compression members; beams; beam columns; and bolted, welded, and riveted connections.

CES 4702 Concepts of Concrete Design (3) EN EGX
PR: CES 3102. Introduction to concrete design and the ACI Building Code Requirements for reinforced concrete: Design of flexural reinforcement in beams and slabs, design of shear reinforcement, design of concrete columns.

CES 4704 Capstone Structural/Materials Design (3) EN EGX
PR: EGN 3365, CES 4605, CES 4702. A capstone materials design experience for seniors in Civil and Environmental Engineering. This course will provide students with a focused design experience aimed to design for durability and reliability.

CES 4742 Concepts of Structural Design (3) EN EGX
PR: CES 3102. Introduction to concrete design and the ACI Building Code Requirements for reinforced concrete; design of flexural reinforcement in beams and slabs, design of shear reinforcement, design of concrete columns, and design of steel beams.

CES 4750 Capstone Structural/Geotechnical/Material Design

CES 4820C Timber and Masonry Design (3) EN EGX
PR: CES 3102, CES 4702. Fundamentals of timber design including beams, columns, connections and formwork. Introduction to masonry design including design of beams, walls, columns, and pilasters.

CES 5105C Advanced Mechanics of Materials I (3) EN EGX
PR: EGN 3331, MAP 2302 Analytical study of the mechanical behavior of deformable solids. Basic concepts, stress and strain transformations, special topics in beams, theory of elasticity, criteria of failure, beams on elastic foundation.

CES 5209 Structural Dynamics (3) EN EGX
PR: CES 3102, EGN 3321. Behavior of structural components and systems when subjected to periodic dynamic loads.

CES 5715C Prestressed Concrete (3) EN EGX
PR: CI, majors only. Fundamental principles of prestressing; calculation of losses; stress analysis and design of simple beams for flexure and shear. Examples of pressures applications.

CGN 3021 Civil Engineering Laboratory (2) EN EGX
PR: CES 3102, EGN 3353, EGN 3365. A laboratory experience in departmental facilities including the subject areas of materials, fluids, environmental engineering, and computer assisted data acquisition.

CGN 4122 Professional and Ethical Issues in Engineering
PR: EGN 3365. Classifications and production of cements. Design and testing of concrete mixes to produce desired properties.
CGS 2935 Special Topics in General Computer Studies (1-5) EN EGB
PR: CC. S/U only. Specialized independent study determined by the students' needs and interests.

CGS 2911 Research in Civil Engineering and Environmental Engineering (1-4) EN EGB
PR: CC. Research course in civil and environmental engineering concepts.

CGS 2914 Senior Project (2-5) EN EGB
PR: CI. Problem-solving experience and training for seniors in research and/or design projects. Written final reports are required.

CGS 4933 Special Topics in Civil and Environmental Engineering (1-5) EN EGB
PR: CI. New technical topics of interest to civil engineering students.

CGS 5933 Special Topics in Civil Engineering and Mechanics (1-5) EN EGB
PR: CI. New technical topics of interest to civil engineering students.

CGS 2034 Computers and Impact on Society SS CASB (3) EN ESB
This course surveys current technology, and its application to various other disciplines. The course includes technical descriptions and protocols for computers. The course compares interdisciplinary applications between fields using technology.

CGS 2060 Introduction to Computers and Programming in Basic 6A CAQR (3) EN ESB
No credit for Engineering Majors. Introduction to programming using the BASIC language and application to computational methods. Emphasis on systematic approach to problem solving. Overview of computer systems, applications & their role in society.

CGS 2062 Computers And Society (3) EN ESB
No credit for Engineering Majors. For non-engineering majors only. This computer literacy course covers the fundamentals of hardware, software, and programming languages, presents a broad overview of data processing concepts, problems and applications for students with little or no computing background.

CGS 2094 Cyber Ethics AF SS CAGC (3) EN ESB
Many ethical issues, e.g. privacy, freedom of speech, security, intellectual property, and workplace globalization, are impacted by computing and related technology. These issues are examined from theoretical, cultural, and geopolitical perspectives.

CGS 2100 Computers In Business (3) BU QMB
A study of the use and impact of computers in all areas of business organizations. Course includes hands-on experience and the use of software packages for business analysis.

CGS 2335 Special Topics in General Computer Studies (1-3) EN ESB
Courses are one-time topics in general computer studies, applicable to all students. Specific course titles will be specified when the course is posted on the schedule.

CGS 3303 IT Concepts (3) AS EIT
PR: Any PHY course. A lecture and problem solving course which deals with subjects related to computers and information technology. A broad range of conceptual and practical topics in IT are covered.

CGS 3845 Electronic Commerce (3) AS EIT
PR: COP 2510 or equivalent. An overview of how Electronic Commerce evolved, what EC is; how it is being conducted and managed; its major opportunities, issues, and risks. Discussions include: The Internet, intranets, firewalls, etc. Exercises will use various Web and software packages.

CGS 3853 IT Web Design (3) AS EIT
PR: COP 2510 or equivalent. An overview of how the Internet and the WWW evolved, and how Electronic Commerce is supported by web pages. The student will do exercises relative to HTML, and how browsers show that code. The student will also learn to use web page development packages.

CGS 5765 Introduction to Unix and C (3) EN ESB

CHI 1120 Modern Chinese I (4) AS WLE
CR: CHI 1120L. Mandarin. An intensive study of basic skills: pronunciation, listening, comprehension, speaking, and some composition.

CHI 1120L Modern Chinese I Laboratory (1) AS WLE
CR: CHI 1120. S/U only. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. A laboratory designed to offer additional practice using various instructional technologies and media.

CHI 1121 Modern Chinese II (4) AS WLE
CR: CHI 1121L. Mandarin. An intensive study of basic skills: pronunciation, listening, comprehension, speaking, and some composition.

CHI 1121L Modern Chinese II Laboratory (1) AS WLE
CR: CHI 1121. S/U only. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. A laboratory designed to offer additional practice using various instructional technologies and media.

CHI 2200 Modern Chinese III (4) AS WLE
PR: CHI 1121 or the equivalent. For language students who intend to attain basic proficiency.

CHI 2201 Modern Chinese IV (4) AS WLE
PR: CHI 2220 or the equivalent. Continuation of CHI 2220. Practice of writing, speaking and listening skills for language students who intend to attain basic proficiency.

CHI 4905 Directed Study (1-5) AS WLE
Departmental approval required. S/U only. Permits study options in Modern Chinese not available in the regularly scheduled curriculum at departmental discretion.

CHM 2023 Chemistry for Today NS (4) AS CHM
PR: High school chemistry and mathematics including algebra are recommended. No credit for science majors. An introduction to the principles and applications of modern chemistry including the properties of matter, structural view of matter and reactions, quantitative relations in chemical reactions, technological aspects and societal impact.

CHM 2032 Introduction to General, Organic, and Biochemistry I CANP (4) AS CHM
No credit for science majors. Fundamental concepts of
general, organic, and biological chemistry.

CHM 2045 General Chemistry I NS CANP (3) AS CHM
PR: 550 SAT Quantitative score or completion of MAC 1105 College Algebra with a C or better AND one year of high school chemistry or completion of CHM 2023 with a grade of C or better. Principles and applications of chemistry including properties of substances and reactions, thermochemistry, atomic-molecular structure and bonding, periodic properties of elements and compounds.

CHM 2045L General Chemistry I Laboratory (1) AS CHM
CP: CHM 2045. Laboratory portion of General Chemistry I. Introduction to laboratory techniques; study of properties of elements and compounds; synthesis and analysis of natural and commercial materials.

CHM 2046 General Chemistry II NS CANP (3) AS CHM
PR: CHM 2045 and CHM 2045L with a C or better or equivalent. Principles and applications of chemistry including solutions, chemical thermodynamics, kinetics, equilibria, aqueous chemistry, electrochemistry, and nuclear chemistry.

CHM 2046L General Chemistry II Laboratory (1) AS CHM
PR: CHM 2045L. Laboratory portion of General Chemistry II. Continuation of chemistry laboratory.

CHM 2200 Organic Chemistry (4) AS CHM

CHM 2210 Organic Chemistry I (3) AS CHM
PR: CHM 2046, CHM 2046L with a C or better. Fundamental principles of organic chemistry. Lecture.

CHM 2210L Organic Chemistry Laboratory I (2) AS CHM

CHM 2211 Organic Chemistry II (3) AS CHM
PR: CHM 2210 with a C or better. Continuation of organic chemistry.

CHM 2211L Organic Chemistry Laboratory II (2) AS CHM

CHM 2932 Selected Topics in Chemistry (1-3) AS CHM
Topics of interest to students relating to chemistry and other sciences.

CHM 3120C Elementary Analytical Chemistry (4) AS CHM

CHM 3610 Intermediate Inorganic Chemistry (3) AS CHM
PR: CHM 2046, CHM 2046L. Fundamental principles of inorganic chemistry including atomic structure, bonding theories and structural consequences, transition metal chemistry and illustrative laboratory work.

CHM 3610L Intermediate Inorganic Chemistry Laboratory (1) AS CHM
PR: Two semesters of general chemistry lecture and lab. CR: CHM 3610. Illustrative laboratory work concerning the fundamental principles of inorganic chemistry including atomic structure, bonding, transition metal chemistry, structural consequences and spectroscopic methods.

CHM 4060 Use of the Chemical Literature (1) AS CHM
PR: CHM 2045, CHM 2046, CHM 2210, CHM 2211. Discussions and assignments using abstracts, bibliographies, indices, encyclopedias, journals, patent files, electronic databases, and other information sources to obtain chemical and technical material and including written and oral presentations. Career information and opportunities also discussed.

CHM 4070 Historical Perspectives in Chemistry 6A MW (3) AS CHM
PR: One year of college chemistry; or senior standing and CI. A study in depth of the historical and philosophical aspects of outstanding chemical discoveries and theories. Lec.-dis.

CHM 4130C Methods of Chemical Investigation I (4) AS CHM
PR: CHM 3120C, CHM 2211, CHM 2211L, CHM 4060, CHM 4410. Theory and applications of instrumental methods in chemical research, chemical synthesis and analysis; electrochemical and calorimetric techniques, separation methods, spectroscopy, statistical analysis of data, computer data handling, and individual projects. Lec.-lab.

CHM 4131C Methods of Chemical Investigation II (4) AS CHM
PR: CHM 4130C. Continuation of CHM 4130C. Lec.-lab.

CHM 4300 Biomolecules I (3) AS CHM
PR: CHM 2211. Nature, structure, elucidation, synthesis and (in selected cases) organic chemical mechanisms of biochemical involvement of the major classes of organic compounds found in living systems.

CHM 4410 Physical Chemistry I (4) AS CHM
PR: CHM 2046, MAC 2242 or MAC 2282 or MAC 2312, and PHY 2054 or PHY 2049. Thermodynamics, the state of matter and solutions are presented. The course includes a recitation.

CHM 4410L Physical Chemistry Laboratory (1) AS CHM
PR: CHM 4410. A physical chemistry laboratory with emphasis on modern techniques and instruments. Lab.

CHM 4411 Physical Chemistry II (4) AS CHM
PR: CHM 2046, MAC 2242 or MAC 2282 or MAC 2312, and PHY 2054 or PHY 2049. Introduction to quantum mechanics and molecular spectroscopy. Chemical Kinetics and statistical mechanics are also presented. The course includes a recitation.

CHM 4413 Biophysical Chemistry (3) AS CHM
PR: CHM 2046, CHM 4410, MAC 2242 or MAC 2282 or MAC 2312, and PHY 2054 or PHY 2049. This course will cover spectroscopy, bonding and kinetics with emphasis placed on biological molecules and biochemical reactions.

CHM 4611 Advanced Inorganic Chemistry (3) AS CHM
PR: CHM 4410, CHM 2046, MAC 2242 or MAC 2282 or MAC 2312 and PHY 2054 or PHY 2049. An advanced descriptive and theoretical treatment of inorganic compounds.

CHM 4905 Independent Study (1-3) AS CHM
PR: CI. S/U only. Specialized independent study determined by the student’s needs and interests. The written contract required by the College of Arts and Sciences specifies the regulations governing independent study.

CHM 4932 Selected Topics in Chemistry (1-3) AS CHM
PR: CI. The course content will depend on the interest of faculty members and student demand.

CHM 4970 Undergraduate Research (1-3) AS CHM
PR: CI. S/U only.
CHM 5225 Intermediate Organic Chemistry I (3) AS CHM
PR: CHM 2211, CHM 2211L, or equivalent or CI or GS. This course will extend organic chemistry beyond the undergraduate level and will emphasize concepts of stereochemistry and reaction mechanisms.

CHM 5226 Intermediate Organic Chemistry II (3) AS CHM
PR: CHM 5225 or CI. An introduction to synthetic organic chemistry for graduate students and advanced undergraduates. Semester II.

CHM 5425 Applications in Physical Chemistry (3) AS CHM
PR: CHM 4412 and CHM 4410 or CI or GS. Applications of chemical theory to chemical systems.

CHM 5452 Polymer Chemistry (3) AS CHM
PR: Either CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410 or graduate standing. Fundamentals of polymer synthesis, structure, properties, and characterization.

CHM 5621 Principles of Inorganic Chemistry (3) AS CHM
PR: CHM 4411, CHM 4610 or CI or GS. Chemical forces, reactivity, periodicity, and literature in organic chemistry; basic core course.

CHM 5931 Selected Topics in Chemistry (1-3) AS CHM
PR: CI. The following courses are representative of those that are taught under this title: Natural Products, Stereochemistry, Reactive Intermediates, Photochemistry, Instrumental Electronics, Advanced Lab Techniques, Heterocyclic Chemistry, etc.

CHS 2440 General Chemistry for Engineers (3) AS CHM
PR: 550 SAT Quantitative score or completion of MAC 1105 College Algebra with a grade of C or better AND one year of high school chemistry or completion of CHM 2023 with a grade of C or better. Introduction to important concepts and principles of chemistry with emphasis on areas considered most relevant in an engineering context.

CHS 2440L General Chemistry for Engineers Lab (1) AS CHM
CR: CHS 2440. Laboratory portion of General Chemistry for Engineers. Introduction to laboratory techniques, study of properties of elements, synthesis and analysis of natural and commercial materials.

CHS 4300 Fundamentals of Clinical Chemistry (3) AS CHM
PR: BCH 3023. Theoretical and practical aspects of the analysis of various body fluids, with emphasis on the medical significance.

CHS 4301L Clinical Laboratory (2) AS CHM
PR: BCH 3023 and CI, CHM 3120C. Laboratory experience in some of the most important clinical determinations. Lec.-Lab.

CHT 3500 Introduction to Chinese Culture (3) AS WLE
An introductory survey of Chinese cultural traditions with an emphasis on themes important to successful interaction in contemporary Chinese society. The language of instruction is English.

CIS 3360 Principles of Information Security (3) AS EIT

CIS 3362 Cryptography and Information Security (3) AS EIT
PR: MAD 2104 or permission of instructor. This course examines classical cryptography, entropy, stream and block ciphers, public key versus symmetric cryptography, one-way and trap-door functions, plus other specific tools and techniques in popular use.

CIS 3367 Architecting Operating System Security (3) AS EIT
PR: CIS 3360 or permission of instructor. This course examines tools and techniques for securing Windows and Linux operating systems. Students will acquire knowledge and skills to perform audit assessments and implement enterprise-wide operating system security.

CIS 3932 Special Topics for Information Technology (1-4) AS EIT
Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.

CIS 4203 Computer Forensics & Investigations (3) US EIT
PR: Programming course and a math course. Teaches the methods of acquiring, preserving, retrieving, and presenting data that have been processed electronically and stored on computer media for use in legal proceedings. Focus on MS Windows systems.

CIS 4204 Ethical Hacking (3) AS EIT
PR: Programming course and a math course. Provides an understanding of computing, networking, exploitation techniques, used for IT security. In testing, a legal ethical hacker tries to penetrate a system, finds its weakest link and analyzes ways to correct security flaws.

CIS 4250 Ethical Issues And Professional Conduct 6A MW CPST (3) EN ESB
PR: Senior standing in the Department of Computer Science and Engineering. A capstone course for Department majors only, this course introduces students to ethical issues arising in the computer sciences, through written analysis and oral presentations of technical situations which involve ethical conflicts.

CIS 4253 IT Ethics 6A MW (3) AS EIT
PR: Basic computer skills. This course will cover issues that arise from the world of online communication and its impact on our daily lives through education, processes, and information. Class discussions cover various technologies and issues that are shaping our society.

CIS 4361 Information Technology Security Management (3) AS EIT
PR: Junior standing or above. An overview of information security management techniques and concerns is presented. Topics include: Access control systems, telecommunications and network security, security management practices, application and systems development security, cryptography, disaster recovery planning, legal and ethical issues, and physical security.

CIS 4364 Cryptology and Information Security (3) EN ESB

CIS 4365 Computer Security Policies and Disaster Preparedness (3) AS EIT
PR: CIS 3360. When an organization's functioning is interrupted by disasters, accidents, or natural events, a loss of data and/or productivity may occur. The impact on the organization is determined by how prepared it is for
CJE 3444 Crime Prevention 6A (3) AP CJP
PR: CCJ 3024, CCJ 3610. The aim of this course is to introduce students to the theories and constructs of crime prevention and reduction, as well as techniques and policies used currently worldwide that would enhance US response to crime and justice. No restriction, not repeatable.

CJE 3641 Introduction to Forensic Science (3) AP CJP
This course provides students an appreciation of 'real life' forensic science and its role in the justice system. The class introduces students to the scientific techniques employed by the forensic science community. Not restricted or repeatable.

CJE 3656 Introduction to Crime Analysis (3) AP CJP

CLA 3103 Greek Civilization 6A HP CAHU (3) AS WLE
This course surveys the major social, political, and cultural aspects of the ancient Greek world, examined both topically and chronologically across the centuries of the Ancient Greece, c. 1400 to 146 BCE.

CLA 3124 Roman Civilization HP CAHU (3) AS WLE
This course surveys the major social, political, and cultural aspects of the ancient Roman world, topically and chronologically, from 753 B.C.E to 476 CE, through the literary, historical, and artistic records of the Romans.
CLT 3103 Greek Literature in Translation 6A MW WRIN (3) AS WLE
This class investigates the most important texts of the Archaic and Classical Greek world, which are analyzed in both a chronological sequence (c. 700 to 399 BCE) and by genre (epic poetry, philosophy, lyric, history, and drama).

CLT 3123 Roman Literature in Translation 6A MW WRIN (3) AS WLE
This course surveys the major literary texts of the ancient Roman world, examined through both the chronological order of their production (from the 3rd century B.C.E to the 2nd century C.E) and their classification into various literary genres.

CLT 3370 Classical Mythology HP CAHU (3) AS WLE
Classical Mythology surveys the myths, legends, and sagas of the Greeks and Romans chronologically (c. 1200 BCE to 17 CE) and thematically, through literature (prose and poetry), iconography (art and architecture), and film (documentary and dramatic.)
COM 3110 Communication For Business and the Professions (3) AS SPE
For non-majors only. Identification of communication situations specific to business and the professions. Analysis of variables related to communication objectives and preparation of oral presentations in the form of informational reports, conference management, persuasive communications, interviews, and public hearings.

COM 3120 Organizational Communication (3) AS SPE
PR: COM 2000 with C- or above or consent of instructor (CI). A survey of communication concepts which impact upon organizational effectiveness.

COM 3122 Interview Communication (3) AS SPE
A study of communication theory relative to persuasive interviewing with an emphasis on career interview situations.

COM 3413 Communication and Visual Culture (3) AS SPE
PR: COM 2000. Examines the nature and practices of seeing as fundamental to communication with special emphasis on cultural and rhetorical implications of visual practices in aesthetic, political, and social arenas.

COM 4016 Public Memory (3) AS SPE
PR: COM 2000, SPC 2541. Exploration of collective memory as public communication. Examines public memory as created and communicated in memorials, museums, mediated history, nostalgia, and story. For majors; non-majors by permit. Not repeatable for credit.

COM 4020 Communicating Illness, Grief, and Loss 6A (3) AS SPE
PR: COM 2000 with C- or above or consent of instructor (CI). Focus on stories of illness, grief, and loss to make sense of these experiences; to understand the cultural and rhetorical influences on how stories are told; and to explore the context of everyday life, romantic relationship, families, institutions, and culture in which they occur.

COM 4021 Family Communication and the End of Life (3) AS SPE
PR: COM 2000, SPC 3301. Explores theories and practices of family communication at end-of-life through language, relationships, bioethics, and case analysis techniques. For majors; non-majors by permit only. May not be repeated for credit.

COM 4022 Health Communication (3) AS SPE
PR: COM 2000 with C- or above or consent of instructor (CI). Application of communication theory and research to the health context including provider-patient communication, health information campaigns, and health beliefs and behavior. Special attention to the value issues in health communication.

COM 4030 Women and Communication 6A MW (3) AS SPE
Examines women’s patterns of communication in a variety of contexts. Also offered under Women’s Studies.

COM 4050 Globalization and Democratic Discourse (3) AS SPE
PR: COM 2000, SPC 2541. Examines rhetoric of globalization and democracy from communication perspectives, especially the discourses of war, terrorism, nationalism, and security. For majors; non-majors by permit only. Not repeatable for credit.

COM 4104 Communication, Tourism, and Travel (3) AS SPE

COM 4124 Communication and Organizational Change (3) AS SPE
PR: COM 2000 with C- or above and COM 3120 or consent of instructor (CI). An advanced course covering current issues in organizational transformation (e.g., organizational dialogue, learning organizations, reengineering, work teams), and the role communication processes play in such changes.

COM 4128 Integrated Organizational Communication (3) AS SPE
PR: COM 3120. Explores theories, practices, and functions of integrated communications strategies and tactics in organizational contexts. For Communication majors; non-majors by permit only. May not be repeated for credit.

COM 4414 Race and Gender in Popular Film and Television (3) AS SPE
PR: SPC 2541, COM 3051. Explores representations of race and gender in contemporary TV and film and utilizes feminist and critical race theories to interrogate social inequalities. Majors only. Non-majors by permit only. May not be repeated for credit.

COM 4530 Influencing Public Opinion (3) AS SPE

COM 4702 Communication, Language, and Mental Illness (3) AS SPE
PR: COM 2000, SPC 3301. Explores intersection of mental illness and communication as language, talk-in-interaction, and discourse as social practice. For majors; non-majors by permit. May not be repeated for credit.

COM 4710 Writing Lives 6A (3) AS SPE
PR: Junior/Senior standing or CI. Emphasizes writing stories about our lives and the lives of others as a way to understand, cope with and communicate social experiences.

COM 4931 Special Topics in Media Analysis (3) AS SPE
PR: SPC 2541, COM 3051. Selects contemporary topics in media, media genres, and forms to examine how social issues are reflected and changed. Majors only; non-majors by permit only. May be repeated for credit as topics change for 9 total credits.

COM 4942 Communication Intern Seminar (3) AS SPE
PR: Communication major, minimum GPA 3.0, 75 hours completed, 15 hours of core requirements and 9 elective hours completed, and CI. Seminar provides students with an opportunity to put into practice concepts and skills acquired in their study of communication. Weekly seminar sessions augment intern experience. Application for seminar must be submitted one semester prior to seminar offering.

COM 5930 Topics in Communication Studies (3) AS SPE
Topical issues in communication.
COP 1930 Special Topics for Information Technology (1-3)  
AS EIT  
Special topics course.

COP 2270 Programming in C for Engineers (3) EN ESB  
PR: MAC 2281, MAC 2311 or MAC 2241. This class prepares students to use the C programming language and the MATLAB environment to develop solutions to small scale scientific and engineering problems.

COP 2510 Programming Concepts (3) EN ESB  
PR: MAC 2281 or equivalent. An examination of a modern programming language emphasizing programming concepts and design methodology.

COP 2930 Special Topics for Information Technology (1-3)  
AS EIT  
Special topics course.

COP 2931 Special Topics for Information Technology (1-3)  
AS EIT  
Special topics course.

COP 3257 JAVA for Experienced Programmers (3) EN ESB  
PR: COP 3514 or equivalent. Program design and development using the JAVA programming language. Comparison of program design in a procedural language (C recommended) versus design in the JAVA language. Application development using advanced programming techniques.

COP 3331 Object Oriented Software Design (3) EN ESB  
PR: COP 3514 Design of a computer program using an Object-Oriented programming language. Extension of programming knowledge from a procedural language to an object-oriented language. Analysis of program requirements.

COP 3333 Visual Basic for Experienced Programmers (3)  
EN ESB  
PR: COP 3514. Program design and development using the Visual Basic language and application development tools. Application development using advanced programming techniques where visual presentation is a priority element.

COP 3514 Program Design (3) EN ESB  
PR: COP 2510 or comparable introductory programming course and DPR. The class extends students' programming knowledge by systematically considering the concepts involved in program design and creation. Students will also build upon their previous programming experience by learning to use the C programming language in a networked environment.

COP 3515 Program Design for Information Technology (3)  
AS EIT  
PR: COP 2510 or CI. Concepts associated with the design and implementation of computer programs are studied, with emphasis on creation of programs to be developed and maintained in a variety of environments from small to large information technology organizations.

COP 3931 Special Topics for Information Technology (1-4)  
AS EIT  
Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.

COP 4020 Programming Languages (3) EN ESB  
PR: COP 4530. An introduction to the specification, design, and analysis of programming languages. Topics include syntax, operational semantics, type systems, type safety, lambda calculus, functional programming, polymorphism, side effects, and objects.

COP 4313 Symbolic Computations in Mathematics 6A (3) AS MTH  
PR: MAS 3105 and MAP 2302. Students will write programs to solve problems in various areas of mathematics including calculus and linear algebra with symbolic programming systems such as Maple, Mathematica, or Macsyma.

COP 4530 Data Structures (3) EN ESB  
PR: COT 3100, COP 3331, admission to the CSE department. CSE majors only. Understand and implement fundamentals of concise data structure and organization for program efficiency, clarity and simplification. Implementation of different data types and structures. Understanding of current data structures.

COP 4600 Operating Systems (3) EN ESB  
PR: COP 4530. Introduction to systems programming. Design of operating systems. Concurrent processing, synchronization, and storage management policies.

COP 4610 Operating Systems for Information Technology (3) AS EIT  
PR: EEL 4854 or CI. Introduction to concepts and practices of modern operating systems. Topics include process, parallelism, memory management, resource allocation and file systems. Algorithms are used to understand many of the concepts associated with operating systems.

COP 4610L Operating Systems Laboratory for Information Technology (1) AS EIT  
PR: EEL 4854 or CI. Implementation and evaluation of models discussed in the lecture part of the course. Students implement operating system algorithms in stand-alone mode, and modify real operating system code. Students implement and test algorithms in a lab environment.

COP 4620 Compilers (3) EN ESB  
PR: COP 4530. Introduction to techniques for compiling software; lexical, syntactic, and semantic analyses; abstract syntax trees; symbol tables; code generation and optimization.

COP 4703 Database Systems for Information Technology (3) AS EIT  
CR: EEL 4854 or CI. Fundamentals of database management systems are presented, covering relational, CODASYL, network, hierarchical, and object-oriented models. Topics include basic design concepts, analysis of efficiency as well as actual implementations of such systems.

COP 4710 Database Design (3) EN ESB  
PR: COP 4530 or EEL 4851C. This course covers the fundamentals and applications of database management systems, including data models, relational database design, query languages, and web-based database applications.

COP 4814 Web Services (3) AS EIT  
PR: CI. The Web services model, based on the Open Standards of SOAP, WSDL, and UDDI, is studied and applied.

COP 4816 XML Applications (3) AS EIT  
PR: CI. Completion of prerequisites for admission to IT program. This course introduces extensible Markup Language (XML), a technology for exchanging structured
information over the Internet, and examines a sampling of its many applications.

COP 4834 Data-Driven Web Sites (3) AS EIT
PR: CI. Completion of prerequisites for admission to IT program. Junior standing or above. This course builds on students’ knowledge of Web development and databases by adding server-side scripting using the PHP language to interact with the mySQL database system to build transaction processing and report generating systems over the Internet.

COP 4835 Web Development Tools (3) AS EIT
PR: CI. This course builds on web design concepts and extends them to build and maintain complete Web Sites using the current de facto industry-standard integrated web site development environment/applications.

COP 4930 Information Technology Seminar (1-3) AS EIT
PR: Senior standing in Information Technology. A survey of current Information Technology topics are covered to keep the IT student abreast of the variety of domains associated with their major. Speakers with a wide variety of IT experience will give seminars to senior IT students.

COP 4931 Special Topics for Information Technology (1-4) AS EIT
Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.

COT 3100 Introduction to Discrete Structures (3) EN ESB
PR: MAC 2281 or equivalent. Introduction to set algebra, propositional calculus and finite algebraic structures as they apply to computer systems.

COT 4115 Advanced Discrete Structures with Cryptology (3) EN ESB
PR: COP 4530, COT 3100. Advanced topics in discrete mathematics: number theory, groups, rings and fields, finite fields, and combinatorics, as applied to computer systems. Theoretical application of mathematical concepts to coding theory and cryptography.

COT 4210 Automata Theory and Formal Languages (3) EN ESB
PR: COT 3100, COP 4530. Introduction to the theory and application of various types of computing devices and the languages they recognize.

COT 4400 Analysis Of Algorithms (3) EN ESB
PR: COT 3100, COP 4530. Design principles and analysis techniques applicable to various classes of computer algorithms frequently used in practice.

CPO 2002 Introduction to Comparative Politics SS (3) AS POL
Comparison and analysis of representative European and non-Western political systems.

CPO 4034 Politics of the Developing Areas SS AF (3) AS POL
An analysis of the ideologies, governmental structures, and political processes of selected nations of the non-Western world.

CPO 4204 Government and Politics of Africa SS AF (3) AS AFA
Designed to provide the information and analytical tools necessary to interpret current Sub-Saharan African politics. Survey of political organization in traditional African societies; politics under colonial rule; the struggle for independence, and post-independence politics.

CPO 4930 Comparative Government and Politics of Selected Countries or Areas (3) AS POL
Studies political systems with common elements. Structure, process, domestic and foreign politics, and regional roles are considered.

CPO 5934 Selected Topics in Comparative Politics (3) AS POL
Sr./GS. Studies specific substantive areas in Comparative Politics, such as political economy or the politics of specific countries or regions.

CRW 2100 Narration and Description 6A (3) AS ENG
A study of narrative and descriptive techniques in prose. By making the student sensitive to language usage, the course is designed to bridge the gap between expository writing and imaginative writing.

CRW 3111 Form and Technique of Fiction 6A (3) AS ENG
A study of short narrative forms such as the anecdote, tale, character sketch, incident, monologue, epistolary story, and short story as they have been used in the development of fiction and as they exist today. Will not count toward the English major.

CRW 3112 Fiction I 6A (3) AS ENG
PR: CRW 2100 or CRW 3111. An introduction to fiction writing, beginning with a practical study of the various elements of fiction and proceeding through the many processes of revision to arrive at a completed work of art.

CRW 3121 Fiction II 6A (3) AS ENG
PR: CRW 2100 or CRW 3111, CRW 3112. A fiction workshop which provides individual and peer guidance for the student’s writing and which encourages the development of critical skills.

CRW 3311 Form and Technique of Poetry (3) AS ENG
An examination of the techniques employed in fixed forms from the couplet through the sonnet to such various forms as the rondel, ballad, villanelle, sestina, etc. Principles in the narrative, dramatic, and lyric modes are also explored.

CRW 3312 Poetry I (3) AS ENG
PR: CRW 3311. An introduction to poetry writing utilizing writing exercises employing poetic language and devices; the exercises progress to the writing of both rhymed and unrhymed metrical and non-metrical forms.

CRW 3321 Poetry II (3) AS ENG
PR: CRW 3311, CRW 3312. A poetry workshop which provides individual and peer guidance for the student’s writing and which encourages the development of critical skills.

CRW 4120 Fiction III (3) AS ENG
PR: CRW 2100 or CRW 3111, CRW 3112, CRW 3121. An advanced fiction workshop in which works may be carried over from CRW 3121 or longer forms such as the novel may be begun.

CRW 4320 Poetry III (3) AS ENG
PR: CRW 3311, CRW 3312, CRW 3321. An advanced poetry workshop in which students are expected to create works exhibiting a firm knowledge of the principles explored in the preceding courses.

CRW 4930 Selected Topics in Creative Writing (1-4) AS ENG
PR: 12 hours of CRW courses or CI. The focus of the course will be governed by student demand and instructor interest. Topics to be covered may include writing the literary essay, writing in mixed genres, and utilizing popular conventions.
DAA 2504 Jazz Dance (2) TA DAN
PR: Admission by placement audition and DAA 2500. A technique class for the intermediate level dancer to become acquainted with the dance styles and forms of musical theatre and concert jazz dance. Emphasis is on highly stylized movement with a strong rhythmic base. May be repeated.

DAA 2540 Theatre Dance Styles (2) TA DAN
PR: DAA 2500 or DAA 2504 or CI. Development of technical skills in social and historical dance forms frequently stylized for use by dance choreographers. Forms to be studied will include polka, clogging, waltz, folk, tap dancing, etc. May be repeated up to 6 credits.

DAA 2570 Jazz Theatre Dance (3) TA DAN
PR: Admission by placement audition and DAA 2504. Further emphasis on projection, phrasing, rhythmic patterns and dynamics. Solo and ensemble studies leading to performance. May be repeated up to 6 credits.

DAA 3108 Modern Dance II (3) TA DAN
PR: Admission by placement audition. Study of principles of modern dance technique. Practical work in exercises and movement phrases, utilizing changing rhythms and dynamics. Concert and performance attendance required. May be repeated.

DAA 3109 Modern Dance III (2-3) TA DAN
PR: Admission by placement audition. Continuation of DAA 3108. Further emphasis on style and phrasing. Work on projecting mood and quality by dancing and rehearsing in more advanced choreography, leading to performance. May be repeated.

DAA 3208 Ballet II (3) TA DAN
PR: Admission by placement audition. Positions and barre exercises. Emphasis on correct alignment of the body and the application of simple step combinations in centre work. The use of ballet vocabulary (French terms). Material is covered almost totally as practical work in class with a few outside projects. Concert and performance attendance required. May be repeated.

DAA 3209 Ballet III (2-3) TA DAN

DAA 3294 Ballet Variations (1) TA DAN
PR: DAA 3209. This course provides instruction in various forms of ballet. Semester courses include: Pointe technique, Men’s Class, Character Dance, Spanish Dance and Partnering. BFA Ballet concentration students are required to complete two semester hours. May be repeated.

DAA 3395 World Dance Topics (1) TA DAN
PR: Admission by placement audition. Study of ballet vocabulary (French terms). Material covered as practical work in class for concerts and performances. May be repeated.

DAA 3614 Choreography I (2) TA DAN
PR: DAA 3108. CR: DAA 3614. BFA students must be concurrently enrolled in Modern III/IV and Ballet III. Study and execution of basic principles of composition. Preparation of studies in theme and variations, breath phrases and metric phrases.

DAA 3615 Choreography II (2) TA DAN
PR: DAA 3614. Preparation of studies in rhythm, dynamics, form and motivation.
DAE 3351 Ethnic/Folk Dance (2) TA DAN
An exploration of ethnic and folk dance forms in various cultures of the eastern and western hemispheres. Students will investigate ways of doing, making, and teaching dances through studio work, videos, performances, and readings.

DAE 4300 Dance Pedagogy: Theory and Practice (3) TA DAN
PR: CI, CC. Designed to provide prospective teachers with opportunities to develop concepts of pedagogy based on principles of teaching/learning dance. Specific sections will focus on Secondary Curriculum and Methods and on Pre-K and Elementary Methods.

DAA 4310 Dance Pedagogy: Pre-School to Elementary (3) TA DAN
This course is designed to meet the needs of students in Dance Education to understand the scope and sequence of dance curriculum design and teaching methods appropriate to Pre-K and elementary students.

DAA 4340 Dance Pedagogy: Secondary Curriculum (3) TA DAN
This course is designed to meet the needs of students in Dance Education to understand the scope and sequence of dance curriculum design and teaching methods appropriate to the secondary student.

DAA 4397 Special Studies Dance Education (3) TA DAN
PR: CI and CC. PR: CI and CC. For majors and non-majors. Designed to provide prospective dance teachers with opportunities to develop concepts of pedagogy based on principles of teaching-learning in dance techniques and choreography. May be repeated up to 9 credit hours.

DAE 4936 Senior Seminar in Dance Education (2) TA DAN
CR: DAE 4940 This course represents a synthesis of the teacher Candidate’s courses and is required concurrently with the internship.

DAE 4940 Internship in Dance Education (1-12) TA DAN
CR: DAE 4936. S/U only. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours.

DAN 2100 Introduction To Dance 6A FA (3) TA DAN
For majors and non-dance majors, a study of the art and language of dance through lectures, discussions, concert attendance, and studio practice. Designed to develop awareness and insight of this art form through discussion, observation, writing, and movement experience.

DAN 2160 Entry Seminar (2) TA DAN
This is a study of dance-related career opportunities through lectures, assigned reading and video viewing. This course will aid majors in understanding dance as an aesthetic art form through discussion and critical evaluation.

DAN 3584 Practicum In Dance Production (2) TA DAN
A practicum in mounting dance concerts with shop work and backstage participation. Intended for students working in costuming, set preparation, light presentation, stage management and production crew. Dance majors must have 4 credits. May be repeated.

DAN 3614 Music For Dance (2) TA DAN
PR: Designed for majors and non-majors. Development of musical skills in movement studies. Continued study of the inter-relationship of music and dance through movement experiences, observations, video, and writing.

DAN 3615 Music For Dance II (2) TA DAN
PR: DAN 3614. Development of practical music skills in
relation to dance. Continued problems in rhythmic materials and the relationship of music forms to dance. Elements within historical context.

DAN 3714 Dance Kinesiology (3) TA DAN
This course will give the student an understanding of basic human anatomy and how it functions in relation to movement, injury prevention, teaching and performance. Individual structural differences and how these affect movement potential will also be studied. There will be an emphasis on the kinesiological analysis of movement with the goal of increased efficiency, enhanced performance and injury prevention.

DAN 4134 Dance History Through the 19th Century 6A LW (3) TA DAN
Designed for majors and non-majors, this course will present a comprehensive view of the evolution of dance as an art form through the 19th Century. It is designed to develop awareness and insight through lecture, discussion, video, observation and writing.

DAN 4135 20th Century Dance MW (3) TA DAN
Designed for majors and non-majors, this course will trace the development of dance as an art form in the 20th Century. It is designed to develop awareness and insight through lecture, discussion, video, observation and writing. Students will be required to attend at least two dance performances.

DAN 4162 Research in Dance (2) TA DAN
PR: Dance major with Junior standing, and completion of two courses in secondary area. Course will introduce basic research methodologies for conducting research in the dance genre, and will serve the student in preparing for future research based study in the field of dance. Students will conduct library, internet, and field research.

DAN 4180 Dance Senior Seminar (2) TA DAN
PR: Dance major with senior status. A study of career opportunities in performance, teaching, research, design, and choreography. To aid majors in self-appraisal as artists and develop methods to further their potential in the professional world. Discussion, critical evaluation and projects.

DAN 4404 Laban Movement Analysis (3) TA DAN
Specialized study in movement theories, body alignment, and movement patterns focusing on the scientific and analytical basis of movement in dance with consideration for developmental processes, technique, creative expression, and performance.

DAN 4503 Special Study in Movement, Theory, Body Alignment (2) TA DAN
Analysis of scientific basis of movement for the dancer through the study of body alignment and movement theories related to dance techniques.

DAN 4906 Directed Study (1-5) TA DAN
PR: CI. CC. Independent studies in the various areas of Dance. Must receive approval prior to registration. May be repeated.

DAN 4930 Selected Topics In Dance (1-5) TA DAN
PR: CI and CC. The content of the course will be governed by student and instructor interest. May be repeated by majors.

DEC 4161 Program Management of Distributive and Marketing Education (3) ED EDV
The study of the purposes, processes, organization, planning, directing, coordinating and evaluation of Distributive and Marketing Education Cooperative Programs.

DEC 4941 Supervised Field Experience: Distance Education (1-6) ED EDV
Planned supervised functions in the area of specialization and coordinated with selected schools, government offices, social agencies, businesses and industries on site.

DEP 2004 The Life Cycle (3) BC GEY
An examination of individuals and the physical, cognitive, personality, and social changes which occur throughout the entire life span.

DEP 3103 Child Psychology SS (3) AS PSY
Not for major credit. Developmental and psychosocial aspects of childhood, including hereditary, maturational, psychological, and social determinants of child behavior.

DEP 4053 Developmental Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Survey of methods, empirical findings, and theoretical interpretations in the study of human development.

DEP 4135 Psychology of Language Development (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Available both to majors and non-majors. Surveys the course of and processes underlying normal language development. Presents data and theory on phonological, semantic, syntactic, and pragmatic development.

EAB 4715 Supervised Practicum and Field Experience in Applied Behavior Analysis (1-6) AS PSY
PR: PSY 4933 with a grade of B or better. Does not count toward major credit. (S/U only). Field experience in Behavior Analysis in applied settings. Under the supervision, involves the design, implementation and evaluation of behavior analysis methods in applied settings. Includes both field practicum and didactic components. May be repeated for a maximum of 6 hours.

EAP 1850 English for International Students I (6) AS WLE
PR: Department Permission Required This course supports the development of academic English for international students, with an emphasis on processing, analyzing, and integrating information from academic texts and lectures, and applying pragmatic skills in university interactions.

EAP 1851 English for International Students II (6) AS WLE
This course supports the development of academic English for international students, with an emphasis on researching and producing papers and presentations in a variety of academic genres with appropriate academic language use.

EAS 4121 Hydro and Aerodynamics (3) EN EGR
PR: EML 3701, MAP 2302. Advanced fluid dynamics, ideal and viscous flows, applications to flow around immersed bodies.

EBD 4011 Introduction to Behavior Disorders (3) ED EDS
PR: EEX 4012, or equivalent or DPR. Survey of emotional, behavioral and social disorders in children and youth. History of the field, definitions, classifications, theoretical approaches, intervention techniques, classroom management, service delivery models, trends and issues.
ECH 4265C Mass Transfer Operations (4) EN ECH
PR: ECH 4845, ECH 4264, ECH 4123. Integration of phase equilibria with the principles of fluid mechanics, heat and mass transfer in the description of separation processes. Selection of the number of stages and limiting operating conditions in cascades — NTU and HTU. Sizing of partial condensers and pressure differential in columns. Transfer to single particles.

ECH 4323C Process Dynamics and Control (3) EN ECH

ECH 4415C Reaction Engineering (4) EN ECH
PR: CHM 2210, ECH 4265C. Integration of chemical equilibrium and kinetics, heat transfer and fluid mechanics into the hierarchical description of reacting systems. Analysis and selection of operating conditions and contacting models. Sizing. Restricted to department majors.

ECH 4605 Product and Process Systems Engineering (3) EN ECH

ECH 4615 Product and Process Design MW CPST (3) EN ECH
PR: ECH 4415C, ECH 4605. Synthesis and analysis of economically feasible and environmentally acceptable chemical processing routes; Design of safe chemical production and treatment facilities; Chemical product design; Computer Aided-Design; Case studies and Design Project.

ECH 4644 Process Equipment and Safety (3) EN ECH
PR: ECH 4264, ECH 4123. CoPR: ECH 4265. Design, sizing, selection and preparation of equipment specifications for the process industry in accordance with process safety management guidelines and OSHA requirements.

ECH 4845 Numerical Methods in Chemical Engineering (4) ENECH

ECH 4846 Numerical Methods in Chemical Engineering (4) ENECH

ECH 4905 Independent Study (1-4) EN ECH
PR: CI. Specialized independent study determined by the student's needs and interests. Students must have contract with instructor.

ECH 4930 Special Topics in Chemical Engineering I (1-4) EN ECH
PR: CC.

ECH 4931 Special Topics in Chemical Engineering II (1-4) EN ECH
PR: CI.

ECH 4936 Undergraduate Seminar (1) EN ECH
CP: ECH 3023C. Introduction to the profession. Career development. Information sources for Chemical Engineers. Professional organizations. Ethics in the profession. Safety
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>College</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECH 5320</td>
<td>Chemical Process Engineering I (4)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Bachelors degree in science, math, or engineering. The course presents the principles of mass balances, classical thermodynamics, phase equilibria, energy balances, and psychrometrics. The student will learn by doing many case studies. Computer software will be used to obtain solutions to many problems.</td>
<td>Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer. Not available for chemical engineering students.</td>
</tr>
<tr>
<td>ECH 5321</td>
<td>Chemical Process Engineering II (4)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Bachelors degree in science, math, or engineering. Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer. Not available for chemical engineering students.</td>
<td>Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer. Not available for chemical engineering students.</td>
</tr>
<tr>
<td>ECH 5322</td>
<td>Chemical Process Engineering III (4)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Bachelors degree in science, math, or engineering. Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer. Not available for chemical engineering students.</td>
<td>Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer. Not available for chemical engineering students.</td>
</tr>
<tr>
<td>ECH 5324</td>
<td>Automatic Process Control II (3)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: ECH 4323 or CI, majors only / 2 hrs lec., 3 hrs. lab/week. The course covers the root locus and frequency response methods to study stability of control loops. The techniques of ratio, cascade, feed forward, selective, override, and multi-variable control techniques are discussed in detail and shown how to utilize to design control systems, z-transforms and discrete controllers including PID, Dahlin and deadline compensation.</td>
<td>Techniques of ratio, cascade, feed forward, selective, override, and multi-variable control techniques are discussed in detail and shown how to utilize to design control systems, z-transforms and discrete controllers including PID, Dahlin and deadline compensation.</td>
</tr>
<tr>
<td>ECH 5327</td>
<td>Chemical Process Control (4)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Bachelors degree in science, math, or engineering. Basic concepts of feedback control, process dynamics, process controllers (PID) including tuning, control loop stability, cascade, ratio, selective, override, feedforward, and multivariable control. Not available for chemical engineering students.</td>
<td>Basic concepts of feedback control, process dynamics, process controllers (PID) including tuning, control loop stability, cascade, ratio, selective, override, feedforward, and multivariable control. Not available for chemical engineering students.</td>
</tr>
<tr>
<td>ECH 5740</td>
<td>Theory and Design of Bioprocesses (3)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>Introduction to biotechnology, including applied microbiology, enzyme technology, biomass production, bioreactor design, and transport processes in biosystems.</td>
<td>Introduction to biotechnology, including applied microbiology, enzyme technology, biomass production, bioreactor design, and transport processes in biosystems.</td>
</tr>
<tr>
<td>ECH 5747C</td>
<td>Selected Topics in Chemical Engineering Biotechnology (1-3)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Senior or GS standing in engineering or CI. Open to majors and non-majors with CI. Selected topics in engineering in biotechnology, including cell separation technology, immobilized enzymes and cells, food engineering, biohazardous waste, and bioseparations.</td>
<td>Selected topics in engineering in biotechnology, including cell separation technology, immobilized enzymes and cells, food engineering, biohazardous waste, and bioseparations.</td>
</tr>
<tr>
<td>ECH 5748</td>
<td>Selected Topics in Biomedical Engineering (1-3)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems.</td>
<td>Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems.</td>
</tr>
<tr>
<td>ECH 5785</td>
<td>Sustaining the Earth: An Engineering Approach (3)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: CI. An approach of global perspective on ecological principles revealing how all the world’s life is connected and sustained within the biosphere and how engineering provides the tools to design solutions engaging materials science &amp; environmental ethics.</td>
<td>An approach of global perspective on ecological principles revealing how all the world’s life is connected and sustained within the biosphere and how engineering provides the tools to design solutions engaging materials science &amp; environmental ethics.</td>
</tr>
<tr>
<td>ECH 5786</td>
<td>Green Engineering (3)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Senior or Graduate Standing in Engineering, Public Health, Science Synthesis and design of green chemical, biological and energy conversion processes and products. Environmental impact analysis; green chemistry and materials; life cycle analysis; industrial ecology; systematic methods and real-life examples.</td>
<td>Environmental impact analysis; green chemistry and materials; life cycle analysis; industrial ecology; systematic methods and real-life examples.</td>
</tr>
<tr>
<td>ECH 5820</td>
<td>Product Development (2)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: Senior or GS in Engineering or CI. Introduction to the development of consumer products, including the history of innovation, creativity development, the product development environment, and a detailed examination of several product areas.</td>
<td>Introduction to the development of consumer products, including the history of innovation, creativity development, the product development environment, and a detailed examination of several product areas.</td>
</tr>
<tr>
<td>ECH 5930</td>
<td>Special Topics III (1-4)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: CI.</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>ECH 5931</td>
<td>Special Topics IV (1-4)</td>
<td>EN ECH</td>
<td>Engineering</td>
<td>PR: CI.</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics SS CASB (3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>No credit after completing either ECO 2023 or ECO 2013. Survey of economic principles and issues. Scarcity, choice, markets, prices, the monetary system, unemployment, inflation, international trade and finance.</td>
<td>Survey of economic principles and issues. Scarcity, choice, markets, prices, the monetary system, unemployment, inflation, international trade and finance.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Economic Principles (Macroeconomics) SS CASB (3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>ECO 2013 introduces students to basic economic terminology, definitions and measurements of macroeconomic data, simple macroeconomic models, fiscal and monetary policy, and international macroeconomic linkages.</td>
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</tr>
<tr>
<td>ECO 2023</td>
<td>Economic Principles (Microeconomics) SS (3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>Introduction to the theory of price determination. How an economy decides what to produce, how to produce, and how to distribute goods and services.</td>
<td>Introduction to the theory of price determination. How an economy decides what to produce, how to produce, and how to distribute goods and services.</td>
</tr>
<tr>
<td>ECO 2935</td>
<td>Selected Topics In Economics (1-3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>Not available for credit to upper-level students admitted to the College of Business. Topics selected by department. May be repeated if topics vary.</td>
<td>Not available for credit to upper-level students admitted to the College of Business. Topics selected by department. May be repeated if topics vary.</td>
</tr>
<tr>
<td>ECO 3101</td>
<td>Intermediate Price Theory (3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>PR: ECO 2023. The price system and allocation of scarce resources between competing uses. May not receive credit for both ECP 3703 and ECO 3101.</td>
<td>PR: ECO 2023. The price system and allocation of scarce resources between competing uses. May not receive credit for both ECP 3703 and ECO 3101.</td>
</tr>
<tr>
<td>ECO 3203</td>
<td>Intermediate Macroeconomics (3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>PR: ECO 2013 and ECO 3101 or ECP 3703 with a grade of “C” or better. Determination of income, employment, prices, and interest rates. Aggregate demand and aggregate supply.</td>
<td>PR: ECO 2013 and ECO 3101 or ECP 3703 with a grade of “C” or better. Determination of income, employment, prices, and interest rates. Aggregate demand and aggregate supply.</td>
</tr>
<tr>
<td>ECO 4105</td>
<td>Advanced Price Theory (3)</td>
<td>BU ECN</td>
<td>Business</td>
<td>PR: ECO 3101 or ECP 3703 with a grade of “B” or better. An advanced survey of special topics in microeconomics: borrowing and saving, decision making under uncertainty, markets for capital and labor, game theory, production and</td>
<td>PR: ECO 3101 or ECP 3703 with a grade of “B” or better. An advanced survey of special topics in microeconomics: borrowing and saving, decision making under uncertainty, markets for capital and labor, game theory, production and</td>
</tr>
</tbody>
</table>
exchange efficiency, social welfare, and efficiency consequences of market and non-market allocation.

ECO 4201 Advanced Macroeconomic Theory (3) BU ECN
PR: ECO 3203 with a grade of "B" or better. An advanced analysis of a particular topic or topics in macroeconomics. Areas of study include the theories of money, growth, and business cycles. Discussions of how such theories accord with the data are also presented.

ECO 4270 Economic Growth (3) BU ECN
PR: ECO 3101 or 3703. This course provides an introduction to the theory of economic growth, the process whereby the level of real output per capita increases over time. Emphasis is on the role of factor accumulation and productivity growth and their underlying fundamentals.

ECO 4303 History Of Economic Thought (3) BU ECN

ECO 4323 Radical Political Economy MW (3) BU ECN
PR: ECO 1000 or ECO 3101 or ECO 2023 or CI. The radical (left) and Marxist schools of thought in economics. Application of radical theory to problems of advanced capitalist and socialist societies.

ECO 4401 Introduction to Mathematical Economics (3) BU ECN
PR: ECO 3101 or ECP 3703, and MAC 2241 or MAC 2233 or CI. Mathematical models optimizing behavior and economic equilibrium.

ECO 4421 Introduction to Econometrics (3) BU ECN
PR: ECO 3101 or ECP 3703, and QMB 3200 with a grade of "B" or better or CI. Survey of basic econometric techniques. Regression analysis employed to estimate consumption, investment, demand, cost, and production functions. Examines problems of auto-correlation, heteroscedasticity, multicollinearity, and specification errors.

ECO 4504 Public Finance (3) BU ECN
PR: ECO 3101 or ECP 3703 with a grade of "C" or better. The public sector and its contribution to economic welfare. Government expenditures and revenues. Resource allocation, income distribution, stabilization, and economic growth.

ECO 4704 International Trade and Policy (3) BU ECN
PR: ECO 3101 or ECP 3703 with a grade of "C-" or better. Advanced analysis of international trade theory and commercial policy, international economic integration, multinational enterprise.

ECO 4713 International Macroeconomics (3) BU ECN
PR: ECO 3101 or ECP 3703 with a grade of "C-" or better. Advanced analysis of international macroeconomic relationships. Foreign exchange market, international monetary system balance of payments.

ECO 4905 Independent Study (1-3) BU ECN
PR: CI. S/U only. Specialized independent study determined by the student’s needs and interests. May be repeated up to 6 hours.

ECO 4914 Independent Research (1-3) BU ECN
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 6 hours.

ECO 4935 Selected Topics in Economics (1-3) BU ECN
Topics to be selected by the instructor or instructors on pertinent economic issues.

ECP 3201 Economics of Women and Work MW (3) BU ECN
PR: ECO 3101 or ECO 3703 or ECO 4201. Survey of research on women, men and work in the labor market and the household. Focuses on the economic status of women. Includes historical perspective, examination of the family as an economic unit, changing work roles, and gender differences in occupation and earnings.

ECP 3203 Labor Economics (3) BU ECN
PR: ECO 3101 or ECP 3703 with a grade of "C-" or better. Determinants of wage and employment levels; occupational, industrial and geographical wage differentials; union and public policy effects on labor markets; the economics of discrimination; inflation, and unemployment.

ECP 3302 Environmental Economics MW (3) BU ECN
PR: ECO 3101 or ECP 3703 with a grade of "C-" or better. Application of economic methods to health care topics such as demand for medical care, public and private health insurance, physician and hospital supply of medical care, government regulations, and national healthcare systems.

ECP 3304 Managerial Economics (3) BU ECN
PR: ECO 3101 or ECP 3703 or ECO 2023 with a grade of "C-" or better. Application of economic methods to health care topics such as demand for medical care, public and private health insurance, physician and hospital supply of medical care, government regulations, and national healthcare systems.

ECP 4006 Economics of Sports (3) BU ECN
PR: ECO 3101 or ECO 3703. This course teaches economics using sports as a backdrop. Topics covered include the economics of labor markets, exploitation, discrimination, monopoly, monopsony, game theory, bargaining, and cartels. No particular knowledge of sports is required.

ECP 4232 Collective Bargaining and Public Policy (3) BU ECN
PR: ECO 2013 or CI. Administration of labor management agreements. Impact of the government role in collective bargaining and labor relations.

ECP 4451 Law and Economics (3) BU ECN
PR: ECO 2013 and ECO 2023. Advanced analysis of the economic impact of tort, criminal, property, and contract law as well as in the formation and adjudication of law.

ECP 4505 Economics of Crime (3) BU ECN
theory to the analyses of criminal behavior, crime prevention, law enforcement, sanctions, and corrections.

ECP 4708 Economics of Business Strategy (3) BU ECN
PR: ECO 3101 or ECP 3703. This course examines strategies businesses can employ to improve their abilities to compete profitably. Employs game theory to examine horizontal and vertical boundaries of firm, strategic diversification, pricing, and entry deterrence.

ECS 3013 Economic Development (3) BU ECN

ECS 4003 Comparative Economic Systems MW (3) BU ECN
PR: ECO 1000 or ECO 2013 or ECO 2023 or CI. The major economic systems: traditional, capitalism, democratic socialism, communism and fascism.

ECS 4430 Economics of Latin America AF MW (3) BU ECN
PR: ECO 1000, or BOTH ECO 2013 and ECO 2023. The course examines key aspects of economic reform efforts in Latin America and the Caribbean and the challenges facing the region at the beginning of the 21st century.

EDE 4223 Creative Experiences for the Child (3) ED EDE
PR: Acceptance into College of Education. Provides students with critical understanding of visual arts, music, movement, and drama in K-6 curriculum. Students will develop knowledge and strategies to incorporate creative expression into integrated curriculum. Restricted to majors. Not repeatable.

EDE 4301 Classroom Management, School Safety, Ethics, Law and Elementary Methods (3) ED EDE
PR: Admission to the program in the Department of Childhood Education. This course examines the legal issues affecting classroom/school management, school safety, professional ethics and elementary school methods. The course explores the current knowledge of best practices of a variety of teaching and management strategies and methods deemed appropriate for a diverse elementary classroom setting including ESOL students and other exceptionalities.

EDE 4905 Independent Study: Elementary Education (1-4) EDE
S/U only. Specialized independent study determined by the student’s needs and interests.

EDE 4909 Directed Study: Elementary Education (1-3) ED EDE
PR: Senior standing. To extend competency in teaching field.

EDE 4940 Internship: Elementary Education (10-12) ED EDE
PR: EDE 4941 and EDE 4942; CR: EDE 4936. S/U only. Teacher candidate is required to demonstrate professional competencies during one semester of full day internship in a public or private elementary school.

EDE 4941 Childhood Education Internship Level I (3) ED EDE
PR: Admission to the Elementary Education. CR: RED 4310, EDG 4620. Concurrent enrollment in EDG 4620-Elementary section. S/U only. Students spend six hours per week in a supervised internship experience in classroom settings and attend a weekly seminar.

EDE 4942 Childhood Education Internship Level II (6) ED EDE
PR: EDE 4941, RED 4310, EDG 4620, EDF 3122, LAE 4314, EDE 4301, MAE 4310, SCE 4310, LAE 4414, SSE 4313, EME 2040. S/U only. Students spend 12 hours per week in a supervised internship experience in classroom settings and attend a weekly seminar.

EDF 2005 Introduction to the Teaching Profession (3) ED EDC
Introductory survey course required for admission into the College of Education. A broad overview of the history, sociology and philosophy of education in the United States focuses on education as a field of study and teaching as a profession. Includes lecture and field experience.

EDF 2085 Introduction to Diversity for Educators (3) ED EDC
Introductory survey course required for admission into the College of Education. Places schools and teaching within the context of the U.S. as a pluralistic society. Topics include: the demographics of diversity; prejudice; elements of culture; American heritage of diversity and its value; and barriers to cultural understanding. Includes lecture and field experience.

EDF 3122 Learning and the Developing Child (3) ED EDF
PR: General psychology and admission to College of Education. Preadolescent child growth and development, learning theory, and behavioral analysis applied to instruction and to the organization and management of classroom.

EDF 3214 Human Development And Learning (3) ED EDF
PR: General psychology and admission to College of Education. Application of respondent and operant learning principles to classroom learning, teaching models for different instructional goals, analysis of teacher behavior, micro-teaching.

EDF 3228 Human Behavior and Environmental Selection 6A MW (3) ED EDF
Learning principles, behavior analysis applied to global environmental and social issues. Requires elementary computer word processing skills.

EDF 3514 History of Education in the United States HP MW (3) EDE
PR: Upper-division standing. History of childhood, education, and schooling in the U.S. from early European and African contact to the present.

EDF 3604 Social Foundations of Education 6A MW WRIN (3) EDE
PR: Upper level standing. Social, economic and political context within which schools function and the values which provide direction for our schools.

EDF 4124 Child Growth and Learning (3) ED EDF
An introduction to child development and learning from an educational and psychological perspective. Emphasis is on the application of relevant constructs as they would reflect developmentally appropriate practices in early childhood learning settings.

EDF 4131 Learning And The Developing Adolescent (3) ED EDF
PR: General psychology and admission to College of Education. Adolescent growth and development, learning theory, and behavioral analysis applied to instruction and to the organization and management of the classroom.

EDF 4430 Measurement For Teachers (3) ED EDQ
PR: Upper level standing. Concepts and skills related to designing and developing classroom tests; evaluating tests, instruction, and student progress; and communicating student achievement. Including application
of performance assessment techniques and computer applications for measuring and assessing pupil progress.

EDF 4490 Studies in Research Design (3) ED EDQ
Studies in Research Design introduces students to the logic and dynamics of the research process.

EDF 4905 Independent Study: Educational Foundations (1-4) ED EDF
PR: DPR. S/U only. Specialized independent study determined by the student's needs and interests.

EDF 4909 Directed Study: Educational Foundations (1-3) ED EDF
PR: Senior Standing. Offered only as a scheduled class. To extend competency in teaching field.

EDF 5607 Trends in the Social-Political Foundations of Schooling in the US (3) ED EDF
Current debates re: purpose and practice of formal schooling in the U.S. with historical and sociological perspectives. Satisfies social foundations requirements for Fla. Teacher certification and ESL competency in knowledge of intercultural issues in education.

EDG 2701 Teaching Diverse Populations and Field Experience (3) ED EDC
Introductory survey course required for admission into the College of Education. Places schools and teaching within the context of the U.S. as a pluralistic society. Topics include: the demographics of diversity; prejudice; elements of culture; American heritage of diversity and its value; and barriers to cultural understanding. Includes lecture and field experience.

EDG 3943 Integrated Clinical Experience Grades K-5 (2-3) EPEDE
Practical application in a clinical setting of knowledge acquired in the classroom. Includes placements for elementary and exceptional student education.

EDG 4012 Standards Based Education (1) EP EDE
PR: FLE 4317 for undergraduate, FLE 5345 for graduate students. This course is designed to introduce students to standards-based education, linking program outcomes for student learning with the relevant state and national educational standards. The course is restricted to majors and is not repeatable for credit.

EDG 4320 Introduction to Creative Drama (3) TA EDD
This course for classroom teachers introduces the theory and practice of creative drama as it applies to use by elementary, middle school and secondary school teachers. Beginning with a study of dramatic play as it relates to human development, the course includes basic strategies when using pantomime, voice improvisation, theatre games, and role playing and story dramatization.

EDG 4620 Curriculum and Instruction (3) ED EDC
An introduction to the field of curriculum and instruction. Emphasis is placed on principles of curriculum development and use of instructional strategies. Students will develop, implement, and evaluate a variety of lesson plans.

EDG 4909 Directed Studies (1-4) ED EDC
PR: Senior standing. Offered only as a scheduled class. Department permit required. To extend competency in teaching field.

EDG 4934 Final Intern Seminar (1) EP EDE
PR: Achieve passing scores on the GKT. CR: EDG 4944.

The Seminar provides a ongoing continuous improvement activities throughout the full time student teaching experience. It also provides opportunities for the candidates to examine their experiences in their student teaching classroom settings.

EDG 4944 Integrated Final Internship (8-10) EP EDE
PR: BXE Majors only. CR: EDG 4934 Internship provides a full-time general education and an ESE classroom experience for candidates to integrate the theoretical knowledge from university course work and previous field experiences to master state and university standards.

EEC 2000 Introduction to Early Childhood Education (3) ED EDU
An overview of early childhood education with emphasis on its historical development, current theories, and practices.

EEC 4008 Literature in Early Childhood Education 6A LW (3) EDEDU
Jr./Sr. Standing. Emphasis is placed on developing knowledge of literature for younger children (0-8 yrs.) and methodologies and strategies for utilizing literature to teach literacy in content areas of the curriculum.

EEC 4203 Programs for Young Children (3) ED EDU
PR: Admission to College of Education. Early Childhood majors only. Develops students' understanding of historical and social foundations of early childhood education, establishing professional beliefs regarding teaching young children, and developing an appropriate learning environment.

EEC 4211 Integrated Curriculum: Science and Mathematics (3) ED EDU
PR: Admission to College of Education, EDF 4111. Early Childhood majors only. Develops an understanding of science and mathematical concepts for the appropriate stages of cognitive development of young children. Emphasis will be placed on how science and mathematics are integrated throughout the curriculum and become valued functional tools.

EEC 4212 Integrated Curriculum: Social Sciences/ Humanities & Art (3) ED EDU
PR: Admission to College of Education, EDF 4111. Early Childhood majors only. Develops an understanding of appropriate curriculum experiences in social science, humanities, and arts for kindergarten and primary grades with an emphasis on integrated experiences, and sociological influences such as culture, ethnicity, language and gender impact understandings, values, and learning.

EEC 4303 Creative and Affective Experiences for Young Children (3) ED EDU
PR: Admission to College of Education. Early Childhood majors only. Develops students' understandings of children's creative expression through art, music, movement, play and drama. Emphasizes how to plan, implement, and evaluate appropriate learning experiences as well as selection of appropriate instructional materials.

EEC 4307 Cognitive Experiences for Young Children (3) ED EDU
PR: Admission to College of Education, EDF 4111. Early Childhood majors only. Emphasizes theoretical and practical aspects of cognitive development for children ages 3 through 6 with focus on planning integrated
experiences and content in science, mathematics, and social sciences.

**EEC 4408 Child, Family & Teacher Relations (3) ED EDU**
- **PR:** Admission to College of Education, EDF 4111. Early Childhood majors only. Focuses on developing an understanding of traditional and non-traditional families, structural and life style variations and parenting in diverse cultures and at-risk families. Implications from these understandings will guide development of a parent involvement plan that includes effective ways to communicate with parents, conference with parents, and plan parent meetings and home visits.

**EEC 4706 Language and Emerging Literacy (3) ED EDU**
- **PR:** Admission to College of Education, EDF 4111. Early Childhood majors only. Provides knowledge of language development and emerging literacy for typical and atypical development in children from birth to third grade, including ESOL children.

**EEC 4905 Independent Study: Early Childhood Education (1-4) ED EDU**
- **PR:** S/U only. Early Childhood majors only. Specialized independent study determined by the student’s needs and interests.

**EEC 4909 Directed Study: Early Childhood Education (1-3) EDEDU**
- **PR:** Senior standing. To extend knowledge in teaching field.

**EEC 4936 Senior Seminar in Elementary Early Childhood Education CPST (3) ED EDU**
- **PR:** Senior standing; **CR:** EEC 4940. Synthesis of teacher candidate’s courses in complete college program.

**EEC 4940 Internship: Early Childhood (10) ED EDU**
- **CR:** EEC 4936. S/U only. Teacher candidate is required to demonstrate professional competencies during one semester of full-day internship in a public or private elementary school.

**EEC 4941 Field Experience I (3) ED EDU**
- **PR:** Admission to College of Education. Early Childhood majors only. Field placement with three and four year olds where teacher candidates have opportunities to apply knowledge and skills in authentic situations and become objective observers of young children’s development. Weekly seminars are conducted in conjunction with the field experience which provide teacher candidates an opportunity for reflection on their understandings.

**EEC 4942 Field Experience II (3) ED EDU**
- **PR:** Admission to College of Education, EDF 4111. Early Childhood majors only. Field placement in kindergarten or primary grade where teacher candidates have opportunities to apply knowledge and skills in authentic situations. Emphasis on developing deeper understanding of children’s development and implications of development for program planning for both typical and atypical children.

**EEC 4943 Field Experience III (3) ED EDU**
- **PR:** Admission to College of Education, EDF 4111. Early Childhood majors only. Field placement in kindergarten or primary grade where teacher candidates have opportunities to apply knowledge and skills in authentic situations. Focus on developing deeper understanding of growth and development and relationship to curriculum planning with an emphasis on self-evaluation of knowledge, skills, and dispositions essential for teaching.

**EEE 3302 Electronics I (3) ENE EGE**
- **PR:** EGN 3373 with a minimum grade of B. A course in the physical principles of electronic devices with emphasis on semi-conductor electronics. Includes the analysis and design of amplifiers and switching circuits.

**EEE 3394 Electronic Materials (3) ENE EGE**
- **PR:** CHM 2045, PHY 2049. This course provides electrical engineering students with a background in material science and quantum physics as these apply to electrical/electronic material properties.

**EEE 4301 Electronics II (3) ENE EGE**
- **PR:** EEE 3302. Provides further study in electronic circuits. Includes feedback and frequency response techniques in amplifier design.

**EEE 4305 Communications Electronics (3) ENE EGE**
- **PR:** EEE 4301 Provides the basic principles of RF communications circuits including oscillators, mixers, high frequency amplifiers, etc. Requires the design and implementation of a short range communications link including a transmitter and a superheterodyne receiver.

**EEE 4351C Semiconductor Devices (3) ENE EGE**
- **PR:** EEE 3394. An introduction to the fundamentals of semiconductor materials and semiconductor device operation.

**EEE 5344C Digital CMOS/VLSI Design (3) ENE EGE**
- **PR:** EEL 4705 or GS. Design, layout, simulation, and test of custom digital CMOS/VLSI chips, using a CMOS cell library and state-of-the-art CAD tools. Digital CMOS static and dynamic gates, flip flops, CMOS array structures commonly used in digital systems. Top down design example of a bit slice processor.

**EEE 5356 Integrated Circuit Technology (3) ENE EGE**
- **PR:** EEE 4351 or GS. Physics and Chemistry of integrated circuit and discrete device fabrication, materials limitations, processing schemes, failure and yield analysis. A laboratory is integral to the course.

**EEE 5357 Analog CMOS/VLSI Design (3) ENE EGE**
- **PR:** EEE 4301 or GS. Design of analog circuits for CMOS/VLSI design. Op amps, comparators, D to A and A to D converters. Switched capacitor filters. Analog simulation.

**EEE 5382 Physical Basis Of Microelectronics (3) ENE EGE**
- **PR:** EEL 4471 or GS. Quantum mechanics with emphasis on electronic properties in atoms, molecules, and crystals; quantum statistics; energy band theory; crystal structures; defect chemistry; semiconductor properties.

**EEL 2161 Electrical Engineering Computer Methods (3) ENE EGE**
- **Use of computers to perform analysis, simulation, and design of Electrical Engineering systems. Use of computer systems, including Internet resources. Use of analytical software. Computer programming in C++ for the solution of Electrical Engineering problems.**

**EEL 3100 Network Analysis and Design (3) ENE EGE**
- **PR:** EGN 3420 with a minimum grade of C and EGN 3374 with a minimum grade of B. A third course in linear circuit analysis and design. Transient and steady-state responses of passive RLC networks to various functions.

**EEL 3115L Laboratory I (1) ENE EGE**
- **PR:** EGN 3373 with a minimum grade of B. Basic circuit theory applications; computer-aided design tools, electrical
EEL 4422 RF/Microwave Circuits II (1) EN EGE
PR: EEL 4421L and EEE 3302. This laboratory is designed to introduce electrical engineering students to the design, building and testing of active electronic networks. Computer Aided Design tools and computer data acquisition strategies are examined in greater detail.

EEL 4030 Electrical Systems Environments (3) EN EGE
PR: MAP 2302 and PHY 2049 or CC. Dynamics, vibration, thermodynamics, and heat transfer in electrical, electronic, and electromechanical systems and their environments.

EEL 4102 Linear Systems Analysis (3) EN EGE
PR: EGN 3420 with a minimum grade of C and EGN 3374 with a minimum grade of B. Provides further study in the analysis of linear networks and systems. Includes time and frequency domain points of view. Laplace, Fourier and superposition integrals.

EEL 4163 CAD and Analysis (2) EN EGE
The emphasis is upon applications and how to use the major CAD programs as effective tools to solve a wide variety of engineering problems. The coverage includes solid state design, systems analysis, digital logic, and transfer function solutions.

EEL 4243 Switching Power Supply Design (3) EN EGE
PR: EEE 4301 Provides the basic principles of switching power supply circuits: magnetic circuits, power semiconductors, Buck, Boost, and Flyback configurations, dc to dc converters, dc to ac inverters. Requires the design and construction of a switching power supply.

EEL 4420 RF & Microwave Measurements (2-3) EN EGE
PR: EEL 4423L or CI. This course introduces students to the theory and applications of modern radio frequency and microwave measurements. Topics to be included are network analyzer, spectrum analyzer, noise, power, and non-linear distortion measurements. Modern trends also treated are the use of on-wafer measurements for transistor characterization and the evaluation of monolithic microwave integrated circuits.

EEL 4421 RF/Microwave Circuits I (3) EN EGE
PR: EEL 3100, EEL 4471. Introduction to passive microwave circuit design. Investigate the characteristics of transmission lines used in modern microwave systems, the tools used for analysis, and some common circuit topologies for matching, filtering and power distribution. Part one of a two-part sequence. EE majors only. Not available on an S/U basis.

EEL 4422 RF/Microwave Circuits II (3) EN EGE
PR: EEL 4421. Introduction to active RF/Microwave circuit design. Investigate the characteristics of amplifiers and oscillators used in modern microwave systems, the tools used for analysis, and some common circuit topologies for biasing and matching. Substantial coverage of stability analysis, constant gain methods and noise figure. Part two of a two-part sequence. EE majors only. Not available on an S/U basis.

EEL 4423L Wireless Circuits & Systems Design Laboratory (2) EN EGE
PR: EEL 4471. An extensive hands-on introduction to wireless radio frequency and microwave circuits and systems, involving modern measurements, fabrication and computer-aided design experiences at both component and sub-system levels. Not available on an S/U basis.

EEL 4471 Electromagnetics MW (3) EN EGE
PR: MAP 2302 or EGN 3433, PHY 2049, PHY 2049L and EGN 3373 with a minimum grade of B. Electromagnetic field theory, including static and dynamic electromagnetic fields; applications; environmental effects (effects of radiation, magnetic fields).

EEL 4512C Introduction to Communication Systems (3) EN EGE
PR: EEL 3100. Provides an introduction to the fundamental principles and techniques of analog and digital communication systems. Theory is put into practice by investigating a variety of applications. Lectures and projects develop understanding of modern communication systems design and analysis.

EEL 4567 Electro-Optics (3) EN EGE
PR: EEL 3115L, EEL 3116L, EEL 4471. An introduction to the field of electro-optics, including visible and infra-red sources and detectors, radiometry, optical and electronic components, and fiber optics.

EEL 4657 Linear Control Systems (3) EN EGE

EEL 4657L Linear Controls Laboratory (1) EN EGE
PR: EEL 3100; CR: EEL 4657. This laboratory introduces students to the techniques needed for the design and implementation of automatic industrial control systems. Students will learn the basics of the software and hardware used for the design and implementation of control systems.

EEL 4705 Logic Design (3) EN EGE
PR: EGN 3373 with a minimum grade of B for EE students only. Binary number systems; truth functions; Boolean algebra; canonical forms; minimization of combinational logic circuits; synchronous logic circuits in computers.

EEL 4705L Logic Laboratory (1) EN EGE
CR: EEL 4705. Develop designs and demonstrate logic concepts. Schematic capture for design implementation, simulation and design verification.

EEL 4743L Microprocessor Laboratory (1) EN EGE
CR: EEL 4744. Application of microprocessors and microcontrollers for data entry, processing, display and real time signal input/output and control.

EEL 4744 Microprocessor Principles and Applications (3) EN EGE

EEL 4756 Digital Signal Processing (3) EN ESB
PR: EEL 4102. Sampling and quantization of signals; frequency-domain representations, transforms; digital filtering filter structures; DFT, FFT; multi-rate processing, Spectral analysis

EEL 4782 Computer Information Networks for Information Technology (3) AS EIT
The course covers concepts of computer networks. Physical and logical structures are presented. Physical media, circuit switching, data flow, high-level protocols, and the ISO model are discussed. Bus, ring, star, and wireless topologies are presented.
EEL 4906 Professional Issues and Engineering Design MW (3) EN EGE
CR: EEE 4301, EEL 4512C, EEL 4657, EEL 4744. An introduction of engineering design with applications specific to practical engineering problems. Included are discussion of real-world issues as economics, safety, ethics and the environment.

EEL 4914 Senior Project Design (3) EN EGE
PR: EEL 4906 and Senior Standing, CI. Students apply the knowledge acquired in the classroom to design a system which meets a predetermined set of specifications. Students work individually or in small groups with a faculty member (project director) in their area of interest. (Majors only.)

EEL 4935 Special Electrical Engineering Topics I (1-4) EN EGE
EEL 4936 Special Electrical Engineering Topics II (1-4) EN EGE
EEL 4937 Special Electrical Engineering Topics III (1-4) EN EGE
EEL 5250 Power System Analysis (3) EN EGE
PR: EGN 3375. Analysis and design technique for AC power systems.

EEL 5462 Antenna Theory (3) EN EGE
PR: EEL 4471 or GS. Antenna theory beginning with fundamental parameter definitions and continuing with mathematical concepts, elemental antennas and arrays.

EEL 5572C Local and Metropolitan Area Networks (3) EN EGE
PR: EEL 4512C or GS. Basics of data communication exchange of digital information over communication media; Basics of LANs/MANs and its components: media topologies, access methods, etc.; LAN/MAN architectures and protocols-IEEE 802.xLAN Standards; High speed LANs such as FDDI, IEEE 802.6 MAN, etc., Internetworking; LAN/MAN Design and selections.

EEL 5594L Wireless Circuits and Systems Laboratory (2) EN EGE
PR: EEL 4471. This class will provide introductory tutorial learning, plus hands-on experience in analysis, design and measurement in the field of wireless communications.

EEL 5631 Digital Control Systems (3) EN EGE
PR: EEL 4657 or GS. Sample data and digital control processes

EEL 5754C Microprocessor Based Digital Signal Processing (3) EN EGE
PR: EEL 4705 or CI. Arithmetic systems, processing structures, efficient algorithms. DSP hardware, TI, NEC and other DSP microprocessors; multiprocessing hardware and software. System development. Application to telecommunications and voice processing.

EEL 5771 Introduction to Computer Graphics I (3) EN ESB
PR: EEL 4851C. An introduction to the evolution of computer graphics including point-plotting, line drawing, two-dimensional transformations and graphics software packages.

EEL 5935 Special Electrical Engineering Topics I (1-3) EN EGE
EEL 5936 Special Electrical Engineering Topics II (1-3) EN EGE
EEL 5937 Special Electrical Engineering Topics III (1-3) EN EGE
EEX 3751 Enhancing Family Involvement in Education (2) EP EDS
This course is designed for pre-service teachers to examine the development of partnerships with families of students with disabilities and their communities to address the educational needs of all students.

EEX 4012 Foundations of Special Education (3) ED EDS
PR: DPR. Characteristics and needs of children who have learning disabilities, emotional disabilities, hearing impairments, mental retardation, physical handicaps, speech impairments, visual limitations, and who are gifted and talented.

EEX 4054 Perspectives on Learning and Behavioral Differences (3) ED EDS
PR: EEX 4012. The purpose of this course is to introduce students to the historical and theoretical perspectives on educating students with learning and behavioral differences, develop a critical understanding of current practices in service delivery systems, and examine professional issues and trends that impact the future of the field.

EEX 4070 Integrating Exceptional Students in the Regular Classroom (2-3) ED EDS
No credit for department majors.

EEX 4221 Educational Assessment of Exceptional Students (3) ED EDS
PR: EDF 3214, EDF 4430 and EEX 4012. CR: EEX 4941 and EEX 4894. DPR. Introduction to assessment of exceptional students through formal and informal techniques. Emphasis placed on the interpretation of information for educational programming and individualization of instruction.

EEX 4243 Education of Exceptional Adolescents and Adults (3) ED EDS
PR: EEX 4012 or equivalent or DPR. Procedures for implementing educational programs for exceptional adolescents and adults. Topics include service delivery, curriculum, academic remediation, advocacy, utilization of ancillary services, alternative programs and community resources.

EEX 4604 Behavior Management for Special Needs and At-Risk Students (3) ED EDS
PR: EEX 4012. CR: EEX 4941, ELD 4941, or EMR 4941.
EGI 4742 Narrative Perspectives on Exceptionality: Cultural and Ethical Issues 6A LW CPST (3) ED EDS
This course is designed to offer students a meaningful way to interpret and understand exceptionalities.

EEX 4764 Instructional and Adaptive Technologies for Exceptionalities (3) EP EDS
PR: BXE majors only. This course is designed to enhance the use of technology for students with profound and severe exceptionalities as well as for the general classroom.

EEX 4894 Clinical Teaching in Special Education (3) ED EDS
PR: EEX 4012, DPR. CR: EEX 4941. Effective teaching principles, instructional management procedures, and specialized teaching techniques for exceptional students.

EEX 4905 Independent Study: Exceptional Student Education (1-3) ED EDS
PR: DPR. S/U only. Specialized independent study determined by the student's needs and interests.

EEX 4909 Directed Study: Exceptional Student Education (1-3) ED EDS
PR: Senior standing. DPR. To extend competency in teaching field.

EEX 4936 Senior Seminar in Exceptional Student Education (1) ED EDS

EEX 4940 Internship: Exceptional Student Education (1-12) ED EDS
CR: EEX 4936. S/U only. One full semester of internship in an accredited public or private school.

EEX 4941 Practicum in Exceptional Student Education (1-4) ED EDS
CR: Sem I: EEX 4012; Sem II: EEX 4604; Sem III: EEX 4221 and EEX 4894. Designed to provide teacher candidates with carefully planned and supervised clinical experiences with exceptional students populations in a variety of settings. Candidates demonstrate the ability to apply concepts, theories and research. Repeatable up to six credit hours.

EEX 5705 Seminar in Preschool Handicapped (2) ED EDS
Intended to familiarize the education student with the wide range of needs and services of the preschool children with disabilities and their families and how they coordinate with educational services.

EEX 5752 Working With Families: A Pluralistic Perspective (3) ED EDS
PR: Introductory course in special education, GS. The impact of the socio-cultural environment on the education of at-risk children and children with disabilities; family systems theory, principles of multi-cultural education, strategies for working effectively with families of school-age children, diverse cultures and family structures represented in school populations today.

EGI 4941 Undergraduate Supervised Practicum in Gifted Student Education (1-6) ED EDS
Organized, supervised experiences with gifted children. Specific experiences may be either a combination of observation and assistance with gifted children or individualized projects.

EGI 5051 Nature and Needs of the Gifted (3) ED EDS
This survey course examines the characteristics and educational needs of children and youth who are gifted, including those from special populations. Emphasis is on giftedness as defined historically, nationally and locally. The course also explores changing views of intelligence and talent development related to policy and practice in gifted education as well as the processes of identification and programming.

EEX 4764 Instructional and Adaptive Technologies for Exceptionalities (3) EP EDS
PR: BXE majors only. This course is designed to enhance the use of technology for students with profound and severe exceptionalities as well as for the general classroom.

EEX 4905 Independent Study: Exceptional Student Education (1-3) ED EDS
PR: DPR. S/U only. Specialized independent study determined by the student's needs and interests.

EEX 4909 Directed Study: Exceptional Student Education (1-3) ED EDS
PR: Senior standing. DPR. To extend competency in teaching field.

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EGI 4941 Undergraduate Supervised Practicum in Gifted Student Education (1-6) ED EDS
Organized, supervised experiences with gifted children. Specific experiences may be either a combination of observation and assistance with gifted children or individualized projects.
EGN 3331L Mechanics of Materials Laboratory (1) EN EGB

EGN 3343 Thermodynamics I (3) EN EGB

EGN 3353 Basic Fluid Mechanics (3) EN EGB

EGN 3358 Thermodynamics, Fluids, and Heat Transfer (4) ENEGB
PR: PHY 2049. Thermodynamic concepts of energy, entropy, work and heat and thermodynamic cycles. Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer.

EGN 3365 Materials Engineering I (3) EN EGB
PR: CHM 2045; CR: EGN 3311. Structure and property relationships in engineering materials, i.e., metal, ceramic and polymer systems. Environmental effects are also treated.

EGN 3373 Introduction to Electrical Systems I (3) EN EGB

EGN 3374 Introduction to Electrical Systems II (3) EN EGB

EGN 3375 Electromechanical Systems (3) EN EGB
PR: EGN 3373 with a minimum grade of B. Analysis of electromechanical device performance: transformers, transducers, DC motors and generators, AC motors and alternators.

EGN 3420 Engineering Analysis (3) EN EGB
PR: MAC 2282. Introduction to aspects of matrix algebra and complex algebra which are essential in engineering: simultaneous equations, connection matrices, basic eigenvalue theory, the complex exponential.

EGN 3433 Modeling and Analysis of Engineering Systems (3) ENEGB
PR: MAC 2283, PHY 2049. Dynamic analysis of electrical, mechanical, hydraulic and thermal systems; Laplace transforms; numerical methods; use of computers in dynamic systems; analytical solution to first and second order ODEs. Restricted to majors.

EGN 3443 Probability and Statistics for Engineers (3) EN EGB
PR: MAC 2282. An introduction to the basic concepts of statistical analysis with special emphasis on engineering applications.

EGN 3613C Engineering Economy I (3) EN EGB
A study in analyzing the economic limitations imposed on engineering activities using basic models which consider the time value of money.

EGN 3615 Engineering Economics with Social and Global Implications SS CASB (3) EN EGB
Presents basic economic models used to evaluate engineering activities and an understanding of the social and ethical implications of financial decisions in a multicultural environment through lectures, case studies and current readings.

EGN 3835 Globalization and Technology SS CAGC HHCP (3) ENEGB
In this course the student will learn to apply financial analyses to engineering projects. In addition the student will learn the effects (ramifications) of the changing global economy. He/she will apply the tools to business and personal situations.

EGN 4366 Materials Engineering II (3) EN EGB
PR: EGN 3365. Applications and structure property relationships of commonly used engineering materials. Steel, nonferrous alloys and their welding, heat treatment and processing. Introduction to ceramic and polymeric materials.

EGN 4427 Numerical & Computer Tools in Civil and Environmental Engineering (3) EN EGB

EGN 4450 Introduction to Linear Systems (2) EN EGB
PR: MAC 2282. Study and application of matrix algebra, differential equations and calculus of finite differences.

EGN 4831 Technology and Society MW (3) EN EGB
Non-technical survey of engineering activities: utilities, nuclear power, genetics weaponry, space, etc. Students conduct individual in-depth study of environmental/ethical problem.

EGN 4905 Independent Study (1-5) EN EGB
PR: CI. Specialized independent study determined by the students’ needs and interests.

EGN 4930 Special Topics in Engineering (1-3) EN EGB
PR: CI. New technical topics of interest to engineering students.

EGN 5421 Engineering Applications for Vector Analysis (3) ENEGB
Vector methods in electromagnetism and fluid mechanics. Vector operators, line and flux integrals, potential and transport theorems, applications.

EGN 5422 Engineering Applications of Partial Differential Equations (3) EN EGB

EGN 5423 Neural Networks and Mathematics for Communication (3) EN EGB

EGN 5424 Engineering Applications of Complex Analysis (3) ENEGB
Analytic functions, conformal mapping, residue theory,
Laurent series, transforms. Applications to various problems in engineering and physics.

EGN 5425 Engineering Applications of Advanced Matrix Computations (3) EN EGB
Survey of theory and software for matrix computations: factorization methods, least squares and pseudo-inverses, eigenvector algorithms. Special matrices and representations for control system and finite element applications.

EGS 1113 Introduction to Design Graphics (3) EN EGB
The student learns how to graphically represent technical designs using sketches, traditional drawing tools, and AutoCAD. The lab features twenty Pentium II computers running AutoCAD R14.

EIA 4360 Special Teaching Methods: Technology Education (3) ED EDV
Equips Technology Education instructors with professional competencies for classroom and laboratory settings. Includes the selection of appropriate methods, planning, and delivery of instruction, along with supervision of students in laboratory areas.

EIN 3241 Ergonomics I (3) AS EIT
Using the fundamentals of the design process, this course demonstrates the critical importance of ergonomic tools and underlying physical human capacities.

EIN 4142 Project Management (3) EN EGS

EIN 4242 Ergonomics II (3) AS EIT
PR: EIN 3241. This course applies the concepts of work design and measurements within the ergonomic arena to achieve work design that is ergonomically feasible and effective.

EIN 4243C Human Factors 6A (3) EN EGS
Design of man-machine systems, by taking into consideration both human and machine capabilities and limitations.

EIN 4312C Work Analysis (3) EN EGS
PR: EGN 3613C or EGN 3615, EGN 3443. Operation analysis and workspace design, work measurement, standard data, ergonomics, and labor costing.

EIN 4333 Production Control (3) EN EGS
PR: ESI 4312. Planning and control of production systems. Includes: forecasting and inventory control models, scheduling and sequencing, MRP, CPM/PERT, and resource requirements.

EIN 4352 Engineering Cost Analysis (3) EN EGS
PR: EGN 3615. This is a non-repeatable course restricted to Industrial Engineering majors. It provides students with the principles and techniques for the cost analysis, estimation and evaluation of engineering design in service and manufacturing organizations.

EIN 4364C Facilities Design (3) EN EGS
PR: EIN 4312C; CR: ESI 4221, EIN 4333. Design and modification of industrial production and material handling facilities. Basic analysis techniques, use of computer programs, automated warehousing.

EIN 4601C Automation and Robotics (3) EN EGS
PR: EIN 4621. Introduction to the practices and concepts of automation as applied to material handling, inventory storage, material transfer, industrial processes and quality control.

EIN 4621 Manufacturing Processes (3) EN EGS
PR: EGS 1113. The study of basic manufacturing processes and precision assembly. CAD/CAM including NC programming.

EIN 4891 Capstone Design MW CPST (3) EN EGS
PR: EIN 4364. Teams of students work on the design of a product/service company and performed tasks that range from product/service definition (and assessment of market needs) to production and evaluation of economic/financial feasibility. The product/service design will use existing prototype(s) that need revisions, improvements and enhancements considering design, usability, productibility/manufacturability, and delivery.

EIN 4933 Special Topics in Industrial Engineering (1-5) EN EGS
Special topics related to economic analysis, optimization, financial and economic principles are utilized to make technical investments and manage technical enterprises. Repeatable up to 5 credit hours.

EIN 5114 Total Quality Management Concepts (3) EN EGS
This course will examine the methodology and procedures that companies use to improve quality and its operational benefits, including the management transformation (paradigm shift) that is evolving. Unrestricted. Nonrepeatable for credit.

EIN 5182 Principles of Engineering Management (3) EN EGS
Introduction to the fundamentals of planning, organizing and leadership as needed by engineers, scientists, and other professionals considering managerial positions.

EIN 5275 Work Physiology and Biomechanics (3) EN EGS
PR: CC, majors only. Human physiological limitations encountered in design, analysis and evaluation of man-machine systems.

EIN 5350 Technology and Finance (3) EN EGS
A course for technical managers that focuses on how financial and economic principles are utilized to make technical investments and manage technical enterprises.

EIN 5357 Engineering Value Analysis (3) EN EGS
PR: EIN 5219 or equiv., majors only Statistical models for analyzing engineering alternatives from an economic viewpoint. The use of advanced engineering economy concepts in solving industrial problems.

EIN 5510 Manufacturing Systems Analysis (3) EN EGS
PR: CC, majors only. The study of systems of manufacturing entities such as machine tools, robots, and materials handlers. Emphasis is on mathematical description of integrated systems and system optimization.

EIV 4210 Program Management: Industrial-Technical Education (4) ED EDV
Planning, organizing, motivating and controlling of the learning environment in Industrial-Technical Education classroom and laboratories. Program standards for OSHA, program review, record keeping, and budgeting will be examined.
EMIV 4360 Special Teaching Methods: Industrial-Technical Education (4) ED EDV
Instructional techniques in industrial-technical education. Vocational Industrial Clubs of America activities may be included.

EMIV 5315 Program Management: Diversified Cooperative Training (3) ED EEDV
Organization, coordination, and budgeting of adult, cooperative, and special programs.

ELD 4011 Introduction to Specific Learning Disabilities (3) EEDS
PR: EEX 4012 or DPR. Characteristics, needs and abilities of children with SLD. Emphasis is on theories, issues, trends, and philosophy of problems for such children.

ELD 4905 Independent Study: Specific Learning Disabilities (1-3) ED EDS
PR: DPR. S/U only. Specialized independent study determined by student's needs and interests.

ELD 4909 Directed Study: Specific Learning Disabilities (1-3) ED EDS
PR: Senior standing, DPR. To extend competency in teaching field.

ELD 4941 Undergraduate Supervised Practicum in SLD (1-6) ED EDS
PR: EEX 4012. S/U only. DPR. Supervised field experiences in assessment, behavior management and clinical teaching with classes for children who have specific learning disabilities.

EMA 4003 Introduction to Materials Science (3) EN ECH
PR: ECH 4123 or Consent of Instructor. Introduction to the main families of materials and principles behind their design, selection, development, and behavior. Relationship of properties to structure and processing of materials. Not repeatable for credit. Majors and non-majors.

EMA 4324 Corrosion of Engineering Materials I (3) EN EGX
Principles of electrochemical corrosion and the representation of corrosion processes by polarization diagrams. Origin and prevention of the localized forms of corrosion and approaches to corrosion control.

EMA 5326 Corrosion Control (3) EN EGX
PR: EGN 3365. Provide understanding of corrosion fundamentals. Introduce design for corrosion detection, protection, and control. Acquire research project experience.

EME 2040 Introduction to Technology for Educators (3) ED EDK
Designed as an introduction to computer technology and its role in teaching and learning processes. Topics include educational software, ethical and social issues, hardware, interactive multimedia, models for integrating technology into instruction, productivity tools and telecommunications.

EME 5403 Computers in Education (3) ED EDK
A survey course designed to introduce practicing teachers to microcomputer technology and its function in the classroom to augment the teaching and learning processes. Objectives include the use and evaluation of educational software, classroom use of computers, instructional computing research, generic applications software (word processors, database managers, etc.), programming, disk operating systems, and microcomputer hardware.

EML 3035 Programming Concepts for Mechanical Engineers (1) EN EGR
PR: MAC 2281, PHY 2048 Solution of engineering and science problems using programming language such as Visual Basic or Maple. Topics include fundamentals of programming, controlling program flow and arrays. Restricted to majors; not repeatable for credit.

EML 3041 Computational Methods (3) EN EGR
PR: MAP 2302, EML 3035. Techniques to solving engineering problems using numerical methods. Topics include roots of equations, matrix algebra, simultaneous linear equations, numerical integration and differentiation, and curve fitting.

EML 3262 Kinematics and Dynamics of Machinery (3) EN EGR
PR: EGN 3321 Kinematics of machines and mechanisms; position, velocity, and acceleration analysis of mechanisms; cams; gear trains; inertia forces in mechanisms; flywheels; balancing of rotating masses.

EML 3303 Mechanical Engineering Lab I (3) EN EGR

EML 3500 Mechanics of Solids (3) EN EGR
PR: EGN 3311. Stress and deflection analysis of machine parts, variable loads, endurance limits, fasteners, bearings, power transmission, code consideration of pressure and vacuum vessels, elements of design.

EML 3701 Fluid Systems (3) EN EGR
PR: EGN 3343, EGN 3321. Principles of fluid flow; piping and duct systems; fluid machinery; metering of compressible and incompressible flow; boundary layer theory; dimensional analysis; introduction to aerodynamics.

EML 4031 Visual Basic for Engineers and Scientists (3) EN EGR
PR: EML 3041 Introduces students to the powerful graphical interface language of Visual Basic. Illustrates the use of the language in engineering and science applications.

EML 4106C Thermal Systems and Economics (3) EN EGR
PR: EGN 3343. Power and refrigeration cycles; fuels and combustion; internal combustion engine cycles; cogeneration; nuclear energy; methods of economic analysis.

EML 4123 Heat Transfer (3) EN EGR
CR: EML 3701, EML 3041. Conduction, convection and radiant heat transfer; thermal properties of materials; role of fluid flow in convective heat transfer; design and selection of heat exchangers.

EML 4220 Vibrations (3) EN EGR

EML 4230 Introduction to Composite Materials (3) EN EGR
PR: EML 3500 and EML 3041. The course introduces manufacturing types and applications of advanced composites. Students study micromechanical and macromechanical behavior of a lamina and analyze and
design a laminated structure made of advanced composite materials.

EML 4246 Tribology (3) EN EGR
PR: EML 4501. Introduction to friction, lubrication and wear. Contact of real surfaces, mechanics of friction, surface failures, boundary lubrication fluid properties, thin film lubrication, thick film lubrication, bearing and lubricant selection.

EML 4302 Mechanical Engineering Laboratory II (3) EN EGR
PR: EML 3303. Continuation of EML 3303 with emphasis on material and energy balances, stress analysis and vibrations. Lec.-lab. The Team-Project-Time Approach.

EML 4312 Mechanical Controls (3) EN EGR

EML 4325 Mechanical Manufacturing Processes (3) EN EGR
PR: EGN 3365. Description of mechanical material cutting, forming and fabrication methods, as used in modern industrial manufacturing processes.

EML 4395 Motor Selection and Control (3) EN EGR
PR: ENG 3373 Standard electrical voltages; power wiring in industrial plants; NEMA motor designs and their uses; techniques for estimating motor starting times and temperature rise; motor selection, starting, and operating safety interlocks; conventional starting and control systems; programmable controllers; electrical code requirements for conductors and protective devices.

EML 4414 Power Plant Engineering (3) EN EGR
PR: EML 4106C. Application of thermodynamics, heat transfer, and fluid flow to sizing of HVAC systems. Heating and cooling calculations, air requirements, equipment sizing. Energy Code requirements. Design project.

EML 4905 Independent Study (1-4) EN EGR
PR: CC.

EML 4930 Special Topics in Mechanical Engineering (1-4) EN EGR
PR: CC.

EMR 4011 Mental Retardation and Developmental Disabilities (3) ED EDS
PR: EEX 4012 or equivalent. This course is designed to provide students with a broad introduction to the area of mental retardation and developmental disabilities with particular emphasis on the educational aspects. This course is required by the State for certification in mental retardation.

EMR 4230 Educating the Severely/Profoundly Handicapped (3) ED EDS
PR: EMR 3011 or DPR. Emphasis on educational methods and materials for teaching children with severe/profound handicaps. Practicum/field experience linkage.

EMR 4905 Independent Study: Mental Retardation (1-3) ED EDS
S/U. May be repeated when subjects vary. DPR. Specialized independent study determined by the student’s needs and interests.

EMR 4909 Directed Study: Mental Retardation (1-3) ED EDS
PR: Senior standing, DPR. Offered only as a scheduled class. To extend competency in teaching field.

EMR 4941 Undergraduate Supervised Practicum in Mental Retardation (1-6) ED EDS
PR: EEX 4012. S/U only. DPR. Supervised field experiences in assessment, behavior management, and clinical teaching with children who have mental retardation.

ENC 1101 Composition IIA EC CAEC HHCP (3) AS ENG
PR: College-level reading and writing. ENC 1101 helps prepare students for academic work by emphasizing expository writing, the basics of library research, and the conventions of academic discourse.

ENC 1102 Composition IIB EC CAEC (3) AS ENG
PR: ENC 1101 (or the equivalent, i.e. passing the CLEP exam). ENC 1102 emphasizes argument, research, and style. As students engage in creative and critical thinking, they learn to support assertions based on audience and purpose; students apply library research, strategies for revision, and peer response.

ENC 1121 Composition I: Honors 6A EC (3) AS ENG
Reserved for students in University Honors. Honors Section of ENC 1101.
ENC 1122 Composition II: Honors 6A EC (3) AS ENG
PR: ENC 1121. Reserved for students in University Honors. Honors Section of ENC 1102.

ENC 1130 Improving College-Level Writing (3) US REA
This class approaches writing as a process and utilizes prewriting, drafting, revising, and editing. Through intensive reading and writing practice, the curriculum will address grammar, mechanics, punctuation, word usage, and essay structure.

ENC 2210 Technical Writing 6A (3) AS ENG
PR: ENC 1101 and ENC 1102 or ENC 1121 and ENC 1122. Effective presentation of technical and semi-technical information. Will not count toward the English major.

ENC 3246 Communication for Engineers 6A WRIN (3) AS ENG
Focuses on writing concerns of engineers. Deals with the content, organization, format, and style of specific types of engineering documents. Provides opportunity to improve oral presentations.

ENC 3310 Expository Writing 6A WRIN (3) AS ENG
PR: ENC 1101 and ENC 1102 or ENC 1121 and ENC 1122. This is a course that teaches the techniques for writing effective prose, (excluding fiction), in which student essays are extensively criticized, edited, and discussed in individual sessions with the instructor and with peers.

ENC 3416 New Media for Technical Communication (3) AS ENG
PR: ENC 1101 and ENC 1102 or ENC 1121 and ENC 1122. The study and production of digital media with special emphasis on emergent and evolving applications.

ENC 4210 Technical Writing 6A (3) AS ENG
PR: ENC 2210, or ENC 3310, or Cl. Advanced Technical Writing is a course designed to develop writing skills of a high order: technical exposition; technical narration, description, and argumentation; graphics; proposals; progress reports; physical research reports; and feasibility reports.

ENC 4311 Advanced Composition (3) AS ENG
PR: ENC 3310 or Cl. Instruction and practice in writing effective, lucid, and compelling prose, with special emphasis on style, logical argumentation, and critical thinking.

ENG 4931 Selected Topics in Professional and Technical Writing (3) AS ENG
PR: ENC 3250, ENC 2210, or ENC 3310 or Cl. Focus of the course will be determined by student demand and instructor interest. Topics to be covered may include legal writing, the conventions of business writing, writing in the medical fields, and writing for the social sciences. May be taken twice for credit with different topics.

ENG 4013 Literary Criticism (3) AS ENG
A study of the works of major literary critics from Aristotle to the present, with emphasis on their meaning, their implied world view, and their significance for our own time and literature. Required for Literature majors. Recommended during first 2 semesters of LIT major.

ENG 4590 Individual Research (1-4) AS ENG
PR: CC. Directed study in special projects.

ENG 4907 Directed Reading (3) AS ENG
PR: CC. Readings in special topics.

ENG 4935 Honors Seminar I (3) AS ENG
PR: Admission to English Honors Program. CR: ENG 4936. Variable topics. Students will be expected to participate in class discussion, make formal presentations, and complete a major research project.

ENG 4936 Honors Seminar II (3) AS ENG
PR: Admission to English Honors Program. CR: ENG 4935. Variable topics. Students will be expected to participate in class discussion, make formal presentations, and complete a major research project.

ENG 4940 Internship in English (1-4) AP ENG
PR: ENG majors only. Supervised field experience in a writing and/or reading oriented position relevant to the English major. Restricted to majors. Nonrepeatable.

ENG 4970 Honors Thesis (3) AS ENG
PR: ENG 4935, ENG 4936. For students writing English Honors theses.

ENL 3015 British Literature to 1616 (3) AS ENG
A survey of representative prose, poetry, and drama from its beginnings through the Renaissance, including such poets and figures as Beowulf, Chaucer, Malory, More, Hooker, Skelton, Wyatt, Sidney, Spenser, Shakespeare, Donne, and Jonson.
ENL 3016 Studies in 17th and 18th Century British Literature (3) AS ENG
This is a topics course focusing on 17th and 18th century British literature. It satisfies a historical distribution requirement for the English major, LIT, and may be taken more than once for credit.

ENL 3017 Studies in 19th Century British Literature (3) AS ENG
This is a topics course focusing on British Literature primarily of the years 1800-1900. It satisfies a historical distribution requirement for the English major, LIT, and may be taken more than once for credit.

ENL 3026 Studies in Twentieth-Century Literature (3) AS ENG
This is a topics course focusing on Twentieth-Century Literature (British; American; and/or World). It satisfies a historical distribution requirement for the English major, literature track, and may be taken more than once for credit.

ENL 3230 British Literature 1616-1780 (3) AS ENG
A survey of 17th Century and Neoclassical Literature, including such figures as Donne, Herbert, Crashaw, Vaughan, Marvell, Milton, Pope, Swift, Johnson, Boswell, and Goldsmith.

ENL 3251 British Literature 1780-1900 (3) AS ENG
The poetry and poetics of the Romantic figures, with attention to the continuing importance of Romantic thinking in contemporary affairs and letters; a survey of representative figures of the Victorian and Edwardian periods, including poetry, prose, and drama.

ENL 3273 British Literature 1900-1945 (3) AS ENG
Survey of poetry, drama, and fiction of such writers as Eliot, Yeats, Thomas, Conrad, Shaw, Joyce, Lawrence, Huxley, Woolf, Forster, Waugh, Owen, Auden, O’Casey, and others.

ENL 3331 Early Shakespeare (3) AS ENG
A study of from five to eight of Shakespeare’s comedies, histories, and early tragedies, ending with Hamlet. Special attention to developing the student’s ability to read and interpret the text.

ENL 3332 Late Shakespeare (3) AS ENG
A study of from five to eight of Shakespeare’s problem plays, major tragedies, and late romances. Special attention to developing the student’s ability to read and interpret the text.

ENL 3334 Shakespeare from an Historical Perspective 6A-HP CAHU HHCP (3) AS ENG
This course introduces students to at least six of Shakespeare’s plays. The course will focus on artistic elements of the plays; the political, social, and intellectual milieu of the period; as well as issues of class, race, and gender. Will not count toward English major.

ENL 4122 19th Century British Novel (3) AS ENG
Study of the 19th-century British novel, including works by novelists such as Thackeray, Dickens, Eliot, Hardy, Trollope, and others. Analysis of the characteristics of the novels and their historical, social, cultural, and political contexts.

ENL 4132 British Novel: Conrad to the Present (3) AS ENG
A critical study of British fiction from 1900 to the present, with emphasis on such writers as Conrad, Lawrence, Joyce, Woolf, Huxley, Orwell, Burgess, Murdoch, Golding, and others.

ENL 4303 Selected British Authors (3) AS ENG
The study of two or three major figures in British Literature. The course may include such writers as Fielding and Austen, Keats and Yeats, Joyce and Woolf. Specific topics will vary. May be taken twice for credit with different topics.

ENL 4311 Chaucer (3) AS ENG
An intensive study of The Canterbury Tales and major critical concerns.

ENL 4338 Advanced Studies in Shakespeare (3) AS ENG
PR: ENL 3331 or ENL 3332, or CI. Intensive study of selected plays of Shakespeare, with special attention to significant critical issues and to the Elizabethan and Jacobean cultural setting.

ENL 4341 Milton (3) AS ENG
Study of the poetry and major prose of John Milton, with special emphasis on Paradise Lost.

ENT 3003 Principles of Business in Entrepreneurship (3) BU MAN
Introduction to business principles in entrepreneurship for non-business and non-industrial engineering students. Provides basic foundation in entrepreneurship, finance and accounting. Helps students to understand the role of entrepreneurship in society.

ENT 4014 New Venture Formation (3) BU MAN

ENT 4424 Fundamentals of Venture Capital and Private Equity (3) BU MAN
PR: Jr. Standing, ENT 4014 and EIN 4933 Creativity and Technology. Elective course for business and industrial engineering students. Integrates basic principles of venture financing through an examination of both venture capital and private equity in entrepreneurial new business creation and growth.

ENV 2073 Global Warming: Science and Politics of a Contemporary Issue NS CANP (3) EN EGX
Non-technical introduction to the greenhouse effect and how human activities purportedly affect the global climate. Investigation of the relationship between science and the political process. Proposed policies to address global warming.

ENV 4001 Environmental Systems Engineering (3) EN EGX
CR: EGN 3353. An introduction to various aspects of environmental problems faced by today’s society. Topics covered are: air pollution, water pollution, noise pollution, solid waste management, ionizing radiation, disease transmission, and food protection.

ENV 4004 Environmental/Hydraulics Engineering Lab (1) EN EGX
PR: EGN 3353. CR: ENV 4001. Laboratory experience in the measuring of environmental and hydraulic parameters.

ENV 4351 Solid Waste Engineering (2) EN EGX
Introduction to the principles of integrated municipal solid waste management; waste minimization, recycle and disposal options. Design of landfill disposal systems. Course restricted to Civil and Environmental Engineering majors.
ENV 4417 Water Quality and Treatment (3) EN EGX
PR: EGN 3353. An introduction to municipal water supply and waste water treatment. Topics include water requirements and waste volumes, water quality, physical and chemical treatment processes, and advanced wastewater treatment processes.

ENV 4502 Water Treatment Engineering (3) EN EGX
PR: EGN 3353. CR: ENV 4001. The theory and the design of unit operations normally used in the practice of environmental engineering, such as agitation and mixing of liquids, filtration, leaching, gas absorption, sedimentation and clarification, drying, and evaporation.

ENV 4503 Wastewater Treatment Engineering (3) EN EGX
PR: ECH 3023C, EGN 3353, ENV 4001. The theory and design of unit processes normally used in environmental engineering such as coagulation of colloidal materials, water stabilization, water softening and neutralization, ion exchange, adsorption and oxidation processes for removal of iron and magnesium.

ENV 4552C Environmental Unit Operations and Processes (3) EN EGX
PR: ENV 4001, ENV 4417 or CI. Theory, experimental investigation, and modeling of operations and processes in engineered and natural systems. Laboratory evaluation of unit operations and processes used in water and wastewater treatment including chlorination, activated carbon absorption, biological treatment, gas/liquid mass transfer, filtration, coagulation, flocculation, and settling. Application of experimental data to process analysis and design. Field monitoring of surface water quality; simulation of transport and transformation of pollutants in surface waters.

ENV 4891 Capstone Environmental Engineering Design MW (3) EN EGX
PR: CWR 4540, ENV 4001, ENV 4417. A capstone environmental design experience for seniors in Civil and Environmental Engineering. A design oriented course to design both industrial and domestic water treatment and water transport systems and wastewater and collection systems. The course emphasizes the design procedure normally used in engineering practice.

ENV 5103 Air Pollution Control (3) EN EGX
PR: EGN 3353. Behavior and effects of atmospheric contaminants and the principles of making measurements in the air environment. Basic concepts of meteorology and control technology are discussed. Regulatory aspects and air pollution standards are covered.

ENV 5334 Hazardous Waste Management and Remedial Action (3) EN EGX
PR: ENV 5345 and one of the following: ENV 6347, ENV 6519, ENV 6558; or CI, majors only. Undergraduate preparation in environmental engineering or an environmental science program. Introduction to hazardous waste management and remediation: RCRA regulatory concepts, definitions, aspects of hazardous waste management from within the plant to final disposal. History of hazardous waste cleanup leading to CERCLA and its amendments, site investigations; site control; those aspects of treatment that are unique to remedial action.

ENV 5345 Solid Waste Control (3) EN EGX
PR: CI. Undergraduate preparation in environmental engineering, or graduate standing in environmental engineering or an environmental science program. Introduction to solid waste management, including its definition as an umbrella for hazardous waste: regulatory concepts; waste types, quantities, and characterization; collection and recycling; facility siting; disposal; thermal treatment.

ENV 5504C Environmental Engineering Processes (3) EN EGX
PR: ENV 4001, ENV 4004L, ENV 4417. Theory, experimental investigation, and modeling of operations and processes in engineered and natural systems. Laboratory evaluation of unit operations and process used in water and wastewater treatment including chlorination, activated carbon adsorption, biological treatment, gas/liquid mass transfer, filtration, coagulation, flocculation, and settling. This course is restricted to majors, has no external laboratory section associated with the course, is not available on an S/U basis only, is not cross-listed with another department or college.

ENY 3004C Introduction to Entomology (4) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course, or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712. An introduction to general aspects of insect morphology, development, and classification. The identification of local forms will be emphasized. Fieldwork required. Lecture and Laboratory.

ENY 5505C Aquatic Entomology (4) AS BIN
PR: ENY 3004C and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and CI. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 and CHM 2211. Taxonomy, development, and ecology of aquatic insects with emphasis on local forms. Fieldwork required. Lecture and Laboratory.

EPD 5051 Advanced Theories in Motor and Physical Disabilities (3) ED EDS
PR: EEX 4012 or DPR. Biological and functional aspects of motor and physical health disabilities, including dysfunctions in central nervous system covering motor, sensory, language and psychological disorders.

EPD 5321 Educational Strategies for Physically and Multi-handicapped Students (3) ED EDS
PR: EPD 5051. Educational management of students with cerebral palsy, motor disabilities and multihandicapped conditions including rehabilitation and other community services.

ESC 4705 Geology and Development of Modern Africa MW (3) AS GLY
An in-depth look at how geology has affected the politics, history and culture of Africa. Units include the Nile and hydropolitics, deserts and climate, riftting and hominid evolution, and mining and politics.

ESE 4322 Classroom Management for Diverse School and Society (3) ED EDI
Focuses on classroom management in secondary schools including classroom climate, specific strategies to address management issues, school safety, violence, diversity, ethics, and educational law.

ESE 5342 Teaching the Adolescent Learner (3) ED EDI
Emphasis is placed on adolescent developmental and learning needs linking them to practices in the classroom appropriate to the diverse secondary education population.
ESI 5344 Classroom Management for a Diverse School and Society (3) ED EDI
This course covers practical, theoretical, philosophical and ethical aspects of school and society, the education profession, and secondary schools with particular focus on classroom management, school violence, school safety, educational law and other critical social issues.

ESI 4221 Statistical Quality Control (3) EN EGS
PR: EGN 3443. This course will present the theory and methods of quality monitoring including process capability, control charts, acceptance sampling, quality engineering, and quality design.

ESI 4244 Design of Experiments (3) EN EGS
PR: EGN 3443. Activity forecasting models and control. Design and use of inventory control models, both designs applicable to engineering analyses. Analysis of variance and regression.

ESI 4312 Deterministic O. R. (3) EN EGS
PR: COP 2510, EGN 4450. An introduction to operations research techniques with particular emphasis on deterministic models. Linear programming, dynamic programming, goal programming, integer programming, and PERT/CPM networks are considered.

ESI 4313 Probabilistic O. R. (3) EN EGS

ESI 4523 Systems Simulation (3) EN EGS
PR: ESI 4313. A study of the development and analysis of computer simulation models: Monte Carlo, time-slice, and next-event. Introduction to special purpose simulation languages.

ESI 4905 Independent Study (1-5) EN EGS
PR: CI. S/U only. Specialized independent study determined by the student's needs and interests.

ESI 4911 Senior Project (2) EN EGS
PR: EIN 4364, CR: EIN 4333, ESI 4523. Analysis and design of systems in a directed project format. Individual or group work consisting of project proposal, project activities, and final report. Student projects are directed by faculty, with chairman's approval.

ESI 5219 Statistical Methods For Engineering Managers (3) EN EGS
Not open to students who have had EGN 3443. Study of statistical methods applied to engineering management problems involving estimation and prediction under conditions of uncertainty.

ESI 5236 Reliability Engineering (3) EN EGS

ESI 5306 Operations Research For Engineering Management (3) EN EGS
Not open to students who have had ESI 4312. ESI 5219 or equiv., majors only. Linear programming, non-linear programming, queuing, inventory, network analysis.

ESI 5522 Computer Simulation (3) EN EGS
PR: ESI 4521 or equiv., majors only. Design of discrete and continuous simulation models. Model validation and verification. Statistical analysis of simulation model output.

ETG 3931 Special Topics for Information Technology (1-4) AS EIT
Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.

ETG 4930 Special Topics for Information Technology (1-4) AS EIT
Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.

ETI 4116 Industrial Quality Control (3) AS EIT
PR: STA 2023. This course teaches the students the fundamental concepts of managing a quality assurance system.

EUH 2000 Western Civilization I (3) AP HTY
This course surveys the development of western civilization from the beginnings of Near Eastern civilization to the Renaissance.

EUH 2001 Western Civilization II (3) AP HTY
This course surveys the development of western civilization from the Renaissance to the present.

EUH 2011 Ancient History I HP CAHU HHCP (3) AS HTY
An introductory survey of ancient history. EUH 2011 treats the ancient Near East, Egypt and Greece from the origins of civilization to the Hellenistic kingdoms following the death of Alexander the Great.

EUH 2012 Ancient History II HP (3) AS HTY
An introductory survey of ancient history. EUH 2012 deals with Rome through the Regal, Republican, and Imperial periods, from the beginnings of civilization in Italy to the division of the Roman Empire, A.D. 285.

EUH 2021 Byzantine Empire HP (3) AS HTY
A thematic survey of the history of the medieval Byzantine Empire and neighboring civilizations from ca. 284-1453.

EUH 2022 The Medieval West HP CASB HHCP (3) AS HTY
An introductory survey of medieval history. EUH 2022 examines the European and Mediterranean worlds, exploring the evolution and transformation of beliefs, institutions and social structures, ca. 500-1500.

EUH 2030 Modern European History I HP (3) AS HTY
A thematic survey of Europe in the modern age. EUH 2030 treats the period from the Renaissance to the French Revolution.

EUH 2031 Modern European History II HP CAHU HHCP (3) AS HTY
A thematic survey of Europe in the modern age. EUH 2031 Modern European History II HP CAHU HHCP (3) AS HTY.

EUH 3142 Renaissance and Reformation (4) AS HTY
A history of Europe from the Renaissance to the Thirty Years' War (1400-1618). The cultural, social, and economic characteristics will provide the framework for artistic, philosophical, religious, and political developments.

EUH 3181 Medieval Culture (4) AS HTY
A survey of thought, culture, and art in the Middle Ages. Medieval attitudes as manifested in literature, art, philosophy, education, and religion; with emphasis upon
Medieval man’s changing perception of himself and his world.

EUH 3185 Viking History (4) AS HTY
The role of the Vikings in the shaping of Western history. A comprehensive survey of their institutions, outlook and daily life. Viking expansion into Europe and North America.

EUH 3188 Medieval Society (4) AS HTY
A study of the daily life and attitudes of the medieval nobleman, peasant, townsman, and the agrarian-urban economy and society which affected their lives.

EUH 3189 Medieval Politics (4) AS HTY
An inquiry into the nature, distribution, and use of political power during the Middle Ages, in such institutions as feudalism, monarchy, cities, and the church.

EUH 3202 History of 17th and 18th Century Europe (4) AS HTY
A history of Europe from the beginning of the Thirty Years’ War to the outbreak of the French Revolution. Political and intellectual developments will be assessed in the light of society and the economy.

EUH 3205 History of Nineteenth Century Europe (4) AS HTY
A comparative study of economic, political, social, and intellectual developments in nineteenth century Europe.

EUH 3206 History of Twentieth Century Europe (4) AS HTY
A comparative study of economic, political, social, and intellectual developments in twentieth century Europe.

EUH 3401 Classical Greece (4) AS HTY
A study of ancient Greece focusing on the brilliant period following the Persian Wars, but embracing as well the formative Bronze, Middle and Archaic ages, and the decline culminating in the conquest of Greece by Philip II of Macedon in 338 B.C.

EUH 3402 Age of Alexander (4) AS HTY
A study focusing on the career of Alexander the Great and on the Greek and Macedonian conquest of Imperial Persia. Also treated are the great hellenistic kingdoms prior to Rome’s conquest of the eastern Mediterranean.

EUH 3412 Roman Republic (4) AS HTY
A study of the Roman Republic from 509 B.C. to the assassination of Julius Caesar in 44 B.C., with a prelude treating Rome’s early development under royal rule. Political growth and change provide the framework for the treatment.

EUH 3413 Roman Empire (4) AS HTY
A study of Imperial Roman from the assassination of Julius Caesar in 44 B.C. to the death of the emperor Constantine in A.D. 337. Emphasized is Rome’s government of a vast Mediterranean empire including much of the near East and Europe.

EUH 3461 German History to 1870 (4) AS HTY
A political, social, and cultural approach to the history of the Germanys from 1500 through 1870, with emphasis on the Protestant Reformation, the rise of Brandenburg-Prussian, and the unification under Bismarck.

EUH 3462 German History 1870 to the Present (4) AS HTY
A political, social, and cultural approach to the history of the German Empire from 1870 through the 1970’s. The nation’s two attempts to try for world power status are highlighted, as well as the Weimar Republic, prototype of the embattled democracy.

EUH 3501 British History to 1688 (4) AS HTY
A study of major developments in British history from the 15th century to 1688.
and major policy actions relating to environmental issues at the local, national and international level.

EVR 4027 Wetland Environments MW CPST (3) AS ESP
Study of the general properties and ecology of wetlands, examination of the distribution and functions of wetlands, and consideration of wetland conservation and policies.

EVR 4104 Karst Environments NS (3) AS ESP
PR: EVR 2001. The objective is to provide an understanding of the scientific principles pertaining to karst environments in Florida and around the world. Both physical processes and human interactions/impacts will be examined. Not restricted to majors and not repeatable.

EVR 4114 Climate Change NS (3) AS ESP
PR: EVR 2001. The objective is to provide an understanding of the scientific principles pertaining to global and regional climate change. Both mechanisms causing the change and human impacts on climate will be examined. Not restricted to majors and not repeatable.

EVR 4218 Research Methods in Wildlife Ecology (3) AS ESP
Research Methods in Wildlife Ecology will review the ways in which data are collected, analyzed, and reported, so that informed decisions about wildlife management and conservation can be made. The course will have both classroom and field components.

EVR 4900 Directed Readings (1-6) AS ESP
To provide advanced students with interdisciplinary research experience in areas of specific interest.

EVR 4905 Independent Study (1-6) AS ESP
To provide advanced students with the opportunity for independent study in areas of specific interest.

EVR 4910 Environmental Science and Policy Project (3-12) AS ESP
Open to senior majors only. S/U only. Environmental science project consisting of research in a field related to environmental science/environmental policy. Supervised by a faculty member. Contract and report required.

EVR 4921 Environmental Science and Policy Seminar (1) AS ESP
Restricted to senior majors. S/U only. A topical reading and discussion seminar focusing on the interdisciplinary nature of environmental science and environmental policy.

EVR 4930 Selected Topics (1-4) AS ESP
Each topic is a course under the direction of a faculty member with the content depending on the interests of the students and faculty involved. All areas of Environmental Science, Policy, Ethics and Law included.

EVR 4940 Environmental Science Internship (3-12) AS ESP
Open to senior majors only. S/U only. The purpose of this course is to promote the student’s understanding and application of environmental science and policy within a practical organizational context. Contract and report required.

EVT 4065 History and Principles of Vocational Education (4) EDEDV
An overview of current policies and principles in vocational education including their historical, sociological, and philosophical bases. Open to majors and non-majors.

EVT 4084C Professional Development in Industrial Technical Education (1-3) EDEDV
Designed for the ITE teacher in forming plans of professional development. Competencies include the development of a personal education philosophy; attributes in creating harmonious school community relationships; and desirable staff and teacher associations.

EVT 4165 Curriculum Construction: Industrial-Technical Education (4) EDEDV
Design, development, implementation and evaluation of effective curricular materials in industrial, technical and health related occupations; includes individualized and self-paced materials. Open to majors and non-majors.

EVT 4365 Basic Teaching Methods in Vocational Education (4) EDEDV
Examines the role of the vocational instructor in the teaching learning process; looks at factors that promote and inhibit learning. Reviews a wide variety of instructional approaches, techniques and methods; includes selection of techniques for situations.

EVT 4367 Assessing Student Skill in Industrial Technical Education (4) EDEDV
Focuses on modifying the vocational education curriculum, laboratory, shop, student outcomes, learning activities, tests, media, etc. to accommodate the unique learning needs of minority, handicapped, disadvantaged, non-traditional and other special needs students.

EVT 4651 Equity in Schools and the Workplace 6A MW CPST (3) EDEDV
Examine equity issues related to gender, race, culture, economics in schools/workplaces. Explore legal, ethical, psychological, social perspectives including stereotyping, prejudice and discrimination for personal implications and systems change.

EVT 4905 Independent Study: Industrial-Technical Education (1-4) EDEDV
PR: CI. S/U only. Specialized independent study determined by the student’s needs and interests.

EVT 4909 Directed Study: Industrial-Technical Education (1-3) EDEDV
PR: CI. To extend competency in teaching field.

EVT 4936 Senior Seminar in Industrial-Technical Education (2) EDEDV
PR: Senior standing; CR: EVT 4940. Synthesis of teacher candidate’s courses in complete college program.

EVT 4940 Internship: Industrial-Technical Education (1-12) EDEDV
CR: EVT 4936. S/U only. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9-12 semester hours.

EVT 4946 Supervised Field Experience: Industrial-Technical Education (1-6) EDEDV
PR: CI. S/U only. Planned supervised functions in the area of specialization and coordinated with selected schools, government, offices, social agencies, businesses and industries on site.
EVT 5369 Preparation and Development for Teaching (4) ED EDV
The development of selected instructional materials, use of new educational media, performance evaluation instruments, and counseling techniques.

EXP 4104 Sensory Processes (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Available to both majors and non-majors. Psychophysical and neurophysiological data and theory underlying sensory processes. Visual, auditory, chemical, and somatosensory systems, with particular emphasis on visual processes.

EXP 4204C Perception (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Topics include sensory and physiological bases of perception and how people process relevant information in their environments.

EXP 4304 Motivation (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. A survey of motivational processes and mechanisms from physiological and psychological viewpoints.

EXP 4404 Psychology of Learning (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Survey of methods, empirical findings, and theoretical interpretations in conditioning and instrumental learning.

EXP 4640 Psychology of Language (3) AS PSY
PR: PSY 3213. Historical survey of relations between psychology and linguistics leading to the emergence of psycholinguistics as a field of study. The current status of theory and research in the field will be covered.

EXP 4680C Cognitive Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Survey of methods, empirical findings, and theoretical interpretations of human learning, information processing, verbal learning, and judgment and decision-making.

FIL 1002 Introduction to Film Studies HP SS CAHU HHCP (3) AS HUM
Students will be introduced to key concepts and techniques of Film Studies, including the history of film; an examination of film genres; an overview of foreign cinema; and the study of issues of class, race, gender, and sexuality.

FIL 2000 Film: The Language Of Vision 6A FA (4) TA ART
Exploration of the history of creative filmmaking from its beginnings to the present time. Open to both majors and non-majors.

FIL 3004 The Film as Mass Communication I: Syntax (3) AS COM
PR: MMC 2100 and MMC 3602 or DPR. The language, conventions, elements, and patterns of the film medium as related to current models of effective mass communication and new theories of nonverbal communication.

FIL 3400 Film as Mass Communication II (3) AS COM
A continuation of FIL 3004 to include the effective arrangements of scenes and sequences in motion picture and television films.

FIL 3427C Beginning Film (3) TA ART
Intermediate problems in film with emphasis on the exploration of materials and media and the development of individual concepts.

FIL 3845 World Cinema 6A FA (4) TA ART
Offers international perspectives through an examination of films from around the world. Each week narrative films from acclaimed directors will be screened, read about and discussed.

FIL 4050 Social History of the Film, 1945 to the Present (3) AS COM
PR: MMC 2100 and MMC 3602 or DPR. The development of the film from 1945 to the present.

FIL 4433C Advanced Film (3) TA ART
PR: FIL 3845. More advanced projects in filmmaking to further develop works both technically and conceptually.

FIL 5469C Cinematography (4) TA ART
PR: PGY 4520C. Advanced studio work using black and white, color and sound as technical and aesthetic factors in visual, artistic productions.

FIN 2100 Personal Finance CAQR (3) BU FIN
Not available for credit to upper-level students who have been admitted to the College of Business. May not be counted toward major requirements in FIN or GBA. Survey of the problems and techniques of personal financial planning. Includes consumer credit, insurance, home ownership, and personal investing, with attention given to current economic and legal constraints.

FIN 2935 Selected Topics in Finance (1-6) BU FIN
Not available for credit to upper-level students who have been admitted to the College of Business Administration. Topics to be selected by department chair.

FIN 3233 Money and Banking (3) BU FIN
PR: ECO 2013. Examines the structure and operations of the U.S. monetary system, commercial banking, central banking, money, and capital markets, and provides an introduction to monetary theory and policy.

FIN 3403 Principles of Finance (3) BU FIN
PR: ACG 2071, ECO 2013, and ECO 2023. Study of the processes, decision structures, and institutional arrangements concerned with the use and acquisition of funds by a firm. Includes the management of the asset and liability structure of the firm under certain and risky situations. The financial decision process will include and recognize the international as well as domestic aspects of financial management.

FIN 3604 International Finance (3) BU FIN
PR: FIN 3403. Study of factors affecting international business, assessment of risks, international managerial finance, institutions and instruments of international business finance.

FIN 4245 Federal Reserve System and Monetary Policy (3) BU FIN
PR: FIN 3233 or CI. An analysis of the Federal Reserve System, with special emphasis on monetary theory and the formulation and administration of monetary policy.

FIN 4303 Financial Institutions and Markets (3) BU FIN
PR: FIN 3403. A study of financial institutions and their roles in the capital markets; includes the savings allocation, investment, and financial decision making processes.

FIN 4324 Bank Management (3) BU FIN
PR: FIN 3403. Application of traditional finance concepts to the management of commercial banks with emphasis on decision making and problem-solving techniques to major problem areas in banking.

FIN 4412 Working Capital Management (3) BU FIN
PR: FIN 3403. An examination of short-term financial management - that is, policies and decisions related to
managing the current operations of a firm. Topics to be covered include cash management, credit and collection policy, inventory decisions, and sources of short-term financing.

FIN 4414 Advanced Corporation Finance (3) BU FIN
PR: FIN 3403. An examination of the financial policies of corporations, with special reference to dividend policy, financial structure, capital expenditures, acquisitions, mergers, and reorganizations.

FIN 4443 Financial Policies and Strategies (3) BU FIN
PR: FIN 4414. A senior seminar for majors in Finance. Primarily a case course examining financial policies and the application of financial analysis to alternative strategies.

FIN 4461 Financial Statement Analysis (3) BU FIN
PR: FIN 3403. Provides an understanding of the relationship between financial statements produced in accordance with GAAP and the informational content such statements provide. After completing the course, the student should have a better understanding of the usefulness of published financial statements to various users in a variety of circumstances.

FIN 4504 Principles of Investments (3) BU FIN
PR: ECO 2013 and FIN 3403. Survey of the risks and returns of investment media in relation to the investment objectives of individual and institutional investors. Includes an examination of the capital markets, information flows, and analytical techniques in terms of their impact on the valuation process.

FIN 4514 Advanced Investment Analysis and Management (3) BU FIN
PR: FIN 4504. A comprehensive study of security analysis and portfolio management. The course will utilize a quantitative approach to investment selection and management.

FIN 4905 Independent Study (1-3) BU FIN
PR: CI, CC. S/U only. Specialized independent study determined by the student's needs and interests.

FIN 4915 Independent Research (1-3) BU FIN
PR: CI, CC. The research project will be mutually determined by the student and instructor.

FIN 4934 Selected Topics in Finance (1-3) BU FIN
Topics to be selected by instructor and department chairperson on pertinent finance issues.

FLE 4290 Technology in the Foreign and Second Language Classroom (3) ED EDX
This course prepares pre-service and in-service teachers to infuse technology into foreign language and ESOL instruction. Students will develop technology skills and knowledge based on sound pedagogical principles that reflect research and theory in Second Language Acquisition and will apply this practical and theoretical knowledge to K-16 Foreign Language/ESOL instructional situations.

FLE 4314 Methods of Teaching Foreign Languages and ESOL in the Elementary School (3) ED EDX
PR: EDG 4620 or concurrent registration. Fluency in target language and in English. Methods of planning and teaching foreign languages in the elementary school. The emphasis is on teaching communicatively and on integrating culture in the K-6 classroom.

FLE 4316 Language Principles and Acquisition (1-3) ED EDX
PR: FLE 4317. Overview of applied Second Language Acquisition theory and the components of language, linking them to methods and techniques of providing comprehensible instruction and supporting the development of oral proficiency and literacy skills for (LEP) children.

FLE 4317 Teaching Students with Limited English Proficiency (3) ED EDX
This course is designed to prepare preprofessional teachers to provide linguistically and culturally appropriate instruction, assessment, and learning opportunities for students with Limited English Proficiency.

FLE 4333 Methods of Teaching Foreign Languages and ESOL in the Secondary School (3) ED EDX
PR: FLE 4314. Fluency in the target language and in English or DPR. Methods of teaching foreign languages within a communicative framework. Includes examination and practice of current instructional techniques in listening, speaking, reading and writing skills, testing, error correction, and computer-assisted language instruction. The emphasis is on teaching foreign languages and teaching for cultural understanding at the secondary level 7-12.

FLE 4370 Practicum in Foreign Language Teaching in the Secondary School (3) ED EDX
PR: Senior standing or enrollment in Plan II Master's Program or DPR. Required concurrently with FLE 4314 or FLE 4333. Fluency in the target language and in English. Pre-internship field experience in a K-12 environment. Will include observation and practice in a K-12 classroom as well as class meetings.

FLE 4936 Senior Seminar in Foreign Language Education CPST (3) ED EDX

FLE 4940 Internship: Foreign Language Education (1-12) ED EDX
Intern takes Senior Seminar in Education concurrently. S/U only. One full semester of internship in a public or private school.

FLE 5145 Language Principles, Acquisition and Teaching (3) ED EDX
PR: FLE 5345 Restricted to Education majors and not repeatable for credit. Overview of applied SLA theory and components of language. Methods & techniques of comprehensible instruction and the development of oral proficiency and literacy skills for LEP children.

FLE 5291 Technology in the Foreign Language Classroom (3) ED EDX
PR: FLE 5313 and FLE 5331. This course is intended to prepare foreign/second language teachers to provide pedagogically sound and technologically enhanced instruction for foreign language and second language students in the K-16 realm. Basic computer literacy is recommended.

FLE 5313 Methods of Teaching Foreign Language and ESOL in the Elementary School (3) ED EDX
This course is designed to provide training in the theory and methods of teaching foreign languages and ESOL in the elementary school (FLES) to both pre- and in-service teachers.
FLE 5331 Methods of Teaching Foreign Language and ESOL in the Secondary School (3) ED EDX
PR: FLE 5313. This course provides for the development of knowledge and skills necessary to prepare students to assume roles as foreign language (FL) and ESOL teachers at the secondary school level. It represents the second part of a sequence of methods courses.

FLE 5345 Teaching English Language Learners K-12 (3) ED EDX
This course is restricted to Education majors and is not repeatable for credit. It is designed to prepare preprofessional teachers to provide linguistically and culturally appropriate instruction, assessment, and learning opportunities for LEP students.

FLE 5366 ESOL Education in Content Areas (3) ED EDX
Enables participants to meet the special linguistic & cultural educational needs of limited English proficient (LEP) students in content area classes. Provides a theoretical & practical foundation for ESOL competencies in courses include ESOL infusions.

FLE 5895 Dual Language Education (3) ED EDX
This course is for teachers who are interested in bilingual education. The aim is to deconstruct the philosophical, theoretical, political, social and educational underpinning of instruction (K-16) when it is delivered through two languages.

FLE 5946 Practicum in Foreign Language/ESOL Teaching (3) ED EDX
PR: FLE 5313. CR: FLE 5331. This course prepares students for their internship by providing a structured pre-internship experience while meeting regularly in a university class. Opportunity to see teachers in action.

FOL 2100 General Foreign Language I (1-4) AS WLE
A general purpose course that may be used for transfer of credit, credit by examination, and similar matters; may also be used for formal courses in less commonly taught languages or for workshops in professional interpreting.

FOL 4101 General Foreign Language II (1-3) AS WLE
A general purpose course that may be used for transfer of credit, credit by examination, and similar matters; may also be used for formal courses in less commonly taught languages or for workshops in professional interpreting.

FOL 4905 Directed Study (1-3) AS WLE
Departmental approval required.

FRE 1170 Overseas Study-Elem. French (4) AS WLE
Departmental approval required. Elementary-level French taught in France. In lieu of FRE 1120 and FRE 1121.

FRE 2200 French III (3) AS WLE
PR: FRE 1121 or equivalent. A continuation of the review of the basic structure of French.

FRE 2202 Intermediate French (3) AS WLE
PR: FRE 1121 or equivalent. Readings in the French language on the intermediate level.

FRE 2240 Conversation II (3) AS WLE
PR: FRE 2241 or equivalent proficiency Conversation practice with concentration on current idiomatic usage.

FRE 2241 Conversation I (3) AS WLE
PR: FRE 1121. For development of basic conversational skills.

FRE 2270 Overseas Study-Intro. French (1-6) AS WLE
PR: Two semesters of university-level French or equivalent proficiency. Departmental approval required.

FRE 3234 Reading in French Literature and Culture (3) AS WLE
PR: FRE 2201 or equivalent. This course is designed to build reading skills in French while giving students a broad background in French culture.

FRE 3420 Composition I (3) AS WLE
PR: FRE 2200 and/or FRE 2201. A fundamental composition course for students who have completed FRE 2200 and/or 2201.

FRE 3440 French For Business (3) AS WLE
PR: FRE 2200 or equivalent. An introduction to the French language in ordinary business transactions.

FRE 3470 Overseas Study (1-6) AS WLE
Departmental approval required. An intensive study-travel project in France.

FRE 3500 French Civilization (3) AS WLE
Readings and discussion on the cultural history of France.

FRE 3502 The Francophone World MW (3) AS WLE
An undergraduate 3 credit course, which offers an overview of the main French speaking countries throughout the world, outside of France: French Canada, the Caribbean, Belgium, Switzerland, the Maghreb, Sub-Saharan Africa, the Indian Ocean, the Middle East, Southeast Asia, Louisiana.

FRE 4392 African Images in Francophone Film HP AF SS MW (3) AS WLE
This is a film based course and technologically enhanced course which will look at cultural, socio-economic, political and gender issues in French speaking Africa. Course materials will be available in English and French.

FRE 4421 Composition II (3) AS WLE
Continuation of French composition. This course is designed to follow FRE 3420.

FRE 4471 Advanced Overseas Study (1-6) AS WLE
PR: FRE 3470 or CI. Departmental approval required. Intensive language study in France.

FRE 4700 French Linguistics (3) AS WLE
PR: LIN 3010 and FRE 2201 or equivalent. An introduction to the phonological, morphological and syntactic structure of French.

FRE 4905 Directed Study (1-3) AS WLE
Departmental approval required.
FRW 5958 The 20th Century Novel (MW) (3) AS WLE
PR: FRW 4100 or FRW 4101. Study of representative novels from the 17th - 20th centuries in France, examining literary movements, ideas, and techniques. Course taught in French.

FRW 4901 Introduction to French Drama and Poetry (MW) (3) AS WLE
PR: FRW 4100. Emphasis on Malherbe, Descartes, Pascal, La Fontaine, and Boileau.

FRW 4100 The French Novel (MW) (3) AS WLE
PR: FRW 4100 or FRW 4101. Study of representative novels from the 17th - 20th centuries in France, examining literary movements, ideas, and techniques. Course taught in French.

FRW 5426 Contemporary France (3) AS WLE
PR: FRW 4100 or equivalent. Study of the French literary and cultural movements from the 21st century, including the contributions of various intellectual movements to contemporary French culture.

FRW 5100 French Literary Masterpieces in English Translation (6A MW) (3) AS WLE
PR: FRW 4100 or equivalent. Comprehensive study of representative literary works in French from the Middle Ages to the present, focusing on the evolution of thought and culture in the French tradition.

FRW 5001 French Literary Masterpieces in English Translation (6A MW) (3) AS WLE
PR: FRW 4100 or equivalent. Comprehensive study of representative literary works in French from the Middle Ages to the present, focusing on the evolution of thought and culture in the French tradition.

FRW 5443 18th Century Literature (3) AS WLE
PR: FRW 4100. Study of the literary and cultural trends of the 18th century in France, including the influence of the Enlightenment.

FRW 5458 Pre-Romanticism (3) AS WLE
PR: FRW 4100 or FRW 4101. Study of the romantic and early realistic movements in France, focusing on the works of Flaubert, Zola, Goncourt, Maupassant, and Daudet.

FRW 5505 Naturalism and Realism (3) AS WLE
PR: FRW 4100 or FRW 4101. Study of the naturalistic and realist movements in French literature, focusing on the works of Flaubert, Zola, Goncourt, Maupassant, and Daudet.

FRW 5745 French Literature of Quebec (3) AS WLE
PR: A survey of Francophone literature and cultures is recommended. Overview of the main representative literary works in French from Quebec in all genres (poetry, drama, novel, short story) as well as a survey of the main traits of Quebec history & culture. Open to non-majors. Not repeatable for credit. Taught in French.

FRW 5755 African and Caribbean Literature (3) AS WLE
PR: A survey of Francophone literature and cultures is recommended. Overview of the main representative literary works in French from North and Sub-Saharan Africa as well as the Caribbean. Open to non-majors and not repeatable for credit. Taught in French.

FRW 5829 An Introduction to Modern French Literary Criticism (3) AS WLE
PR: Upper-level or graduate standing. Study of an author, movement or theme. A graduate elective 3 credit course entirely taught in French, which offers a survey of the main trends and methods in 20th Century literary criticism, the French having been at the avant-garde of the field.

FRW 5934 Selected Topics (1-3) AS WLE
PR: Upper-level or graduate standing. Study of an author, movement or theme.

FSS 3231 Introduction to Food Production Management (3) US HRM
PR: FRW 4100 or equivalent. Study of the basic principles and practices of food production and service, with emphasis on the quality of food, practical experience in food production and service, in accordance with food standards, sanitation & safety and cost control.

GEO 2000 World Regional Geography (3) SS HP AF CAGC (4) AS GPY
PR: ENC 1101 and their equivalent. Study of the major physical and cultural regions of the world, with emphasis on their geographic, social, political, economic, and environmental aspects.

GEO 3194 Regional Geography (3) AS GPY
PR: ENC 1101 and their equivalent. Variable title course to systematically study and compare special regions identified by the instructor.

GEO 3405 Geography of Latin America 6A (4) AS GPY
PR: ENC 1101 and their equivalent. Systematic geographic analysis of the Latin American world region, with emphasis on its cultural, political, economic, environmental, and physical diversity.

GEO 3500 Geography of Europe 6A (4) AS GPY
PR: ENC 1101 and their equivalent. Systematic geographic analysis of the European world region, with emphasis on its cultural, political, economic, environmental, and physical diversity.

GEO 3703 Geography of Asia (4) AS GPY
PR: ENC 1101 and their equivalent. Systematic geographic analysis of the Asian world region, with emphasis on its cultural, political, economic, environmental, and physical diversity.
GEB 2350 Doing Business Around the World SS (3) BU GBA
This course introduces the student to: 1) the nature of international business; 2) the framework of international organizations and the monetary system within which international business functions; 3) forces affecting international business; and 4) management responses to problems caused by international environments.

GEB 2935 Selected Topics in Business (1-6) BU GBA
Topics to be selected by department chairs.

GEB 4935 Selected Topics in Business Administration (1-6) BU GBA
Topics to be selected by department chairs.

GEB 4915 Independent Research (1-4) BU GBA
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor.

GEB 4905 Independent Study (1-3) BU GBA
PR: CI. S/U only. Specialized independent study determined by the student's needs and interests.

GEO 1930 Geography of Current Events SS (4) AS GPY
For non-majors only. Application of basic geographic principles to the analysis of contemporary events in various parts of the world.

GEO 2200 Introduction to Physical Geography NS CANP (3) AS GPY
This course explores the principles of physical geography; maps; earth sun relationships; meteorological, hydrological, pedagogical, aeolian, and glacial processes, and resulting landforms.

GEO 2200L Introduction to Physical Geography Lab (1) AS GPY
CR: GEO 2200. Laboratory portion of Introduction to Physical Geography (GEO 2200).

GEO 2371 Introduction to Earth Systems Science NS CANP (3) AS GPY
For non-majors only. This course provides a general overview of the earth, the inter-relationship between its functional systems, and a review of human impacts on the earth system at all scales.

GEO 2400 Human Geography SS CAGC (4) AS GPY
Human geography encompasses those branches in geography which focus primarily upon the relationships between humans and the environments they construct. This course will examine the object of study of human geography, as well as explore many of the components of human geography, including economic geography, geopolitics, cultural geography, urban geography, population geography, and the relationships between geography and globalization.

GEO 2931 Special Topics (1-4) AS GPY
Topics are at the discretion of the instructor. This course will offer lower level topics to attract new majors.

GEO 3164C Research Methods in Geography (4) AS GPY
PR: STA 2023 or STA 2122 or QMB 2100. Statistical analysis in geographic research.

GEO 3602 Urban Geography (4) AS GPY
PR: GEO 2400 or CI. Spatial analysis of urban areas; growth, location, spacing, and size. Development, site, situation, internal structure, and hinterland are considered.

GEO 4114C Geographic Techniques and Methodology (4) AS GPY
PR: GIS 3006 and GEO 3164C, or CI. Selected topics in various geographic techniques and methodologies and their application.

GEO 4204C Topics in Physical Geography (4) AS GPY
PR: GEO 2200 or CI. Intensive study of a topic selected from physical geography.

GEO 4210 Process Geomorphology (4) AS GPY
PR: GEO 2200 or CI. A systematic study of soil genesis and classification with a focus on North American and Florida soils.

GEO 4244 Tropical Meteorology NS (4) AS GPY
PR: GEO 2200, one approved Calculus course, or CI. This course examines the tropical atmosphere, its interaction with land and ocean, as well as weather and climate phenomena that are unique to the topics. Students will take an in-depth look at hurricane climatology, the El Nino and Southern Oscillation phenomenon, thunderstorms and lightning, satellite remote sensing, monsoons, sea-breeze convergence and Florida climatology, surface energy exchange, land use change and its impact on tropical climates.

GEO 4265 Soil Genesis and Classification (4) AS GPY
PR: GEO 2200, or CI. A systematic study of soil genesis and classification with a focus on North American and Florida soils.

GEO 4280C Hydrology (4) AS GPY
PR: GEO 2200 or CI. Introduction to the general principles that govern hydrologic processes. Approaches to hydrologic measurements and the application of hydrologic analyses to water-resource management issues are examined.

GEO 4284 Water Resources Management NS (4) AS GPY
PR: Senior standing. Geographic perspectives on water resources management at the global, national and local scale, including political, socio-economic, technical and scientific aspects.

GEO 4300 Biogeography (4) AS GPY
PR: GEO 2200 and GEO 3164C, or CI. Analysis of the present and past distribution of species at an intermediate to large spatial scale.

GEO 4340 Natural Hazards (4) AS GPY
PR: Junior or Senior Standing. Examination of the physical, social, economic, political and cultural forces that create the phenomena of natural hazards. Case studies from around the world will include floods, droughts, tornadoes, hurricanes, freezes, heat waves, wild fires, earthquakes, tsunami, and volcanoes.

GEO 4372 Global Conservation 6A MW (4) AS GPY
The distribution, exploitation, and conservation of physical and human resources, ecology.

GEO 4421 Cultural Geography (4) AS GPY
PR: GEO 2400 or CI. The interrelationships of culture and nature, from ancient times to the present.
GER 2201 German IV (3) AS WLE
PR: GER 1121 or equivalent. Readings in German on the intermediate level. May be taken concurrently with GER 2200.

GER 2200 German III (3) AS WLE
PR: GER 1121 or equivalent. A review of the basic structure of spoken and written German. May be taken concurrently with GER 2201.

GET 3524 German Popular Film HP MW (4) AS WLE
Overview of films with significant popular success at German box office from 1920s to present. Films will be discussed in the context of Germany’s artistic, intellectual, and social history as well as general film history and criticism. Taught in English.

GER 4410 Conversation II (3) AS WLE
Free conversation based on the current German idiom.

GER 5605 Goethe (3) AS WLE
Selected novels, poems: Werther, Wahlverwandtschaften, Wilhelm, Meister, Westöstlicher, Divan.

GER 5845 History of the German Language (3) AS WLE
Analysis and interpretation of selected major works of German literature, to be read in English, with regard to their thought content and relevance to out thoughts and actions.

GET 3522 Fantastic Films of Early German Cinema HP MW (4) AS WLE
An overview of early 20th century German films with emphasis on horror, science fiction, and fantasy films. Course offers insights into Germany’s artistic, intellectual, and social history, as well as general film history and criticism. Taught in English.
GET 4523 New German Cinema to Present MW HP (4) AS WLE
An overview of post-1945 Ger films with emphasis on films from New Ger Cinema (1960s-early 80s) & its aftermath. Course offers insights into Germany's artistic, intellectual, and social history, as well as general film history and criticism. Taught in Eng.

GEW 4100 Survey of German Literature I (3) AS WLE
Course will examine a variety of texts from the 9th to the early 19th century, exposing significant moments in German literature and thought and exploring diverse perspectives on German culture and society. Course taught in German. Not repeatable.

GEW 4101 Survey of German Literature II (3) AS WLE
Course will examine a variety of texts from the 19th century to the present, exposing significant moments in German literature and thought and exploring diverse perspectives on German culture and society. Course taught in German. Course not repeatable.

GEW 4750 Women in Contemporary German Literature and Film HP (3) AS WLE
PR: GER 2200 or above or CI. This course serves as an introduction to contemporary literary works and films by women writers and directors from German speaking countries. It will examine the works based on feminist literary and cultural theory.

GEW 4900 Directed Study (1-3) AS WLE
Departmental approval required.

GEW 4930 Selected Topics (1-3) AS WLE
Study of an author, movement or theme.

GEW 5475 20th Century Literature to 1945 (3) AS WLE
A study of major styles in German literature from 1900 to WW II with emphasis on Hauptmann, Schnitzler, Hofmannsthal, George Rilke, Kaiser, Heym, Trakl, Thomas Mann, Hesse, Kafka, Benn, Brecht.

GEW 5489 20th Century Literature: 1945 to Present (3) AS WLE
Study of major trends in German literature since WW II with emphasis on Borchert, Frisch, Durrenmatt, Boll, Uwe, Johnson, Grass, Aichinger, Eich Enzensberger, Bachmann.

GEW 5515 The Enlightenment (3) AS WLE
Selected dramas and critical writings by Lessing, Wieland, Kant.

GEW 5545 Romanticism (3) AS WLE
Jenaer circle and Heidelberger circle; the late romantic period, the writers between Classicism and Romanticism.

GEW 5555 Realism (3) AS WLE
Selected works by Grillparzer, Grabbe, Buchner, Hebbel, Heine, Immerman, Stifter, Keller, Meyer, Storm, Raabe, Hulshoff, and Morike.

GEW 5606 Faust (3) AS WLE
Sources, form, content, and literary significance of Urfaust and Faust.

GEW 5615 Schiller (3) AS WLE
Selected dramas, philosophical, and aesthetical writings.

GEW 5934 Selected Topics (1-3) AS WLE
PR: Upper-level or graduate standing. Study of an author, movement or theme.

GEY 2000 Introduction to Gerontology SS CASB (3) BC GEY
This course is designed to be an introduction to the study of aging. The aging process is viewed from a multi-disciplinary perspective including the biological, psychological, and sociological aspects of aging.

GEY 3323 Community Services for Older Adults (3) BC GEY
This class is designed to introduce students to services available to older adults and to careers in the field of aging services. Content includes theoretical and practical issues, as well as exposure to opportunities for service and employment.

GEY 3601 Physical Changes and Aging (3) BC GEY
A survey of normal and pathological physical changes occurring from middle age through older age. Course emphasis will be on basic age-related changes and their implications for behavior in older age.

GEY 3625 Sociocultural Aspects of Aging SS AF CASB (3) BC GEY
Consideration of human aging in a broad sociocultural context. Course emphasis will be on historical, philosophical, and demographic aspects of aging, theories of social gerontology, attitudes toward aging and the aged, and cross-cultural perspective.

GEY 4322 Gerontological Case Management (3) BC GEY
This course examines the role and function of case management in meeting the care needs of the older adult. All aspects of case management practice are covered, including the elements of the case management process as well as ethical and legal issues.

GEY 4327 Understanding Policies and Practices of Long Term Care HP SS MW CPST (3) BC GEY
PR: GEY 2000. This course provides principles for managing disability in a variety of settings. Topics include historical context, experience of disability, and challenges of providing care for disabled persons. Course is repeatable and not restricted to GEY majors.

GEY 4328 Health Care Operations AF HP SS MW (3) BC GEY
PR: GEY 4327, ACG 2011, each with a grade of C or better. This course addresses the health care operations of long-term care facilities. This course is for students in the BS in long-term care administration, but not limited to GEY majors. The course is repeatable for credit.

GEY 4329 Regulatory and Clinical Operations (3) BC GEY
PR: GEY 4328, ACG 2011, each with a grade of C or better. This course will familiarize the student with the basic aspects of nursing home administration through the practical application of management theory and concepts. The course is not repeatable and not restricted to GEY majors.

GEY 4340 Retirement and LTC Housing for the Elderly (3) BC GEY
This course focuses on housing, environment, and long-term care theories, availability of affordable housing services, and a number of age-related housing solutions. Repeatable for credit, and not restricted to GEY majors.

GEY 4360 Gerontological Counseling (3) BC GEY
An introduction to the study of the major mental health problems of the elderly. Current approaches to counseling the elderly in community and institutional settings are discussed.

GEY 4401 Research Methods in Gerontology (3) BC GEY
PR: STA 2122 or equivalent with a grade of C or better. Restricted to Gerontology majors, others by departmental permission. Methods and techniques of social research in
gerontology. Design of gerontological studies, collection and analysis of data, interpretation of results, and preparation of reports.

GEY 4608 Alzheimer’s Disease Management (3) BC GEY
PR: GEY 2000 or GEY 3326. This course will provide instruction on effective approaches for providing care to persons with Alzheimer’s Disease and related disorders in residential and home care settings. The major dementing disorders and typical behaviors presented by patients are presented along with strategies for successful behavior management. Building a dementia program and building dementia care teams are also covered.

GEY 4612 Psychology of Aging SS CASB (3) BC GEY
A comprehensive overview of psychological aspects of aging. Topics will include age-related changes in sensation/perception, cognition, and personality, as well as application to late-life psychopathology.

GEY 4628 Race, Ethnicity and Aging SS (3) BC GEY
This course addresses how people of different ethnic and racial groups age, in the physical, psychological, and social context. Topics include cultural competence and sensitivity. Not restricted; not repeatable.

GEY 4629 Women and Aging (3) BC GEY
Because of longer life expectancy and other factors, women make up a disproportionate share of older adults in the United States. This course examines older women from a feminist perspective, is open to all majors, and is not repeatable for credit.

GEY 4635 Business Management in an Aging Society MW CPST (3) BC GEY
This course provides students with an interdisciplinary perspective that addresses both business management and the impact of our aging society on business.

GEY 4641 Death and Dying SS CASB (3) BC GEY
A broad overview of the basic concepts and psychosocial issues relating to the meaning of loss and death, the process of death, and the experience of grieving. Health care practices are considered along with community resources.

GEY 4647 Ethical and Legal Issues of Aging SS MW CPST (3) BCGEY
A consideration of the major ethical and legal issues in aging and their implications for policies, priorities, and services.

GEY 4900 Directed Readings (1-3) BC GEY
PR: CI. A reading program with topics in gerontology conducted under the supervision of a faculty member.

GEY 4917 Directed Research (1-4) BC GEY
This course will provide Undergraduate Students with an opportunity to engage in an agreed upon research project under the supervision of a professor. The course is open to any major and is repeatable for credit.

GEY 4935 Special Topics in Gerontology (3) BC GEY
Courses on topics such as preretirement, mental health, human services organization, nursing home administration, the older woman, and elder abuse will be offered.

GEY 4945 Field Placement (1-9) BC GEY
PR: CI. Subject to availability of internship sites approved by the School of Aging Studies. Internship in an agency or community setting. A full-time assignment to an agency or organization, engaged in planning or administering programs for older people if in the BA program (6 hours), or to a nursing home if in the BS program (9 hours).

GEY 5620 Sociological Aspects Of Aging (3) BC GEY
Examines, within a sociological frame of reference, the interrelationships between the aged (or aging) and the structure and function of the social system and its major institutionalized subsystems.

GEY 5630 Economics and Aging (3) BC GEY
Examines basic economic systems as they impact the aged. Emphasis is on applied aspects of economic planning, pensions, insurance, social security and other support systems.

GEY 5642 Perspectives on Death and Dying (3) BC GEY
Study of the various psychological, medical, legal, and religious problems caused by dying and death, and how individuals and groups have responded in the past and present.

GIS 2010C Map Interpretation (4) AS GPY
Analysis and synthesis of various types of maps and map projections.

GIS 3006 Computer Cartography (4) AS GPY
An introduction to the concepts underlying modern, computer-based mapping and to the collection and storage of digital spatial data.

GIS 4035C Remote Sensing of the Environment (4) AS GPY
PR: GIS 3006 and GEO 3164C, or CI. Analysis of satellite images and aerial photographs for studies of the environment.

GIS 4043C Geographic Information Systems (4) AS GPY
PR: GIS 3006 and GEO 3164C, or CI. An introduction to the concepts underlying Geographical Information Systems, with an emphasis on analytical capabilities of such systems in both raster and vector domains.

GIS 5049 GIS for Non-Majors (3) AS GPY
An introduction to the concepts underlying digital thematic mapping and geographical information systems (GIS) for non-geography majors and non-geography graduate students.

GIS 5075 Global Positioning Systems (3) AS GPY
PR: GIS 5049: GIS for Non-Majors or permission from the instructor. Examination of the theory, operation and application of Global Positioning Systems (GPS).

GLY 2000 Earth and Environmental Systems NS (3) AS GLY
May substitute for GLY 2010 for geology majors. This course examines the geology of the earth and the environment, using an earth systems approach that looks at interactions between the lithosphere, hydrosphere, atmosphere, and biosphere. Students will learn general principles of geology, travel world-wide on the internet, and participate in discussions on topics ranging from the scientific method to the latest geologic discoveries. Open University course; taught via internet and TV. Open University course; taught via internet and TV.

GLY 2000L Essentials of Geology Laboratory (1) AS GLY
Fundamental concepts and skills of modern geology, including rock and mineral identification, analysis of geologic maps, field analysis, and applications of computers in Geology. Required field trip.
GLY 2010 Dynamic Earth: Introduction to Physical Geology NS CANP (3) AS GLY
A first course in geology emphasizing the Earth's composition, structure, and dynamics. Lectures/activities include but are not limited to plate tectonics, earthquakes, volcanism, glaciation, global warming, shorelines, and natural resources.

GLY 2010L Dynamic Earth Laboratory (1) AS GLY
PR: GLY 2010 or concurrent registration. Laboratory study of earth materials, landforms, geologic structures, topographic and geologic maps. Lec-lab-field trips.

GLY 2030 Hazards of the Earth's Surface: Environmental Geology NS CANP (3) AS GLY
A first course in geology emphasizing catastrophic events that cause damage to humans and their possessions. Lectures and recitation activities on geologic hazards, tools geologists use to study them, and measures that can be taken to minimize them.

GLY 2050 Science, Earth and Life NS (3) AS GLY
May substitute for GLY 2010 for geology majors. The nature, history and philosophy of science intended primarily for non-science majors. Consideration of science as a way of knowing through examples taken primarily from historical geology and biology (e.g., extinction of the dinosaurs, continental drift, evolution) but also from physics and astronomy. Consideration of social relevance of science.

GLY 2051 Origins: From the Big Bang to the Ice Age NS (3) AS GLY
The history of the cosmos, origin of the universe, galaxies, the solar system, and earth, evolution of life, great extinction's including the dinosaurs, evolution of the primates, and the environmental future of the planet. (For both non-science and science majors.)

GLY 2100 History of Life NS CANP (3) AS GLY
This course has several objectives. It is an introduction not only to basic scientific concepts in geology and evolutionary theory but, perhaps more importantly, to science as a way of understanding the world around you and finding answers to big question.

GLY 2100L Earth History Laboratory (1) AS GLY
Laboratory study of the history of the earth and life. Required for Geology majors; open to non-majors.

GLY 2160 Geology of the National Parks NS CANP (3) AS GLY
This course is delivered over the internet through blackboard and recitation meetings. It introduces the nature of geologic processes including plate tectonics, earthquakes, volcanism, and glaciation drawing on examples from our nation's Parks.

GLY 2930 Selected Topics in Geology (1-3) AS GLY
Does not count toward the geology major. Topical courses in geology of general interest.

GLY 3311C The Solid Earth: Petrology and Geochemistry (4) AS GLY

GLY 3402C The Solid Earth: Plate Tectonics and Earth Structure (4) AS GLY
PR: 4 hrs. introductory geology including GLY 2000L; MAC 2312 or equivalent; PHY 2048. Plate tectonic theory and its implication re: the formation of structural features on outcrop and regional scales. Field and geophysical tools for structural analysis. Required field trip. Lec-Lab.

GLY 3552C Sedimentary Record 1: Sedimentary Processes and Petrology (4) AS GLY
PR: GLY 2000L, CHM 2045, MAC 2281. CR: GLY 3311C. A lecture and laboratory class that discusses sedimentary processes, formation and classification of sedimentary rock, and the sedimentary rock record. Examination of the rock record to solve problems in sedimentary geology.

GLY 3720C The Fluid Earth (4) AS GLY
PR: GLY 2000L; MAC 2311 and MAC 2312 or equivalent; CHM 2045 and CHM 2046; PHY 2048 and PHY 2048L. Physical, chemical and biological processes affecting fluids of the lithosphere, oceans and atmosphere. Water as a geologic medium and global entity. A systems approach. Not available as S/U for geology majors; S/U available for others.

GLY 3850 Geology For Engineers (3) AS GLY
PR: Junior standing in College of Engineering or CI. No credit toward the geology major, or for those with credit for GLY 2010. An examination of geologic materials and processes designed for engineering students; classification and properties of earth materials, surface processes, site investigation techniques, applications of geology to the solution of engineering problems.

GLY 4045 Moons, Planets, and Meteors: An Introduction to Planetary Science MW (3) AS GLY
PR: Junior standing, Solar System exploration, from Aristotle to NASA. Modern views on the origins of meteorites, the Moon, Mars, Venus, and other planetary bodies, and the methods of planetary study. Meteor impacts, their effects, future hazard. Space science as a tool in the study of the Earth. Field trips, lectures, Internet exercises.

GLY 4053 Theories and Arguments about the Earth MW (3) AS GLY
PR: 2000 level geology course. History of thinking about the Earth: context - geologic controversies; emphasis - geologic reasoning.

GLY 4104C Sedimentary Record 3: Paleontology and Earth Evolution (4) AS GLY
PR: GLY 2000L, GLY 3552C, BSC 2010. The study of "deep time", including how it is measured, how it is correlated over the Earth's surface, and how important physical, biologic, and chemical geologic processes have varied with time. Lec-Lab.

GLY 4324C Physical Volcanology (4) AS GLY
PR: GLY 3311C, MAC 2241 or MAC 2311 or MAC 2281. Physical volcanology explores the nature of volcanism on Earth and nearby planets. Topics in magma production and ascent, eruption dynamics, volcanic hazards, and volcano monitoring will be covered in lecture, laboratory, and independent exercises.

GLY 4462 Geomechanics (4) AS GLY
PR: GLY 2010 or equivalent, PHY 2048 and 2049 or equivalent. Co-PR: GLY 3402C (or an equivalent structural geology course). Overview of the mechanical behavior of
earth materials including general theory, an introduction to soil mechanics, and introduction to rock mechanics. Includes two field trips to observe geomechanical issues in Florida and modern methods of rock testing.

**GLY 4880 Seismology (4) AS GLY**
Introductory geology for majors, calculus and calculus-based physics as required for geology majors. Comprehensive introduction to theoretical and observational seismology, use of seismic waves and earthquake patterns to study earth structure, seismic hazard and risk mitigation, earthquake prediction, and techniques for the analysis of seismic data.

**GLY 4554C Sedimentary Record 2: The Earth’s Surface (4) AS GLY**

- **PR:** At least one course in Geology with lab. Principles of weathering, erosion, production, and transport of sediment on the earth’s surface, and the resulting geomorphology. Modern sedimentary environments and the process-response systems that govern them. Course is open to anyone with at least one course in geology with lab. Course is not available on an S/U basis for geology majors; it is for other majors.

**GLY 4734 Beaches and Coastal Environments MW (3) AS GLY**
A comprehensive introduction to the nature of all coastal environments including beaches, dunes, tidal inlets, estuaries, reefs, and river deltas. Emphasis will be on the natural state of these environments and how human activities have and will impact them. Consideration of coastal management policies involving economics, ethics, policy, and environmental law.

**GLY 4780 Geological Field Studies (1-3) AS GLY**

- **PR:** 1 geology course. Lectures and field trip to study modern geologic systems and/or geologic origins of specific regions. Mapping and field description techniques introduced. Topic/destination of trip varies. Trip requires camping and vigorous physical activity. Lec.-Field trip.

**GLY 4822C Fluid Earth 2: Hydrogeology (4) AS GLY**

- **PR:** GLY 2000L, GLY 3720C, PHY 2048, MAC 2281. CR: MAC 2282. Ground water flow systems, ground water geology, introduction to numerical and analytical models of ground water flow. Lec.-lab.-field trips.

**GLY 4866 Computational Geology (3) AS GLY**

- **PR:** One semester of calculus and physics. Geologic problems and problem-solving from a mathematical perspective. The intersection of geology and math. Calculations and error analysis. Not available as S/U for geology majors; S/U available for others.

**GLY 4905 Independent Study (1-3) AS GLY**

- **PR:** CI. S/U only. Specialized independent study determined by the student's needs and interests.

**GLY 4915 Undergraduate Research (1-3) AS GLY**

- **PR:** Senior or advanced junior standing and written permission of department prior to registration. S/U only. Individual experimental investigations with faculty supervision.

**GLY 4920 Geology Colloquium (1) AS GLY**

- **PR:** Senior standing in Geology. S/U only. Weekly topical lectures by faculty, graduate students and invited speakers.

**GLY 4921 Geocommunications (3) AS GLY**

- **PR:** Twelve (12) or more hours upper level geology courses.

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A course in communicating within the disciplines of the earth sciences. Emphasis will be on: writing for publication and technical reports, preparation and presentation of posters, and preparation and presentation of oral papers in earth sciences. Course is open to anyone majoring in geology, geography, anthropology or environmental science and policy. Course is not available on a S/U basis for geology majors.

**GLY 4930 Selected Topics in Geology (1-4) AS GLY**
Each topic is a course under the direction of a faculty member with the content depending on the interests of the students and faculty involved. All areas of geology included.

**GLY 4946L Practical and Applied Geology: Teaching Experience (1) AS GLY**

- **PR:** Junior standing, declared Geology major, and at least 12 credit hours of Geology courses, or CI. CR: Enrollment in other Practical/Applied sections. Completion of Geology supporting course sequence highly recommended. Hands-on course designed to teach the basic skills of a practicing geologist. Topics vary widely, with several different offerings each semester. May be repeated for credit.

**GLY 4947L Practical and Applied Geology: Laboratory Experience (1) AS GLY**

- **PR:** Junior standing, declared Geology major, and at least 12 credit hours of Geology courses, or CI. CR: Enrollment in other Practical/Applied sections. Completion of Geology supporting course sequence highly recommended. Hands-on course designed to teach the basic laboratory skills of a practicing geologist. Topics vary widely, with several different offerings each semester. May be repeated for credit.

**GLY 4948L Practical and Applied Geology: Field Experience (1) AS GLY**

- **PR:** Junior standing, declared Geology major, and at least 12 credit hours of Geology courses, or CI. CR: Enrollment in other Practical/Applied sections. Completion of Geology supporting course sequence highly recommended. Hands-on course designed to teach the basic skills of a practicing geologist. Topics vary widely, with several different offerings each semester. May be repeated for credit.

**GLY 4949L Practical and Applied Geology: Computational Experience (1) AS GLY**

- **PR:** Junior standing, declared Geology major, and at least 12 credit hours of Geology courses, or CI. CR: Enrollment in other Practical/Applied sections. Completion of Geology supporting course sequence highly recommended. Hands-on course designed to teach the basic computational skills of a practicing geologist. Topics vary widely, with several different offerings each semester. May be repeated for credit.

**GLY 4970 Undergraduate Honors Thesis (3) AS GLY**
Open to seniors admitted to the Geology undergraduate honors program. Students will complete an independent research project under supervision of a faculty member, and present results in a senior thesis and a public presentation.

**GLY 5752 Geological Field Excursion (2) AS GLY**

- **PR:** Senior standing in geology or CI. Lectures and 2-3 week field excursion to study regional geology, structure and lithogenesis of geologically complex terrain. Mapping and outcrop description techniques are emphasized.
GRE 1120 Beginning Classical Greek I  (4) AS WLE
An introductory course in classical Greek grammar with appropriate readings.

GRE 2140 New Testament Greek I  (4) AS REL

GRE 2141 New Testament Greek II  (4) AS REL

GRE 2220 Intermediate Classical Greek  (4) AS WLE
PR: GRE 1121 or equivalent. Readings in Greek at an intermediate level.

GRK 1120 Beginning Modern Greek I  (4) AS WLE
CR: GRK 1120L. An intensive study of basic skills; pronunciation, listening comprehension, speaking and some composition.

GRK 1120L Beginning Modern Greek I Laboratory  (1) AS WLE
CR: GRK 1120. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

GRK 1121 Modern Greek II  (4) AS WLE
PR: GRK 1120 or its equivalent; CR: GRK 1121L. A continuation of GRK 1120. An intensive study of basic skills; pronunciation, listening comprehension, speaking and some composition.

GRK 1121L Modern Greek II Laboratory  (1) AS WLE
CR: GRK 1121. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

GRK 2220 Modern Greek III  (4) AS WLE
PR: GRK 1121 or the equivalent. For language students who intend to attain basic proficiency.

GRK 2221 Modern Greek IV  (4) AS WLE
PR: GRK 2220 or its equivalent. Continuation of GRK 2200. Practice of writing, speaking and listening skills for language students who intend to attain basic proficiency.

GRK 4905 Directed Study  (1-5) AS WLE
Departmental approval required. S/U only. Permits study options in Modern Greek not available in the regularly scheduled curriculum at departmental discretion.

GRK 4930 Directed Topics  (1-5) AS WLE
Departmental approval required. Course permits classes in Modern Greek not available in the regularly scheduled curriculum at departmental discretion.

GRW 3502 Survey of Greek Literature: Plato’s Republic  (3) AS WLE
PR: GRE 2200 or equivalent. Plato's Republic introduces students to Plato in the original Classical Greek language, providing the necessary transition from the Beginning and Intermediate courses to an Advanced level of proficiency in ancient Greek.

GRW 4905 Directed Reading  (1-4) AS WLE
Departmental approval required.

GRW 5905 Directed Reading  (1-4) AS WLE
Departmental approval required.
HFT 3423 Hospitality Information Systems (3) US HRM
Available to majors and non-majors. Study of management information systems in the hospitality management industry. The students will evaluate software and hardware computer systems and application software being used in the hospitality industry and develop selection strategies.

HFT 3424 Cost Control in Hospitality Operations (3) US HRM
PR: HFT 3003, FIN 3403, MAN 3025 Provides students with a thorough understanding of hospitality financial accounting concepts. The emphasis of the course is to use accounting information in making managerial decisions and to prepare and understand hospitality financial statements.

HFT 3503 Hospitality Marketing and Sales (3) US HRM
PR: MAR 3023 Principles of marketing and sales and practical application in hospitality marketing philosophies; the marketing mix; product differentiation; corporate travel market; and the association, convention, and trade show market.

HFT 3603 Law and Security for the Hospitality Industry (3) US HRM
PR: HFT 3003 Functions of the law, legal environment and legal reasoning. An overview of the security issues in the hospitality industry. The law pertaining to contracts, workmen’s comp and the impact of law on economic enterprise in the hospitality industry.

HFT 3641 Beverage Management (3) US HRM
An introduction to the identification, use and service of wines, spirits, and other alcoholic beverages. An in-depth analysis of beverage operations to include selection/storage, inventory, purchasing, sales/promotion/merchandising, profits and bar management.

HFT 4221 Human Resources Management (3) US HRM
PR: HFT 3003, MAR 3023 Designed to educate new managers and supervisors in the complex issues involved in a comprehensive human resource program and its importance to hotel and restaurant business. Workmen’s Compensation, ADA, training, unions, EEO and discrimination issues.

HFT 4253 Lodging Management (3) US HRM
PR: HFT 3003, MAN 3023 Principles, practices, and procedures of managerial functions as they relate to the operation of hotels. Training, conflict resolution, total quality management, crisis management, employee empowerment and service standards are focus of team building.

HFT 4323 Facilities Management in Hospitality Operations (3) US HRM
PR: HFT 3003, MAN 3025 Provides students with a thorough understanding of hospitality financial accounting concepts. The emphasis of the course is to use accounting information in making managerial decisions and to prepare and understand hospitality financial statements.

HFT 4471 Management Accounting and Finance in Hospitality (3) US HRM
PR: FIN 3403, HFT 3003, HFT 3424 Financial functions in hospitality, interpret hospitality financial statements, capital investment decision making, financial instruments and concepts. Analytical modeling for hospitality operations, including ratio analysis and capital budgeting tools.

HFT 4583 Restaurant Trends and Challenges Seminar (3) US HRM
PR: Senior standing. Advanced level course focusing on contemporary management issues and challenges facing the foodservice and hospitality industries. Topic covered will be applicable to current trends applicable to a variety of situations.
HIS 4940 Internship in History  (1-4) AP HTY  
PR: History majors only. Supervised field experience in a research and writing-related position that relates to the History major. Possible internship sites include historical societies and museums. Restricted to majors. Repeatable for 6 total credits.

HFT 4930 Special Topics in Hospitality (1-3) US HRM  
PR: HFT 3003 Topics to be selected by instructor and department chairperson for pertinent Hospitality Management issues.

HFT 4936 Hotel Management Seminar (3) US HRM  
PR: Senior standing. Advanced level course focusing on current problems and trends in hotel management and the hospitality industry.

HFT 4945 Advanced Internship (3) US HRM  
PR: HFT 3003 Coordinated hospitality training combines practical experience with didactic academic analysis. Principles, theory and standard practices applied to operational situations. S/U only.

HIS 2931 Special Topics (2-4) AS HTY  
This course emphasizes a selected historical problem or issue. A variety of instructional approaches will be taken, and topics may vary.

HIS 3308 War and Society MW (3) AS HTY  
An examination of the ways in which societies have organized themselves for war and how societies are changed by war. Also explores gendered expectations in war, and the changing conduct of war. Does not count for History major or minor credit.

HIS 3474 Science and Civilization (4) AS HTY  
A thematic study of the interrelationship of science and society in modern history emphasizing the institutional forms, value structures, and social relations in science as they have developed from the scientific revolution to the present.

HIS 3930 Special Topics (2-4) AS HTY  
This course is designed to emphasize a selected historical problem or issue that is meaningful and challenging to the student. A variety of instructional approaches will be taken to the material. Topics will be changed each semester.

HIS 3938 Major Issues in History MW CPST HHCP (3) AS HTY  
This course is an interdisciplinary examination of the historical relationship between (broadly) Asia and the West. It offers non-historians the opportunity to understand the dynamic between past and its interpretation.

HIS 4104 Theory of History (4) AS HTY  
PR: History major status and 2.25 HTY major GPA required. An analysis of the foundations of historical knowledge and historical methodology. Includes a survey of historical thinking and writing from ancient times to the present.

HIS 4900 Directed Reading (1-4) AS HTY  
PR: CI. Arrangement with instructor prior to registration. Readings in special topics.

HIS 4920 Colloquium in History (2-4) AS HTY  
Reading and discussion of selected topics in the various fields of history. The subject and scope of inquiry will be determined by the instructor for each section.

HIS 4936 Pro-Seminar in History 6A MW (4) AS HTY  
PR: History major status and 2.25 HTY major GPA required. Advanced topics in the various fields of history. Emphasis on discussion of assigned readings and on research and writing of a major paper.

HIS 4940 Internship in History (1-4) AP HTY  
This course explores the contributions of prevention science and public health in impeding the development of mental disorders and the events that lead to mental disorders with the major developmental focus on childhood.
HSC 4172 Women’s Health: A Public Health Perspective (3) PH PHC
From a public health perspective, this course will explore the multidimensional and multidisciplinary dimensions of women’s health. The course will emphasize health promotion, disease prevention, and overall well-being.

HSC 4211 Health, Behavior and Society (3) PH PHC
This course focuses on an ecological perspective of the determinants of health including biology, individual behavior, social relationships, social stratification, institutions, neighborhoods and communities, environment, policies and globalization.

HSC 4504 Foundations of Public Health Immunology NS (3) PH PHC
This course provides an overview of the principles of Immunology and an introduction to the applications of immunology and immunologic techniques used in the surveillance, prevention and control of diseases of public health importance.

HSC 4537 Medical Terminology (3) PH PHC
This course provides a unique educational program to improve the student's medical vocabulary. The course includes medical and scientific content information, which students encounter in other health professional courses. Not restricted to any major.

HSC 4554 Survey of Human Diseases (3) PH PHC
PR: Fund. of Biology with Lab or CI. An overview of the nature, types, and mechanisms of diseases of the major body systems.

HSC 4579 Foundations of Maternal and Child Health (3) PH PHC
This course provides an overview of maternal and child health issues and trends. With this primary aim, the objectives are organized around the knowledge of health assessment and interventions for families and children.

HSC 4580 Foundations of Food Safety (3) PH PHC
This course provides an overview of food safety practices and principles emphasizing the role of food safety in public health. Topics include proper food handling procedures, food safety hazards, food-borne illness prevention, and food safety regulations.

HSC 4624 Foundations of Global Health (3) PH PHC
This course introduces students to the principles of public health from a global perspective. Emphasis will be placed on the impact of social, economic, political and environmental factors that influence health and access to health care across the globe.

HSC 4630 Understanding U.S. Health Care (3) PH PHC
An introduction to health services; providing an overview of important components of the U.S. health care system, health policy, funding sources, and comparisons with other developed nations.

HSC 4631 Critical Issues in Public Health (3) PH PHC
This course provides students the opportunity to learn about the multiple ways to view controversial topics in public health. The course covers topics including biomedical issues, social & behavioral factors related to health, and environmental issues.

HSC 4933 Special Topics in Public Health (1-6) PH PHC
PR: CI. Content will be governed by student demand and instructor interest.

HSC 5036 Professional Foundations of Health Education (1) PH CFH
The study of the practice of health education in various settings, and selected historical, cultural, philosophical, professional, and ethical issues in the practice of education.

HUM 1020 The Arts FA CAFA (3) AS HUM
Analysis of selected works of literature, music, film, and visual art, representing artists of diverse periods, cultures, genders, and races. Especially recommended for students who later take 4000-level Humanities courses.

HUM 2101 Studies in Culture: The Classical Through Medieval Periods HP CAHU HHCP (3) AS HUM
A survey of literature and the arts of ancient Greece, Rome, and medieval Europe. Issues to be examined may include the dialogue between local traditions and cosmopolitan cultures, the relationship of the individual to society, and the bases for moral values.

HUM 2230 European Humanities: Renaissance -20th Century HP CAHU HHCP (3) AS HUM
Students will be exposed to the creative expressions and cultural products of Western European societies in order not only to determine the past's values, beliefs, and concerns, but also to enrich our own spirits, imaginations, and intellects.

HUM 2250 Studies in Culture: The Twentieth Century HP CAHU (3) AS HUM
Analyses of selected works of twentieth century art, including films, paintings, music, and literature, in the context of major political, social, and economic events, such as war, depression, totalitarianism, and technological change.

HUM 2271 Eastern and Western Culture from Antiquity to 1400 AF (3) AS HUM
A comparative treatment of music, visual arts, theatre, literature, and philosophy in the East and West, proceeding chronologically from Ancient times through the Middle Ages, emphasizing Europe and India.

HUM 2273 Eastern and Western Culture Since 1400 AF (3) AS HUM
A comparative treatment of music, visual arts, theatre, literature, and philosophy in the East and West, proceeding chronologically from the Renaissance through the present, emphasizing Europe, the United States, and India.

HUM 2466 Latin American Civilization II: Modern Latin America CAGC (3) AS HUM
PR: HUM 2210 or HUM 2230. An overview of the cultural heritage of Latin America since the time of independence. Verbal and visual texts will be used to study the difficult struggle to create a cultural identity that incorporates African, indigenous, and European traditions.

HUM 2522 Introduction, the Cultural Study of Popular Music CAHU (3) AS HUM
Variable topic. An interdisciplinary examination of popular music traditions as they affect race, class, and gender, and interact with commerce, technology, and politics. Students will combine critical listening with history and cultural analysis.

HUM 2930 Selected Topics (1-4) AS HUM
An introductory course dealing with a recurrent theme in the arts or focusing on a particular artistic center (a nation or city at a particular time).
HUM 3231 The Renaissance (3) AS HUM
Junior/Senior Level Standing. An examination of the arts of the Renaissance, focusing on primary texts and images. Themes include humanism, the revival of antiquity, the concept of the individual, the Reformation and Counter-Reformation, and the impact of New World explorations.

HUM 3237 The Seventeenth Century (3) AS HUM
Junior/Senior Level Standing. An examination of the development of the art and culture of the Baroque Period, roughly the 17th Century, focusing on primary texts and images. Themes will include mysticism, sensuality, rationalism, science, absolutism, and liberty.

HUM 3240 The Early Middle Ages (3) AS HUM
Junior/Senior Level Standing. This course examines the diverse cultures of Europe from the fourth to eleventh centuries. Major issues include the formation of religious cultures, modes of cultural contact, relationships between texts and images, and uses of earlier traditions.

HUM 3241 Central Medieval and Gothic Europe (3) AS HUM
By studying texts and artifacts, this course examines the diverse cultures of Europe from the eleventh to fourteenth centuries. A central issue covered will be the efforts of the church to create an all-encompassing Christian culture.

HUM 3242 The Enlightenment (3) AS HUM
Junior/Senior Level Standing. By studying late seventeenth and eighteenth century literature, music, visual art, and philosophy, this course examines phenomena such as rationalism, classification systems, the influence of science, utilitarianism, reform, and secularism.

HUM 3244 Nineteenth-Century Arts and Letters (3) AS HUM
PR: HUM 2210 or HUM 2230. By studying 19th century literature, music, and visual art, this course examines phenomena such as the rise of capitalism, colonial expansion, nationalism, urbanism, and the redefinition of public and political life during this period of extreme change.

HUM 3331 Humanities Pro-Seminar (3) AS HUM
PR: Must have completed HUM 3804 with a GPA of 2.5 or better (grade of B- or better). A course emphasizing the analysis of primary works in relation to cultural contexts, the integration of secondary sources, and the construction of a written argument. Not restricted to majors. Offered only in fall semester.

HUM 3407 Ancient Near East Cultures (3) AS HUM
Material and intellectual culture of ancient Mesopotamia (Iraq) & Persia (Iran) from the fourth millennium BCE until the coming of Islam. Topics include the Sumerian and the Assyrian in Mesopotamia; and the Achaemenid, Parthian, and Sassanian in Persia.

HUM 3457 Nineteenth Century American Culture (3) AS HUM
Junior/Senior Level Standing. This course explores American art, literature, and cultural life from the early republic through the Gilded Age. Works are studied in their historical context in order to understand how they transmitted important information about American identity.

HUM 3458 Twentieth-Century American Culture (3) AS HUM
Junior/Senior Level Standing. A historical survey of American culture since 1900. Literature, music, visual art, film, and intellectual movements are analyzed, to understand how they have reflected and shaped cultural values and responded to changing conditions of American society.

HUM 3463 Latin American Civilization I: Pre-Columbian & Colonial (3) AS HUM
PR: HUM 2210 or HUM 2230. An overview of Pre-Columbian and Colonial Latin American Culture through 1700. Topics include literature, music, and art; ethnic diversity; political and religious tension; “high” versus “low” culture; and the clash of European and American cultures.

HUM 3804 Introduction to Cultural Studies (3) AS HUM
PR: HUM 2230. An introduction to the ideas and skills needed for doing scholarly work in interdisciplinary cultural studies. An overview of central critical discussions including gender studies, postcolonialism, class and power relationships, and technology and media.

HUM 3930 Selected Topics in Humanities (1-4) AS HUM
Courses offered under this number will always be interdisciplinary, treating more than one art media and relating them historically or in some other way. The interdisciplinary emphasis on literature and the arts, placing them in some larger context of culture or ideas, distinguished HUM courses from related courses offered in other departments of the university. Topics will vary; course may be repeated for credit with change of content.

HUM 4261 Cultural Periods and Styles (3) AS HUM
Focuses on the relationships between a particular historical period and the cultural forms characteristic of it. An interdisciplinary examination of cultural texts as responding to social and political issues of the day. Topic varies. Repeatable to 6 cr.

HUM 4391 Places, Spaces, and Regions (3) AS HUM
Focuses on relationships between geographical location and cultural dynamics. Emphases include the roles of natural environments, core-periphery relations, and local identities in the development of cultural practices. Topic varies. Repeatable to 6 cr.

HUM 4433 Ancient Greek Culture (4) AS HUM
PR: Junior standing and HUM 2210 or HUM 2230, or CI. A study of the poetry, drama, philosophy, historical writing, painting, sculpture and architecture of ancient Greece, including such authors as Homer, Sophocles, and Plato, and monuments such as the Parthenon.

HUM 4435 Early Medieval Culture (4) AS HUM
PR: Junior standing and HUM 2210 or HUM 2230, or CI. A study of the culture of Europe and the Mediterranean world from the 4th to 11th centuries through the readings of early Medieval historians, poets, and theologians, as well as the study of illuminated manuscripts, mosaics, painting and architecture.

HUM 4437 Italian Renaissance Culture (4) AS HUM
Junior/Senior Level Standing. A study of the painting, literature, music, sculpture and architecture of early modern Italy (1300-1600), emphasizing humanism, the revival of antiquity, the tension between sacred and secular, and artists such as Michelangelo, Titian, Raphael.

HUM 4438 Northern Renaissance Culture (4) AS HUM
PR: Junior standing and HUM 2210 or HUM 2230, or CI. A study of the Renaissance in Germany, France, the Netherlands, England, and Spain, including painting, architecture, literature and music, with special study of Durer, Van Eyck, El Greco, and Bosch.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Notes/Prerequisites</th>
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<tbody>
<tr>
<td>HUM 4440 Arts and Letters in the 17th and 18th Centuries (4) AS HUM</td>
<td></td>
<td>Junior/Senior Level Standing. A study of the visual arts, literature and music from the mysticism and ornament of the Baroque to the rationalism and classicism of the Enlightenment, including such artists, authors and composers as Rembrandt, Gentileschi, Voltaire, Bach, and Mozart.</td>
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<tr>
<td>HUM 4442 Arts and Letters of the Romantic Period (4) AS HUM</td>
<td></td>
<td>PR: Junior standing and HUM 2210 or HUM 2230, or CI. Continental masterworks of fiction, painting, and music in the context of European cultural history from the French Revolution to the Revolutions of 1848.</td>
</tr>
<tr>
<td>HUM 4444 Nineteenth Century European Arts and Letters (4) AS HUM</td>
<td></td>
<td>PR: Junior standing and HUM 2210 or HUM 2230, or CI. A study of continental literary, musical, and artistic masterworks from the Revolutions of 1848 until the outbreak of World War I.</td>
</tr>
<tr>
<td>HUM 4445 Twentieth Century Arts and Letters I (4) AS HUM</td>
<td></td>
<td>Junior/Senior Level Standing. Analysis of selected works of twentieth century art. The course will focus on a particular phase in the development of modernism, a set of themes, or certain stylistic aspects of various arts of the twentieth century.</td>
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<tr>
<td>HUM 4446 Twentieth Century Arts and Letters II (4) AS HUM</td>
<td></td>
<td>Junior/Senior Level Standing. Analysis of selected works of twentieth century art. The course will focus on a particular phase in the development of modernism, a set of themes, or certain stylistic aspects of various arts of the twentieth century.</td>
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<tr>
<td>HUM 4452 Nineteenth Century American Culture (4) AS HUM</td>
<td></td>
<td>PR: Junior standing and HUM 2210 or HUM 2230, or CI. Study of selected works of art, tracing the course of American expansionism in civilization, and the interaction between the arts and the sciences in American ways of life and work, 1790-1890.</td>
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<tr>
<td>HUM 4455 Twentieth Century American Culture (4) AS HUM</td>
<td></td>
<td>PR: Junior standing and HUM 2210 or HUM 2230, or CI. Study of selected works, tracing the course of expansion in the production and enjoyment of works of art, and interaction between the idealistic and pragmatic concerns for development of the arts in the 20th century.</td>
</tr>
<tr>
<td>HUM 4462 Pre-Columbian and Colonial Latin American Culture (4) AS HUM</td>
<td></td>
<td>PR: Junior standing and HUM 2210 or HUM 2230, or CI. Analysis of selected Latin American works of art in their cultural context, with emphasis on the Pre-Columbian and Colonial periods. The course will focus on a particular historical, geographical, or thematic topic within those periods.</td>
</tr>
<tr>
<td>HUM 4464 Modern Latin American Culture (4) AS HUM</td>
<td></td>
<td>Junior/Senior Level Standing. Analysis of selected Latin American works of art in their cultural context, with emphasis on the period since the time of independence. The course will focus on a particular historical, geographical, or thematic topic within that period.</td>
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<tr>
<td>HUM 4824 Issues in Cultural Theory (3) AS HUM</td>
<td></td>
<td>Focuses on a critical issue in cultural theory. Students will delve into an issue central to cultural study and develop their ability to apply cultural theory to the analysis of cultural forms. Topic varies. Repeatable up to 6 hours with change of topic.</td>
</tr>
<tr>
<td>HUM 4825 Identity and Power (3) AS HUM</td>
<td></td>
<td>Focuses on the relationships between social power and individual or group identity. Emphasizes how discourses on race, class, gender, and/or nationality construct individual subjectivity and imagined communities. Topic varies. Repeatable to 6 credits.</td>
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<tr>
<td>HUM 4890 Genres and Media (3) AS HUM</td>
<td></td>
<td>This course focuses on a particular aesthetic genre or media. Emphasis is on close readings of the media or genre in question, and on how media or generic paradigms shape ideas and identities.</td>
</tr>
<tr>
<td>HUM 4905 Directed Study (1-4) AS HUM</td>
<td></td>
<td>PR: Cl. Specialized individual study determined by the student’s needs and interests.</td>
</tr>
<tr>
<td>HUM 4930 Selected Topics in Humanities (1-4) AS HUM</td>
<td></td>
<td>This course will deal with a recurrent theme in the arts as, for example, love or death, or will focus on artistic centers such as Renaissance Florence or Paris in the 1920s. Topics will vary.</td>
</tr>
<tr>
<td>HUM 4931 Seminar in Humanities 6A (3) AS HUM</td>
<td></td>
<td>PR: HUM 3331 or Cl. Senior status required. Seminar focuses on the writing of a substantial research paper in the humanities. Topic varies. Offered only in spring semester.</td>
</tr>
<tr>
<td>HUM 4938 Major Issues in the Humanities MW CPST (3) AS HUM</td>
<td></td>
<td>The study of an important topical issue in the Humanities. Materials representing diverse views relating to that issue will be read, and works of art in different media that have relevance to the debate will be studied. Available to majors and non-majors.</td>
</tr>
<tr>
<td>HUM 4940 Internship in Humanities (1-2) AS HUM</td>
<td></td>
<td>A structured, out-of-class learning experience providing firsthand, practical training in Humanities-related professional careers in the community. Restricted to Humanities majors. Repeatable up to 4 credit hours.</td>
</tr>
<tr>
<td>HUM 4941 Study on Location (1-4) AS HUM</td>
<td></td>
<td>PR: Repeatable once for up to eight credits. The art of a culture will be examined during travel in groups, led by an instructor, to important cities or sites. Monuments, museums, architecture, plays, and/or concerts will be studied. Reading assignments and lectures. Not restricted.</td>
</tr>
<tr>
<td>HUN 2201 Nutrition (3) NU NUR</td>
<td></td>
<td>PR: Course work in chemistry and biology or permission of faculty. Open to majors and non-majors. The study of fundamental principles of normal nutrition as they relate to human life and growth from conception through senescence, interpretation of current nutrition information, and application of nutrition knowledge in the establishment of good eating habits.</td>
</tr>
<tr>
<td>HUN 3932 Selected Topics in Nutrition (3) US DEA</td>
<td></td>
<td>The content of this course will be determined by student demand and instructor interest. Repeatable up to 3 times with different topics.</td>
</tr>
</tbody>
</table>
| IDH 2009 Honors Discovery: People, Processes and Problems (3) HC HON       |         | PR: Admission to Honors College. An appreciation of the research process in multiple disciplines culminating in the
production of a collaboratively developed research proposal.

IDH 2010 Acquisition of Knowledge CAHU HHCP (3) HC HON
PR: Admission to Honors College. An appreciation of the problems of how human understanding proceeds through operations such as perception, classification, and inference, among others, as well as the open philosophical questions behind these operations.

IDH 2930 Selected Topics (0-4) HC HON
PR: IDH 2010 or CI. This course is designed to emphasize a selected problem or issue that is meaningful and challenging to University Honors students and special populations. A variety of instructional approaches will be used. Topics will vary each semester. Repeatable for a total of 8 credits.

IDH 3100 Arts/Humanities Honors (1-3) HC HON
PR: IDH 2010. An introduction to western arts and letters from the perspectives of three periods (classicism, romanticism, and modernism), the relationship of ideas to art, the similarities among the arts of a given period, and important differences between periods.

IDH 3350 Natural Sciences Honors CANP (3) HC HON
PR: IDH 2010. An exploration of current knowledge concerning fundamental principles in the Sciences, their potential for application and attendant ethical and philosophical questions. Honors College students only. Repeatable up to 6 hours.

IDH 3400 Social and Behavioral Sciences Honors (3) HC HON

IDH 3600 Seminar in Applied Ethics (3) HC HON
PR: IDH 2010. This course explores ethical issues related to selected topics such as Ethics of Technology, Ethics in Business, Bio-Medical Ethics, Personal Ethics Development.

IDH 4000 Honors Program Seminar: Major Works/Majors Issues (4) HC HON
PR: IDH 2010. This course explores major works and major issues in a variety of disciplines. Each section will be devoted to content in a different academic area.

IDH 4200 Geographical Perspectives Honors (3) HC HON
PR: IDH 2010. An introduction to African, Latin American, Middle Eastern, or Asian perspectives focusing on social, political and economic, artistic, cultural and intellectual subject matter. The material will be presented within a geographical, chronological, and humanities background.

IDH 4910 Undergraduate Research (0-4) HC HON
PR: DPR. A supervised program of interdisciplinary research in areas of specific interest. Open to all USF students by application through the undergraduate research coordinator.

IDH 4930 Selected Topics (1-4) HC HON
PR: IDH 2010 or CI. This course is designed to emphasize a selected problem or issue that is meaningful and challenging to University Honors students and special populations. A variety of instructional approaches will be used. Topics will vary each semester. Repeatable for a total of 8 credits.

IDH 4950 Honors Project (1-4) HC HON
A program of independent research or study in areas of specific interest working under the supervision of a faculty mentor. Restricted to Honors College students.

IDH 4970 Honors Thesis (3) HC HON
PR: Senior Honors Standing. The development and public presentation of a senior thesis under the direction of a mentor. Course is taken for 2 semesters.

IDH 5956 Honors Graduate Project (3) HC HON
PR: Senior Status and permission of Honors College. Advanced Honors Project. Repeatable up to 12 hours.

IDH 5975 Honors Thesis (3) HC HON
PR: Senior Status and permission of Honors College. Advanced Honors Thesis. Repeatable up to 12 hours.

IDS 1505 Introduction to Research in Beh. & Com. Sciences (1) BC FMH
Overview of research problems in behavioral & community sciences, research ethics, and the responsible conduct of research. Restricted to students with a major or minor in College of Behavioral & Community Sciences.

IDS 2664 Social Science Perspectives I SS (3) AS IAS
Provides an overview of the evolution and global expansion of Western Civilization. Examines global problems of economic growth and development; geopolitical relations among nations and states, food supply and hunger, and environmental change.

IDS 2665 Social Science Perspectives II SS (3) AS IAS
Approaches the study of human history through a series of specific case-studies that focus on historical processes. The primary focus of the course is to understand the variety of ways that the past has been brought into and understood in the present, rather than a comprehensive survey of a limited time or place.

IDS 2666 Historical Perspectives I HP (3) AS IAS
Approaches the study of human history through a series of specific exercises that focus on what historians do: produce histories. The primary focus of the course is to understand the variety of ways that the past can be emplotted in histories, rather than a comprehensive survey of a limited time or place. With this understanding, students will produce several of their own histories.

IDS 2931 Selected Topics (1-5) AS IAS
Selected topics in liberal arts and sciences. A basic introduction to the substance and theory of contemporary topics in humanities, social science or natural science.

IDS 2932 Selected Topics HP (3) AS IAS
Selected topics in the liberal arts and sciences.

IDS 2933 Selected Topics III SS (3) AS IAS
Selected topics in the Liberal Arts. A basic introduction to the substance and theory of contemporary topics in the arts and sciences.

IDS 2934 Selected Topics IV SS (3) AS IAS
Selected topics in the Liberal Arts. A basic introduction to the substance and theory of contemporary topics in the arts and sciences.
IDS 3115 Values and Choices 6A MW (3) ED EDF
An in-depth examination of values and their relationship to choices in contemporary society using historical perspective and inquiry of moral/ethical dilemmas. Available to majors or non-majors.

IDS 3186 Scientific and Ethical Dimensions of Human Disease MW (3) AS IAS
PR: DPR. An interdisciplinary perspective of the biological basis of human disease combined with critical thinking and medical ethics. Basic concepts of human disease are integrated with bioethical dimensions of patient choice, physician responsibility and current health care issues.

IDS 3662 Arts Connections FA (3) TA FAI
This is an interdisciplinary course to the arts disciplines of music, dance, theatre, and art. Artists from the four disciplines will provide weekly presentations centered around issues and ideas that have formed the basis of their creative research. Influences of diversity, new technologies and community and public arts will be explored. This course will introduce students to the role the arts play in shaping their perceptions of the world as well as reflecting the underlying values and paradigms that form our culture(s).

IDS 3663 Critical Issues Affecting the Arts 6A MW (3) TA FAI
PR: Junior standing or CI. A discussion-based examination of cultural trends, educational policies, governmental regulations, and financial factors which impact Art, Dance, Music, and Theatre.

IDS 3668 Images of Contemporary Urban Culture 6A LW (3) AS IAS
Offers multiple perspectives on the vision, theories, and practices of contemporary urban culture through the use of various literary genres. Examines the cultural realities of contemporary urban life, such as social stratification, discontinuity, anonymity and poverty; as well as its many potentials such as creative energy, diversity, and relational networks. Must have enough credit hours required for exit course admittance.

IDS 3949 Cooperative Education, Parallel (0-2) US COE
PR: 45+ semester hours completed, cumulative GPA 2.5+, have a declared major and be accepted in Cooperative Education Program. Part-time (10-25 hrs/wk) paid or for credit, career-related work experience. This course may be repeated up to 6 credit hours. Prerequisite: 45+ hours of credit, GPA2.5+, a declared major and be accepted in Cooperative Education Program.

IDS 4955 International Community Research (1-4) AS CEL
PR: CEL Program approval. Repeatable up to 8 credit hours. To provide students with an international community research experience.

IDS 4956 International Community Internship (1-4) AS CEL
PR: CEL Program approval. To provide students with an international community internship experience. Repeatable up to 8 credits.

IDS 5177 The Atelier, Its Management and History (3) TA ART
This class will consider the history of printmaking and other forms of collaborative art production through the prism of the atelier and its management.

IDS 5178 Problems in Museum Studies (3) TA ART
PR: Art Advisor's Approval This class is designed as both an academic and theoretical course to introduce students to the museum profession and develop critical thinking skills required to solve problems in the rapidly changing landscape of museums. Students will develop managerial and administrative skills as they meet with and discuss the job descriptions of curators, educators, collection managers, marketing professionals, exhibit designers, registrars, and fundraisers.

INP 2101 Applied Psychology SS (3) AS PSY
The application of psychological principles and the functions of psychologist in education, government, industry, and clinical practice.

INP 4004 Industrial Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Applications of psychological principles to industry. Topics include: selection, training, motivation, job satisfaction, supervision, decision-making.

INR 1015 World Perspective SS AF (3) AS INT
An interdisciplinary study of the international system, major world regions and problems.

INR 2002 Introduction to International Relations (3) AS POL
Concepts and analytical tools applied to events such as politics among nations, control of foreign policies, types of actors, war and peace.

INR 3003 Introduction to International Studies (3) AS INT
An interdisciplinary study which stresses methods and analysis. A major portion will focus on the roles which different disciplines play in interpreting the international scene.

INR 3011 Globalization (3) AS INT
Influence of globalization on political-economic and social systems around the world. International organizations involved with globalization processes are studied along with nations benefiting and suffering from the consequences of globalization.

INR 3018 World Ideologies MW (3) AS INT
A course which details and examines the ideologies of today's independent countries; analyzing them in their political, social, cultural and historical context.

INR 3033 International Political Cultures MW (3) AS INT
This course will explore ways in which culture influences the nature of government, economic success or failure, and constructive and destructive modes of self and social identification.
INR 3038 International Wealth and Power SS (3) AS INT
Introduction to the relationship between politics and economics, emphasizing the analysis of government policies in response to both domestic and international economic problems.

INR 3081 International Issues and Actors (3) AS INT
Departmental approval required. For majors and minors in INT only. An examination of the most important issues in international affairs. The course analyzes the behavior of major foreign policy actors in the international arena, including nation states, non-governmental and international organizations.

INR 3084 International Terrorism SS AF (3) AS INT
A study of contemporary international terrorism and its causes, ranging from national liberation movements to networks of philosophical anarchists.

INR 3102 American Foreign Policy (3) AS POL
Analysis of the development and scope of United States foreign policy, emphasizing goals and objectives, policy formulation and implementation, themes and issues.

INR 3141 Global Security Policy (3) AS INT
A study of security issues, regional and global (such as proliferation, arms control, arms transfer) as they relate to contemporary international politics.

INR 3202 International Human Rights MW (3) AS INT
This course explores the evolution of international rights from the Greeks to the present. It examines human rights issues in major regions of the world.

INR 3336 Intelligence and U.S. Foreign Policy (3) AS INT
An examination of the role of intelligence and the intelligence community in U.S. foreign policy, with emphasis on the period since World War II.

INR 3955 Overseas Study (1-6) AS INT
A program of individual or group research in a foreign country.

INR 4035 International Political Economy (3) AS POL
Analysis of the development and politics of the international economic system, focusing on questions of cooperation and conflict in trade, aid, and investment relationships.

INR 4083 Conflict In The World MW (3) AS INT
PR: Junior/Senior standing. An interdisciplinary course examining theories of conflict, conflict resolution processes and strategies, theories and peacemaking strategies, and the concept of Early Warning Systems related to the outburst of conflict.

INR 4254 Africa in World Affairs MW (3) AS INT
An examination of Africa’s place and role in world affairs, including an analysis of the impact of external forces, international relations in post-colonial Africa, the relations of African states with the major world powers, the U.N. and its agencies.

INR 4403 International Law SS (3) AS POL
Examines essential components of the international legal system; recognition; succession; sea, air and space law, treaties, diplomats, International Court of Justice; laws of war, etc. Introduces the student to legal reasoning as employed in the international context.

INR 4502 International Organizations SS AF (3) AS POL
Study of the operations and structure of international organizations and effects on world politics; background and achievement of the UN; regional organizations and multi-national corporations.

INR 4900 Directed Readings (1-3) AS INT
PR: CI. A supervised program of intensive reading of interdisciplinary materials in areas of specific interest.

INR 4910 Directed Research (1-3) AS INT
PR: CI. A supervised program of interdisciplinary research in areas of specific interest.

INR 4931 Selected Topics (1-4) AS INT
Interdisciplinary studies with course content dependent on student demand and instructor’s interest.

INR 4936 Senior Seminar MW (3) AS INT
PR: International Studies major and senior standing. A variable topics seminar integrating concepts and analyses relating to the academic background of INT majors. Should be taken in the student's final semester.

INR 4943 Internship in International Studies (3-6) AS INT
PR: Senior status. S/U only. For majors only. The purpose of the course is to promote the student’s understanding of global international issues within a local and practical context.

INR 5012 Globalization (3) AS INT
Examination of globalization's impact on international relations, including literature from political science, anthropology, geography, sociology, and economics that impacts the study of the nation-state system and power. Open to majors and non-majors.

INR 5086 Issues in International Relations (3) AS POL
Sr./GS. Explores specific topics and provides the student with an opportunity for in-depth study of historical and contemporary problems in international politics.

INT 3004 Fundamentals of Interpreting (3) BC CSD
PR: ASL 4201C. An overview of the profession of interpreting, its standards and settings is provided. It provides a basic practical experience component of interpreting and transliterating skills.

INT 3110 Language and Cognitive Processing Skills in English (4) BC CSD
PR: ASL 4201C; CR: INT 3111. Students develop the cognitive processing and language skills within English that are preliminary steps for interpretation. It will develop student's ability to segment information to perform various cognitive tasks intralingually. For Majors only.

INT 3111 Language and Cognitive Skills in ASL (4) BC CSD
PR: ASL 4201C; CR: INT 3110. Students acquire cognitive processing and language development within ASL that are preliminary steps for performing simultaneous interpretation. This course also includes a service component by volunteering in various deaf communities. For majors only.

INT 3112 Translation from English and from ASL (3) BC CSD
PR: INT 3110, INT 3111. A course of intralingual language exercises that introduces students to and provides practice in techniques of rephrasing and restructuring meaning in ASL and in English. For majors only.

INT 4190 Senior Seminar in Interpreter Training (3) BC CSD
PR: INT 4250. Students expand upon previously learned topics and discuss factors that will affect their profession. Topics include: professional organization, certification, ethics and discuss best practices and will produce a professional portfolio. For majors only.
INT 4250 Simultaneous Interpretation Monologic (4) BC CSD  
PR: INT 3004, INT 3112. Students simultaneously interpret monologic talk from ASL and from English with target language beginning before the conclusion of the source utterance and continuing as the student listens to the continuing source utterance. For majors only.

INT 4251 Simultaneous Interpretation Dialogic (4) BC CSD  
PR: INT 4250. Students interpret dialogues from ASL to English and from English to ASL with the target language production beginning before the conclusion of the source utterance and continuing as the student listens to the continuing source utterance. For majors only.

INT 4260 ASL to English Consecutive Interpretation (2) BC CSD  
PR: INT 3004, INT 3112; CR: INT 4261. Students consecutively interpret conversational discourse of planned and unplanned conversational language samples from ASL to English with delays of a few seconds after the source utterance is finished. For majors only.

INT 4261 English to ASL Consecutive Interpretation (2) BC CSD  
PR: INT 3004, INT 3112; CR: INT 4260. Students consecutively interpret conversational discourse from English to ASL with delays from conversational language samples of various lengths ranging from single utterances to discourse units of several minutes duration. For majors only.

INT 4944 Practicum: Interpreting in the Schools (1-8) BC CSD  
This course provides practice sessions in school settings under supervision of an experienced interpreter and course instructor. Each practicum student will shadow an interpreter, and participate in discussion about the overall performance.

ISC 1004 Integrated Natural Sciences I: Science that Matters NS (3) AS IDS  
Discussion of integrative concepts in biology, chemistry, geology, and physics based on major knowledge strands of the Florida and Natural Science Education Standards. This course deals with current topics relevant to students, is inquiry based, and emphasizes development of higher order (critical thinking) skills through active learning strategies.

ISC 1005 Integrated Natural Sciences II: Science that Matters NS (3) AS IDS  
Discussion of integrative concepts in biology, chemistry, geology, and physics based on major knowledge strands of the Florida and Natural Science Education Standards. This course deals with current topics relevant to students, is inquiry based, and emphasizes development of higher order (critical thinking) skills through active learning strategies.

ISM 3011 Information Systems in Organizations (3) BU QMB  
PR: CGS 2100 or equivalent. An introduction to the language, concepts, structures and processes involved in the management of information systems including fundamentals of computer-based technology and the use of business-based software for support of managerial decisions.

ISM 3113 Systems Analysis and Design (3) BU QMB  
PR: ISM 3011 with a grade of “C” or better (not C-). The course presents concepts, procedures, and tools needed to build computer-based information systems. The objective is to develop project management, data collection, analysis, design, testing and documentation skills.

ISM 3232 Business Application Development (3) BU QMB  
CP: ISM 3011 with a grade of “C” or better (not C-). Presentation of business application development using an object-oriented programming language. Good program design techniques are emphasized. Business applications are developed.

ISM 3431 Management Science Production/Operations Management Applications (3) BU QMB  
PR: MAC 2233 or MAC 2241. Fundamentals of production operations management (POM) and fundamentals of management science (MS). The application of MS models in the solution of POM problems.

ISM 4133 Advanced Systems Analysis and Design (3) BU QMB  
PR: ISM 4212 with a grade of “C” or better (not C-). This course builds previous class and/or work experience in systems development, with particular emphasis on the use of an integrated CASE tool on a team project. Students will gain an understanding of systems development problems and approaches using a variety of methods, such as, lectures, discussion, team presentations, guest speakers, demonstrations and computer use.

ISM 4141 Web Application Development/Java (3) BU QMB  
PR: ISM 3232 with a grade of “C” or better (not C-). Java will be used to introduce object oriented concepts. Programming assignments cover a variety of application features including graphical user interface, database connectivity, multithreading, & client-server computing using Java and Java Server Pages.

ISM 4212 Database Design and Administration (3) BU QMB  
PR: ISM 3113 with a grade of “C” or better (not C-). An introduction to the concepts and principles of database management. Provides potential designers, users and managers of database systems with an understanding of physical vs. logical representations, data modeling, implementation, and data management.

ISM 4213 Advanced Database Administration (3) BU QMB  
PR: ISM 3113, ISM 4212, with grades of “C” or better (not C-). Essential concepts of database administration in a business environment are covered in order to prepare students to understand and deal with database administration issues and concepts. Students gain hands-on experience by administering a database environment and completing assignments that involve resource management, data administration, security, backup, recovery and database tuning issues.

ISM 4220 Business Data Communications (3) BU QMB  
PR: ISM 3011 with a grade of “C” or better (not C-). Fundamentals of data communication, including network architectures, communication protocols, transmission standards, and internetworking. Basic concepts in distributed computing will also be covered.

ISM 4233 Information System Interface Design (3) BU QMB  
PR: ISM 3232 with a grade of “C” or better (not C-). An introduction to theories of human-computer interaction and the principles and practices of information system interface design, evaluation, and integration. Students
develop programs utilizing various user interface design techniques.

**ISM 4234 Object-Oriented Design and Development (3) BU QMB**
PR: ISM 3232 with a grade of “C” or better (not C-). This course presents an object-oriented approach to software development of business information systems. Students will learn to create object models of the business world and to develop information system designs based on these objects.

**ISM 4240 Distributed Operating Systems (3) BU QMB**
PR: ISM 3113 with a grade of "C" or better (not C-). Introduction to distributed operating systems fundamentals such as distributed systems architecture, file structures, client-server, open systems, resource allocation, and basic tools for manipulating these operating environments.

**ISM 4290 Senior Seminar in Information Systems (3) BU QMB**
PR: ISM 4212 with a grade of "C" or better (not C-). A seminar covering advanced topics in systems management, analysis and design. Applications of these procedures to actual or hypothetical cases.

**ISM 4300 Managing Information Resources (3) BU QMB**
PR: ISM 4212 and ISM 4220, with grades of "C" or better (not C-). Current issues in information systems management focusing on managing computer resources and social issues such as ethics, privacy, and legal issues including intellectual property.

**ISM 4382 Global Information Systems (3) BU QMB**
PR: ISM 3011 with a grade of "C" or better (not C-). Role of information technology in global business organizations and challenges in building information systems to enable global operations.

**ISM 4400 Decision Support Systems (3) BU QMB**
PR: QMB 3200, ISM 3011, with a grade of "C" or better (not C-). Study of quantitative analysis tools and their use in organizational decision making. Emphasis on a structured approach to making common business decisions, demonstrating several forms of mathematical modeling and other management science techniques.

**ISM 4480 Electronic Commerce Systems (3) BU QMB**
PR: ISM 3011 with a grade of "C" or better (not C-), MIS major or CC. Familiarize students with the opportunities and challenges associated with e-commerce and its business models, to explore the underlying technologies used in implementing e-commerce systems, and to develop the skills needed to manage effective Web sites.

**ISM 4905 Independent Study (1-6) BU QMB**
S/U only. Independent study as directed by designated faculty.

**ISM 4930 Selected Topics in MIS (1-3) BU QMB**
Selected topics in MIS.

**ISM 4950 Independent Research (1-6) BU QMB**
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor.

**ISS 1101 Knowledge and Society SS (3) AS ISS**
Course introduces students to issues concerning the relationship between knowledge and society. Among the issues addressed are competing accounts of knowledge and the relationship between knowledge and other forms of human experience and different aspects of social life such as religion, morality, aesthetics, politics, and gender.

**ISS 1102 Self and Society 6A SS CASB (3) AS ISS**
This course considers the history of the intellectual and social underpinnings of individualism. Why do we consider ourselves “selves,” independent of social forces which we so readily recognize in others?

**ISS 1103 Nature and Culture SS (3) AS ISS**
This course examines competing ideas and theories concerning the relationship between nature and culture. Among the issues and questions examined are the relationship between nature and our awareness of it; to what extent is nature transmendable; should “nature” dictate the shape of social institutions; how does technology affect our society and environment.

**ISS 3010 Introduction to the Social Sciences (3) AS ISS**
Integrates the range of social science fields into a global interdisciplinary perspective. Views social institutions and issues from perspectives of changing paradigms.

**ISS 3930 Selected Topics in the Social Sciences (1-4) AS ISS**
Interdisciplinary studies of varying topics, with course content dependent on student demand and instructor’s interest.

**ISS 4151 Native American Women (3) AS ISS**
An interdisciplinary examination of lives of Native American Women, past and present. Topics include history, education, politics, family, etc.

**ISS 4900 Directed Readings (1-3) AS ISS**
PR: CI. A supervised program of intensive reading of interdisciplinary materials in areas of specific interest.

**ISS 4910 Directed Research (1-3) AS ISS**
PR: CI. A supervised program of interdisciplinary research in areas of specific interest.

**ISS 4935 Seminar in the Social Sciences MW (3) AS ISS**
PR: Senior standing and ISS 3010 or CI. The seminar which caps the interdisciplinary major. Weds personal curiosity with the application of theoretical models to research on salient social issues.

**ISS 4940 Internship in Interdisciplinary Social Sciences (1-4) AP ISS**
PR: ISS Majors only. Individual guidance in a selected internship. Restricted to majors. Nonrepeatable.

**ISS 5934 Selected Topics (1-3) AS AFA**
PR: CI plus senior standing or graduate status. Interdisciplinary studies with course content dependent on student demand and instructor’s interest.

**ITA 1120 Beginning Italian I (4) AS WLE**
CR: ITA 1120L. The first course in the study of elementary Italian. Emphasis is on the development of basic skills in comprehension, speaking, and reading.

**ITA 1120L Beginning Italian Laboratory (1) AS WLE**
CR: ITA 1120. A laboratory designed to offer additional practice using various instructional technologies and media.

**ITA 1121 Beginning Italian II (4) AS WLE**
CR: ITA 1121L. The second course in the study of elementary Italian. Emphasis is on the development of basic skills in comprehension, speaking, and reading.

**ITA 1121L Beginning Italian II Laboratory (1) AS WLE**
CR: ITA 1121. S/U only. Concurrent enrollment with a
lecture session is required, and, if dropped, then dropped simultaneously. A laboratory designed to offer additional practice using various instructional technologies and media.

ITW 4905 Directed Study (1-3) AS WLE
PR: ITW 2200 or Cl. Selected topics in Italian literature. Departmental approval required. Selected topics in Italian literature.

ITW 4240 Italian Conversation I (3) AS WLE
PR: ITW 2240 or CI. This advanced-level Italian course belongs to the third level of modules leading to proficiency. It aims at consolidating student’s knowledge of Italian grammar and vocabulary with the ultimate goal of fostering accuracy in Italian conversation.

ITW 4241 Italian Conversation II (3) AS WLE
PR: ITW 2241 or CI. This advanced-level Italian course belongs to the third level of modules leading to proficiency. It aims at consolidating student’s knowledge of Italian grammar and vocabulary with the ultimate goal of fostering accuracy in Italian conversation.

ITW 4320 Composition (3) AS WLE
A fundamental composition course for students who have completed ITA 2200.

ITW 4370 Overseas Study (1-6) AS WLE
Prior approval and early registration required. An intensive study-travel project in Italy.

ITT 3504 Italian Culture Through Film HP MW (3) AS WLE
An overview of Italian culture from the Unification to the present. It aims at tracing the ways in which the concept of Italian culture has been defined according to different social, historical, and political perspectives. Taught in English

ITW 4100 Survey of Italian Literature I (3) AS WLE
The course aims at providing an introduction to the study of Italian Medieval and Renaissance literature and civilization. The course may be taught as a survey course or it may focus on any author, period, genre, or cultural theme.

ITW 4101 Survey of Italian Literature II (3) AS WLE
The course aims at providing an introduction to the study of Italian Modern and Contemporary literature and civilization. The course may be taught as a survey course or it may focus on any author, period, genre, or cultural theme.

ITW 4905 Directed Study (1-3) AS WLE
Departmental approval required. Selected topics in Italian literature.

JOU 2100 Beginning Reporting (3) AS COM
PR: MMC 2100 and MMC 3602. Basic instruction in news judgment, sources of news, news gathering, and news writing techniques for various media. Typing ability is required.

JOU 3101 Advanced Reporting (3) AS COM
PR: JOU 2100 or RTV 3301 (RTV majors only), JOU 4201 (may be taken concurrently), PHI 1103 and POS 2041. Reporting and writing the more complex and specialized story. Techniques of investigative and analytical reporting, including ethical and legal considerations.

JOU 3306 Critical Writing: Editorials, Reviews, Columns (3) AS COM
PR: JOU 3101 and JOU 4201. Interpretive and opinion writing for the mass media. Analysis and discussion of current events as a basis for critical thinking and editorial writing. Evaluation of editorial pages of leading newspapers. Study of journalistic techniques involved in writing reviews and personal columns.

JOU 3308 Magazine Article and Feature Writing (3) AS COM
PR: CRW 2100 and JOU 2100. Planning, researching, writing, and marketing articles for general and special interest magazines and newspaper supplements. Experiences in developing article ideas and analysis of magazine articles.

JOU 3940 Reporting Practicum (1) AS COM
PR: JOU 3101 and Cl. For journalism sequence majors. S/U only. Practical experience outside the classroom where the student works for academic credit under the supervision of a professional practitioner. Periodic written and oral reports to the faculty member coordinating the study.

JOU 4181 Public Affairs Reporting (3) AS COM
PR: JOU 3101 or RTV 3301 (RTV majors only), POS 2041 and POS 2112 or POS 3142. Covering city council meetings, courthouse, city hall, courts, society, and other special assignments. Emphasis is on coverage of major governmental units of all levels of government, including examination and interpretation of public documents and records.

JOU 4188 Neighborhood News Bureau (3) AP COM
PR: JOU 2100, MMC 2100, MMC 3602 This course provides students with experience and news clips. Classes are conducted as editorial meetings and students report and write about minority and multi-ethnic communities. The course is restricted to majors and is not repeatable for credit.

JOU 4201 News Editing I (3) AS COM

JOU 4206 Newspaper and News Publication Design (3) AS COM
PR: JOU 4201 or Cl. Theoretical and practical applications of newspaper and news publication design, including typography, graphics, graphics software and electronic picture editing. Exercises in design for newspapers and news publications in both print and electronic formats.

JOU 4212 Magazine Design and Production (3) AS COM
PR: JOU 4201. Theoretical and practical application of design principles for magazines. Design software. Study of visual design, page architecture, typography, color and illustrations. Integration of design elements in the design of magazine covers. Design elements specific to magazine and production preparation.

JOU 4938 Senior Capstone Seminar (2) AP COM
PR: Senior standing as a department major. Students complete a final professional project, a portfolio, and exit
examination. Senior Seminar is the result of the department’s development of a plan to set and measure learning outcomes. It is restricted to majors and not repeatable for credit.

**JOU 4941 Editing Practicum** (1) AS COM  
**PR:** Senior standing, JOU 4201 and CI. For journalism sequence majors. S/U only. Practical experience outside the classroom where the student works for academic credit under the supervision of a professional practitioner. Periodic written and oral reports to the faculty member coordinating the study.

**JOU 4944 Magazine Practicum** (1) AS COM  
**PR:** Senior standing and CI. For journalism sequence majors. S/U only. Practical experience outside the classroom where the student works for academic credit under the supervision of a professional practitioner. Periodic written and oral reports to the faculty member coordinating the study.

**JOU 5015 Newswriting and Editing** (3) AS COM  
**PR:** GS in Mass Communications or CI. Introduction to the basics of gathering, writing, and editing the news, with an emphasis on practical assignments done under professional conditions and standards. Discussions, readings emphasize the larger context and implications of news.

**JOU 5305 Explorations in Newswriting** (3) AS COM  
**PR:** CC. Students work to develop writing styles, reporting on and creating stories about significant issues, events, and ideas. The course explores the notion that narrative-style journalism can be accurate, thorough, fair, and compelling, effectively bringing readers into stories and giving them a bigger stake in the news. The focus is ongoing beyond traditional practices of reporting and writing news stories.

**JOU 5344 Multimedia Journalism** (3) AS COM  
**PR:** An appropriate undergraduate degree in mass communications or significant professional experience in journalistic writing styles. The course is designed to bring components of print, web and broadcast writing together to develop skills for and understanding of the multimedia environment. It is restricted to majors and not repeatable for credit.

**JPN 1120 Modern Japanese I** (4) AS WLE  
**CR:** JPN 1120L. An intensive study of basic skills: pronunciation, listening comprehension, speaking, and some composition.

**JPN 1120L Modern Japanese I Laboratory** (1) AS WLE  
**CR:** JPN 1120. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

**JPN 1121 Modern Japanese II** (4) AS WLE  
**PR:** JPN 1120 or equivalent. CR: JPN 1121L. A continuation of JPN 1120. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

**JPN 1121L Modern Japanese II Laboratory** (1) AS WLE  
**CR:** JPN 1121. S/U only. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. A laboratory designed to offer additional practice using various instructional technologies and media.

**JPN 2220 Modern Japanese III** (4) AS WLE  
**PR:** JPN 1121 or equivalent. Continuing study to attain basic proficiency in Japanese.

**JPN 2221 Modern Japanese IV** (4) AS WLE  
**PR:** JPN 2220 or equivalent. Continuation of JPN 2220.

**JPN 4905 Directed Study** (1-5) AS WLE  
**CR:** JPN 1120 or equivalent. Departmental approval required. S/U only. Permits study options in Japanese not available in regularly scheduled curriculum at departmental discretion.

**JPN 4930 Selected Topics** (1-5) AS WLE  
**CR:** JPN 1120 or equivalent. Departmental approval required. Course permits study options in Japanese not available in the regularly scheduled curriculum at departmental discretion.

**JOU 4314 Teaching Writing in the Elementary School, Grades K-6** (3) ED EDE  
**PR:** Elementary Education majors or CI. Recommended to be taken with LAE 4464. Whole language methods of integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature-based program for middle school students.

**JOU 4332 Traditional English Grammar for Teachers** (3) ED EDE  
**PR:** English Education Majors only or CI. Prepares teachers to teach secondary English with an interactive approach to grammar instruction in which students learn, not only the basic elements of English grammar, but also pertinent and engaging classroom activities for teaching grammar.

**JOU 4335 Methods of Teaching English: High School** (3) ED EDE  
**PR:** LAE 4464. Must be taken one semester prior to internship concurrently with LAE 4530. Whole language methods of integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature-based program for high school students.

**JOU 4414 Teaching Literature in the Elementary School, Grades K-6** 6A LW WRIN (3) ED EDE  
This course involves the selection, evaluation, and use of fiction, nonfiction, and poetry for instructional, informational, and recreational purposes in childhood education.

**JOU 4416 Teaching Literature and Writing in the Elementary Grades 6A LW (3) ED EDE  
**PR:** Elementary Education major. This course is designed to provide students with the skills necessary to implement a coordinated literature program and an integrated writing curriculum. Not repeatable for credit.

**JOU 4464 Adolescent Literature for Middle and Secondary Students 6A LW (3) ED EDE  
**PR:** English Education majors or CI. Recommended to be taken with LAE 4323 two semesters prior to internship. A study of the types of literature read by adolescents with an emphasis upon the criteria for the choice of good books and knowledge of available books and teaching materials.
LAE 4469 Teaching World Literature to Middle and Secondary Students MW (3) ED EDT
World literature encompasses more than Western European literature. This course is designed to emphasize, but is not limited to, the study of Eastern literature. This course fulfills the world literature course requirement for teacher certification in English.

LAE 4530 Methods of Teaching English: Practicum (3) ED EDT
PR: Senior standing or enrollment in Plan II Master’s Program. CR: LAE 4323 or LAE 4335. Taken one semester, spring or fall, prior to internship.

LAE 4936 Senior Seminar in English Education CPST (3) ED EDT
PR: Senior standing. Required concurrently with internship. Synthesis of teacher candidate’s courses in complete college program.

LAE 4940 Internship: English Education (1-12) ED EDT
S/U only. One full semester of internship in a public or private school. Intern takes Senior Seminar in English Education concurrently. In special programs where the intern experience is distributed over two or more semesters, student will be registered for credit which accumulates from 9 to 12 semester hours.

LAE 5462 Young Adult and World Literature for New Teachers (3) ED EDI
PR: Teaching position wether English degree or 30 hrs of Undergraduate English A study of the types of literature read by adolescents, including literature representative of other cultures, with emphasis upon the criteria for the choice of good books and knowledge of available books and teaching materials.

LAE 5862 Classroom Communication in English Education (3) ED EDI
Identifies characteristics of classroom communication environment; offers insights, info, instructional strategies designed to help you become effective classroom communication managers. Emphasis on role of media & non-print texts in students’ lives.

LAE 5932 Selected Topics in the Teaching of English (3) ED EDT
PR: Certification in English and/or Mass Communications and approval of graduate advisor. Investigation of topics which are of special interest to the student and are related to the teaching of English in the secondary school. Topics will be selected by the student in accordance with his particular goals and will be approved by the student’s graduate advisor.

LAH 2020 Latin American Civilization HP AF CAGC HHCP (3) AS HTY
This course introduces the principle historical events, trends, conflicts and outcomes that have shaped the Spanish and Portuguese Americas from the Pre-Columbian period (prior to 1492) to the present.

LAH 2733 Latin American History in Film HP AF (3) AS HTY
Through the use of films and readings, the course introduces the broad sweep of Latin American history from the pre-Columbian period to today. Emphasis is placed on the social-cultural context to understand the peoples and events that have shaped Latin America.

LAH 3130 Colonial Latin America (4) AS HTY
A study of the Spanish and Portuguese Colonial empires in the New World from 1492-1830.

LAH 3200 Modern Latin America (4) AS HTY
A study of the emergence of the Latin American states. The course will examine developments in Latin America during the nineteenth and twentieth centuries. Special attention is given to the Third World character of the region.

LAH 3430 History of Mexico (4) AS HTY
Mexican history from pre-Columbian cultures to the twentieth century. Emphasis falls on the colonial political economy, social development, the wars of independence, development of the 19th century Mexican state and the Mexican revolution.

LAH 3470 History of the Caribbean (4) AS HTY
A thematic study of the circum-Caribbean from pre-Columbian cultures to the twentieth century, emphasizing the development of the Caribbean political economy with emphasis on monoculture, plantation society, and colonial/neo-colonial relationships.

LAH 3480 History of Cuba (4) AS HTY
Cuban history from pre-Columbian cultures to the Cuban Revolution. Emphasis on colonization, the sugar economy, the struggles for independence, the political economy of the Republic, and the 20th century revolutionary process.

LAS 3002 Latin America (3) AS INT
Area study courses are multi-disciplinary in nature and deal with one or more countries of a region. Each course combines some measure of political, economic, historical, religious, geographic, anthropological, and sociological analysis in dealing with salient features and current problems.

LAS 3004 The Americas - Latin and Caribbean (3) AS INT
This is a telecourse that is designed to introduce the complexities of Latin America and the Caribbean to students in the U.S. (Open University - televised course.)

LAS 3116 Latin America Through Film AF (3) AS INT
This course will use film, video, selected readings, and lectures to teach the interested student about Latin America.

LAS 4023 African Diaspora in Latin American and the Caribbean CAGC HHCP (3) AS AFA
The class examines the development and history of the African Diaspora in Latin America and the Caribbean from colonization through the modern era. While primarily a history course, anthropological and sociological perspectives are also incorporated.

LAS 4934 Selected Topics: Latin American Studies (3-9) AS INT
Latin America region will be analyzed through different specific topics to provide students analytical tools to understand hemispheric relations and the relevance of this complex region for the USA. Open to non-majors, repeatable up to 09 credits.

LAS 4940 Internship in Latin American and the Caribbean (1-9) AS INT
PR: CI. Designed to complement other instruction focused on Latin America and the Caribbean. Open to all majors and is repeatable up to 9 hours.

LAT 1120 Beginning Latin I (4) AS WLE
An introductory course in Latin grammar with appropriate readings.
LING 

LING 4600 Language and Society (3) AS WLE  
PR: LIN 3010  
Introduction to the basic techniques of phonological and grammatical analysis and description; the application of leadership theories into practice. It provides a practical forum for students to examine and develop personal leadership skills.

LING 4610 Theories of Leadership HP (3) US STL  
PR: LDR 2010, PR: LDR 4114. Focuses on historical and modern views of leadership. It is designed to assist students analyzing and understanding the historical, social, political, economic, educational, and racial groups. Problems in communication between strata.

LING 4671 Traditional English Grammar (3) AS ENG  
A course primarily using the sentence diagram to present a detailed analysis of the parts of speech, verb tenses, sentence functions, and other basic grammatical classifications of traditional English grammar.

LING 4680 Structure of American English (3) AS ENG  
An introductory survey of traditional, structural, and generative transformational grammars and their techniques for the analysis and description of linguistic structure in general, and contemporary American English, in particular.
LIN 4903 Directed Reading (1-3) AS WLE
PR: Cl. Readings in special topics.
LIN 4930 Selected Topics (1-3) AS WLE
PR: Cl. Course content depends upon students’ needs and instructor’s interest and may range over the entire field of linguistics.
LIN 5700 Applied Linguistics (3) AS WLE
Analysis of the phonological, morphonological, and syntactic features of English as a basis for linguistic application to problems of English language acquisition by non-native speakers.
LIS 2005 Library and Internet Research Skills CASB (3) AS LIS
This course covers the development of undergraduate research and critical thinking skills to identify, evaluate, and use appropriate information sources to address educational, research, and other information needs.
LIS 2937 Selected Topics in Library/Information Science (1-3) AS LIS
Covers a variety of topics in the field of library/information science such as emerging technologies, administration and service, and current professional issues.
LIS 3361 World Wide Web Page Design and Management (3) AS LIS
LIS 4930 Selected Topics in Information Studies (3) AS LIS
Covers a variety of topics in the field of library/information science such as emerging technologies, administration and service, and current professional issues.
LIS 5020 Foundations of Library and Information Science (3) AS LIS
Introduction to the study of library and information science, history; organization; specialized literature; outstanding leaders; current trends, issues, and problems; the place of the information agency in society with its contributions to that society.
LIS 5268 Microcomputer Applications Library and Information Centers (3) AS LIS
Microcomputer hardware and software for libraries and their application in library/information settings. Projects using major applications for budgets, databases, and telecommunications are undertaken.
LIS 5315 Instructional Graphics (3) AS LIS
Theoretical aspects, planning and production of instructional graphic material. The theory of graphic communications. Interpreting needs for instructional materials appropriate for given behavioral objectives.
LIS 5333 TV in Schools and Libraries (3) AS LIS
Small format video tape recordings and the utilization of open and closed broadcasts in schools and libraries.
LIS 5418 Health Informatics for Medical Librarians (3) AS LIS
PR: LIS 5020 or LIS 6620. CR: LIS 6475. Introduction to the interdisciplinary field of medical informatics highlighting the underlying theories, and methods related to health information technology in support of decision-making, problem-solving, and other health information problems.
LIS 5566 Multicultural Literature for Children and Young Adults (3) AS LIS
Students will select and evaluate multicultural and special population materials for effective use in youth services and programs in public and school libraries.
LIS 5937 Selected Topics in Library Studies (1-4) AS LIS
Covers a variety of topics in such areas as collection development, reference services, technical services, and administration.
LIT 2000 Introduction to Literature 6A HP CAHU (3) AS ENG
This course will introduce students to the three major literary forms of prose, poetry and drama as well as to various “schools” of literary criticism. Will not count toward the English major.
LIT 2010 Introduction to Fiction 6A HP CAHU (3) AS ENG
A study of the short story and novel as literary forms; approached from an historical perspective though not restricted to any historical period. Will not count toward the English major.
LIT 2020 Introduction to the Short Story 6A CAHU HHCP (3) ASENG
Introduction to the formal elements of the short story, analysis and interpretation, application of major types of literary criticism, the history of the genre and its interaction with its social context. Will not count toward the English major.
LIT 2030 Introduction to Poetry 6A HP CAHU (3) AS ENG
A study of the poem as literary form; approached from an historical perspective though not restricted to any historical period. Will not count toward the English major.
LIT 2040 Introduction to Drama 6A HP CAHU (3) AS ENG
This course will introduce students to the literary form of drama as well as to the various “schools” of literary criticism. Will not count toward the English major.
LIT 3022 Modern Short Prose HP (3) AS ENG
PR: ENC 1101 and ENC 1102. This course for English majors and minors explores modern short prose in World, British, and American literatures; genres include the short story, the long short story, the short novel, and the essay. Not repeatable.
LIT 3031 Survey of Poetry (3) AS ENG
A chronological sampling of the major poems written in English from the Middle Ages to the present. Recommended as the first literature course in the CRW (Poetry emphasis) Option.
LIT 3043 Modern Drama (3) AS ENG
A study of such modern and contemporary dramatists as Ibsen, Strindberg, Chekhov, Pirandello, Shaw, O’Neill, Pinter, Stoppard, Brecht, Beckett, and Ionesco.
LIT 3093 Contemporary Literature (3) AS ENG
An introduction to the fiction, poetry, and drama written since 1945—American, British, Continental, or Multicultural. Focus may be on one, two, or all three genres or on works from any combination of nationalities.
LIT 3101 Literature of the Western World Through the Renaissance (3) AS ENG
A study in English of the great works of Western Literature from its beginnings through the Renaissance, including the Bible, Homer, Sophocles, Plato, Euripides, Virgil, Cicero, Dante, Petrarch, Machiavelli, and Rabelais, among others.

LIT 3102 Literature of the Western World Since the Renaissance (3) AS ENG
A study in English of the great works of Western Literature from the Neoclassic to the Modern Period, including such writers as Moliere, Racine, Voltaire, Dostoevsky, Chekhov, Ibsen, Kafka, Gide, Sartre, and Camus, among others.

LIT 3103 Great Literature of the World 6A MW LW WRIN (3) AS ENG
A survey of world literature including samples from the ancient and modern era, Western and Eastern traditions, male and female writers, and various ethnic cultures. Focus on values/ethics, race, ethnicity and gender; thinking and writing skills. Will not count toward the English major.

LIT 3144 Modern European Novel 6A HP (3) AS ENG
A study of the Modern European novel in translation as it developed from the nineteenth century to the present, including such writers as Dostoevsky, Flaubert, Kafka, Hesse, Camus, and Solzhenitsyn.

LIT 3155 Twentieth-Century Literature 6A HP MW LW WRIN (3) AS ENG
Examines major literary works of the 20th Century written in English and explores ways authors have expressed the age, its great issues and conflicts, in order to gain an historical perspective that will help relate the present to the recent past. Will not count toward the English major.

LIT 3301 Cultural Studies and the Popular Arts 6A MW LW WRIN (3) AS ENG
A study of American and international cultures as they are represented in the film, fiction, and other cultural artifacts of various ethnic groups and nationalities. Focuses on values/ethics, race, ethnicity and gender; thinking and writing skills. Will not count toward the English major.

LIT 3374 The Bible As Literature 6A MW LW WRIN (3) AS ENG
Major emphasis on literary types, literary personalities of the Old (Fall semester) and New (Spring semester) Testaments, and Biblical archetypes of British and American literary classics. Focuses on values/ethics, race, ethnicity and gender; thinking and writing skills. May be taken twice for credit with different subject matter. May count once toward the major.

LIT 3383 The Image of Women in Literature 6A MW LW WRIN (3) AS ENG
This course seeks to trace the origins of contemporary views about women, to analyze major Eastern and Western literary portrayals of women, to examine ideas about women's roles, and to compare and contrast cultural and racial images of women. Will not count toward the English major.

LIT 3410 Religious and Philosophical Themes (3) AS ENG
Theological and philosophical ideas, allusions, and symbols in the writings of Dostoevsky, Nietzsche, Mann, Joyce, Eliot, Camus, Sartre, among others.

LIT 3451 Literature and the Occult 6A MW LW WRIN (3) AS ENG
An introduction to the occult tradition as a major ingredient in English, Continental, American, and Multicultural literature. Focuses on values/ethics, race/ethnicity and gender; thinking and writing skills. Will not count toward the English major.

LIT 3930 Special Topics in English Studies (3) AS ENG
The study of variable specialized areas of literary interest, suitable for junior and senior English majors. Topics will vary according to student interest and instructor expertise. May be taken twice for credit with different topics.

LIT 4386 British and American Literature by Women 6A (3) AS ENG
Survey of women's literary tradition in England and America from the seventeenth century to the present. Thematic focus includes self, marriage, sexuality, madness, race and generations. Writing intensive.

LIT 4804 Literature as Cultural Study MW (3) AS ENG
The study of literary texts as cultural artifacts. Literary texts as historical, social, political, psychological, philosophical, religious, etc. documents. Topics and works vary. Will not count toward the English major.

LIT 4930 Selected Topics in English Studies (1-4) AS ENG
The content of the course will be governed by student demand and instructor interest. It will examine in depth a recurring literary theme or the work of a small group of writers. Special courses in writing may also be offered under this title. May be taken twice for credit with different topics.

LNW 4381 Livy (4) AS WLE
PR: Basic knowledge of Latin. Readings in the ideas and artistry of this Roman historian.

LNW 4500 Cicero and Roman Philosophy (4) AS WLE
PR: Basic knowledge of Latin. Readings in the philosophic writings of Cicero, together with a consideration of eclectic thought.

LNW 4501 Seneca and Roman Philosophy (4) AS WLE
PR: Basic knowledge of Latin. Readings in the philosophic writings of Lucius Annaeus Seneca, together with an examination of Stoic, Epicurean, and Eclectic thought.

LNW 4634 Catullus (4) AS WLE
PR: Basic knowledge of Latin. Readings in Catullus. Study of techniques and tradition in Roman lyric poetry.

LNW 4644 Cicero (4) AS WLE
PR: Basic knowledge of Latin. Readings in the epistles of Cicero.

LNW 4654 Horace (4) AS WLE
PR: Basic knowledge of Latin. Readings in the Odes and Epodes of Horace; study of the Ode's tradition.

LNW 4660 Vergil (4) AS WLE
PR: LAT 1121 or equivalent. Readings in Virgil's Aeneid. Study of the tradition, techniques, and artistry of Roman epic poetry. Available to majors and non-majors.

LNW 4670 Ovid (4) AS WLE
PR: LAT 1121 or equivalent. Readings in Ovid's Metamorphoses. Study of Ovid's technique, style, and artistry.

LNW 4900 Directed Reading (1-4) AS WLE
Departmental approval required.

LNW 4930 Selected Topics (4) AS WLE
Study of an author, movement, or theme.

LNW 5900 Directed Reading (1-4) AS WLE
Departmental approval required. S/U.
LNW 5934 Selected Topics (4) AS WLE
Study of an author, movement, or theme.

MAA 4211 Intermediate Analysis I 6A (4) AS MTH
PR: MAC 2313 and MAS 3105. Sequences, series, metric spaces, continuity, differentiation.

MAA 4212 Intermediate Analysis II 6A (3) AS MTH
PR: MAA 4211. Riemann-Stieltjes integration, uniform convergence, and related topics.

MAA 4402 Complex Variables 6A (3) AS MTH
PR: MAP 2302 or CI. No credit for students with credit in MAA 5405. Complex numbers, Cauchy-Riemann equations, analytic and conformal functions, power series, Cauchy Theorem, Cauchy Integral Formula, residue theory.

MAA 5306 Real Analysis I (3) AS MTH
PR: MAA 4211. Riemann-Stieltjes integrals, uniform convergence, Fourier series, Lebesgue measure and integration on R.

MAA 5307 Real Analysis II (3) AS MTH

MAA 5405 Applied Complex Analysis (3) AS MTH
PR: CI. Complex numbers, analytic and harmonic functions. Series. Contour integrals, residue theory. Conformal mappings. (A survey course emphasizing techniques and applications.)

MAC 1105 College Algebra 6A QM CAMA (3) AS MTH
PR: C (2.0) or better in MAT 1033, or 490 or better SAT Math score, or 21 or better ACT Math score, or 90 or better Elementary Algebra CPT score, or 40 or better College-Level Math CPT score. No credit for students with prior credit in MAC 1140 or MAC 1147. Concepts of the real number system, functions, graphs, and complex numbers. Analytic skills for solving linear, quadratic, polynomial, exponential, and logarithmic equations. Mathematical modeling of real life applications. College Algebra may be taken either for General Education credit or as preparation for a pre-calculus course.

MAC 1114 Precalculus Trigonometry 6A (2) AS MTH
PR: C (2.0) or better in MAC 1105, or 550 or better SAT Math Score, or 24 or better ACT Math Score. CP: MAC 1140. Angles, trigonometric functions, properties and graphs of trigonometric functions, right triangles, laws of sines and cosines, polar coordinates.

MAC 1140 Precalculus Algebra 6A QM (3) AS MTH
PR: C (2.0) or better in MAC 1105, or 550 or better SAT Math Score, or 24 or better ACT Math Score. CP: MAC 1144. Review of functions and graphs. Analytic geometry including conic sections and rotation of axes, systems of equations including matrix algebra and determinants, sequences and series including Binomial Theorem.

MAC 1147 Precalculus Algebra and Trigonometry 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 1105, or 550 or better SAT Math score, or 24 or better ACT Math score, or 60 or better College-Level Math CPT score. No credit for students with credit for either MAC 1140 or MAC 1144. This is an accelerated combination of MAC 1140 and MAC 1114; this course is best for students who have already seen some trigonometry. See the descriptions of MAC 1140 and MAC 1114.

MAC 2233 Business Calculus 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 1105, or C (2.0) or better in MAC 1140, or C (2.0) or better in MAC 1147, or 590 or better SAT Math score, or 26 or better ACT Math score, or 78 or better College-Level Math CPT score. No credit for mathematics majors or students with credit for either MAC 2241, MAC 2281, or MAC 2311. Linear equations and functions, mathematics of finance, differentiation and integration of algebraic, exponential and logarithmic functions with applications to business, finance and economics.

MAC 2241 Life Sciences Calculus I 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 1114, or C (2.0) or better in MAC 1147, or 650 or better SAT Math score, or 29 or better ACT Math score, or 90 or better College-Level Math CPT score, and knowledge of trigonometry. No credit for math majors or students with credit in MAC 2233, MAC 2281, or MAC 2311. Differentiation and integration of algebraic, trigonometric, exponential, and logarithmic functions with applications to life sciences.

MAC 2242 Life Sciences Calculus II 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 2241. No credit for Mathematics majors or students with credit in MAC 2282 or MAC 2312. Techniques of integration, differential equations, functions of several variables, series and Taylor polynomials.

MAC 2281 Engineering Calculus I 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 1114 and C (2.0) or better in MAC 1140, or C (2.0) or better in MAC 1147, or 650 or better SAT Math score, or 29 or better ACT Math score, or 90 or better College-Level Math CPT score, and knowledge of trigonometry. No credit for mathematics majors or for students with credit in MAC 2233, MAC2241, or MAC 2311. Differentiation, limits, differentials, extremes, indefinite integral. No credit for mathematics majors or for students with credit in MAC 2233 or MAC 2243 or MAC 2311.

MAC 2282 Engineering Calculus II 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 2281. No credit for students with credit in MAC 2242 or MAC 2312. Define integral, trigonometric functions, log, exponential, series, applications.

MAC 2283 Engineering Calculus III 6A (4) AS MTH
PR: C (2.0) or better in MAC 2282 or CC. No credit for students with credit in MAC 2313. Techniques of integration, numerical methods, analytic geometry, polar coordinates, Vector algebra, applications.

MAC 2311 Calculus I 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 1114 and C (2.0) or better in MAC 1140, or C (2.0) or better in MAC 1147, or 650 or better SAT Math score, or 29 or better ACT Math score, or 90 or better College-Level Math CPT score, and knowledge of trigonometry. No credit for students with credit in MAC 2233, MAC 2241, or MAC 2281. Differentiation, limits, differentials, extremes, indefinite integral. No credit for students with credit in MAC 2233 or MAC 2243 or MAC 2311.

MAC 2312 Calculus II 6A QM CAMA (4) AS MTH
PR: C (2.0) or better in MAC 2311 or CC. No credit for students with credit in MAC 2242 or MAC 2282. Antiderivatives, the definite integral, applications, series, log, exponential and trig functions.

MAC 2313 Calculus III 6A (4) AS MTH
PR: C (2.0) or better in MAC 2312 or CC. No credit for students with credit in MAC 2283. Integration, polar coordinates, conic sections, vectors, indeterminate forms and proper integrals.
induction to teaching mathematics in the high schools of today. The experiences help bridge the perceived gap between theory and practice.

MAE 4551 Reading the Language of Mathematics (3) ED EDO
PR: MAE 4330 and MAE 4653 or CI. This course provides an opportunity to develop concepts, skills and procedures for effective communication (reading, writing, listening and speaking) in the mathematics curriculum. The State DOE required preparation in basic reading is covered.

MAE 4652 Technology for Teaching Secondary School Mathematics I (3) ED EDO
PR: Admission to Mathematics Education Program or CI. This course provides prospective teachers an opportunity to develop concepts, skills, and instructional procedures for integrating technology for teaching Geometry and Probability into secondary mathematics classrooms.

MAE 4653 Technology for Teaching Secondary School Mathematics II (3) ED EDO
PR: MAE 4652 or CI. This course provides prospective mathematics teachers with an opportunity to develop concepts, skills and procedures for effectively integrating technology into teaching algebra and data analysis into the secondary mathematics curriculum.

MAE 4909 Directed Study: Mathematics Education (1-3) ED EDO
PR: Senior Standing and CI. To extend competency in teaching field.

MAE 4936 Senior Seminar in Mathematics Education CPST (3) ED EDO
PR: Senior Standing; CR: MAE 4940. Synthesis of teacher candidate’s courses in complete college program.

MAE 4940 Internship: Mathematics Education (1-12) ED EDO
CR: MAE 4936. S/U only. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours.

MAE 5875 Abstract Algebra for Teachers (3) AS MTH
PR: MAS 3105 and MAS 4301 and Bachelor’s degree or CI. No credit for Mathematics majors. Groups, fields, vector spaces as they relate to high school algebra and geometry.

MAN 3025 Principles of Management (3) BU MAN
PR: Junior standing. Examines intrapersonal, interpersonal, group/team, organizational, and environmental (both stakeholder and societal) factors influencing the management task.

MAN 3240 Organizational Behavior Analysis (3) BU MAN
PR: MAN 3025. The course covers research literature relevant to organizational functioning including behavioral effects of power and authority, formal organization, structural variation, leadership, motivation, and communication.

MAN 3301 Human Resource Management (3) BU MAN
To develop a broad exposure to new approaches, techniques, and future trends in the management of personnel. A study of the major functions in personnel including job analysis, manpower planning, selection, performance evaluation, training, and wage and salary administration.

MAN 3401 Industrial Relations (3) BU MAN
Conceptualization of the administrative problems arising from unionization. Emphasis on the relationship between
management and employee representatives in private and public employment.

MAN 4120 Managerial Behavioral Laboratory (3) BU MAN
PR: MAN 3240 or equivalent. Development of direct understanding of personal, interpersonal, and intergroup factors present in organizational interaction. Stress is on a series of experiential exercises and written application of results within a laboratory setting.

MAN 4129 Theory and Practice of Management Skills (3) BU MAN
This course involves the transference of management theories into practice. It requires the active involvement of students in developing and practicing the skills needed to be a successful manager.

MAN 4280 Organizational Development and Change (3) BU MAN
PR: MAN 3240 or CI. A lab course where students experimentally apply behavioral science techniques in an “action-research” framework to the cycle of planned change so as to build a more effective organization.

MAN 4282 Organizational Assessment (3) BU MAN
PR: MAN 3240. The analysis and measurement of factors which influence organizational effectiveness and the quality of work life. Data based cases will be used by students to assess managerial and supervisory skills and to measure organizational functioning and work design.

MAN 4402 Employment Laws (3) BU MAN
Federal and state regulation of the employment relationship, including wage and hour laws; EEO; affirmative action programs; employee benefits; insurance; workers' compensation, safety, health, employee's personal rights; collective bargaining legislation.

MAN 4430 Seminar in Negotiations and Administration of Labor Agreements (3) BU MAN
Case studies in contract negotiation, administration, grievance settlement, and arbitration. Assumes familiarity with industrial relations system.

MAN 4504 Operations Management: A Systems Approach (3) BU QMB
PR: ISM 3431 or equivalent. Studies the problems of “operations” in all types of enterprises in both the public and private sectors. Emphasis is placed on the application of various decision science methodologies to problem situations.

MAN 4507 Operation Production Systems (3) BU QMB
PR: MAN 4504 or CI. Study of closed loop production planning and control systems. Master production planning, inventory management, materials requirements planning, capacity, management, production activity. Relationship to organizational effectiveness.

MAN 4600 International Management (3) BU MAN
PR: MAN 3025, Senior Standing or CI. Examines the effects of international cultural differences on business practices within and outside the United States and provides methods to build synergies and establish/enhance competitive advantage via those differences.

MAN 4631 Global Perspectives and Management Choices (3) BU MAN

MAN 4702 Disaster Recovery and Business Continuity Planning (3) AS EIT
PR: Electives may be taken at any time after completion of the first semester. When organizations are interrupted by disasters, accidents, or natural events, a loss of money, data, and/or productivity occurs. The extent to which the loss affects the organization's health depends on its ability to deal with these disruptions.

MAN 4802 Entrepreneurship and Small Business Management (3) BU MAN
PR: ACG 2021, ACG 2071, MAR 3023, or CI. Study of the factors involved in starting and managing a small- to medium-sized business. Emphasis on conduct of pre-business feasibility study, start-up of business, successful management of the firm, and options for succession or termination.

MAN 4804 Small Business Management Counseling (3) BU MAN
PR: MAN 4802 or CI. Field application in small business settings by (a) analyzing an on-going small business and developing recommendations for making improvements; or (b) conducting a feasibility study for a new enterprise and developing a strategy for implementation if favorable.

MAN 4905 Independent Study (1-3) BU MAN
PR: CI. S/U only. Specialized independent study determined by the students needs and interests.

MAN 4930 Selected Topics in Management (1-3) BU MAN
Topics to be selected by instructor and department chairperson for pertinent Management issues.

MAN 4931 Independent Research (1-4) BU MAN
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor.

MAP 2302 Differential Equations 6A (3) AS MTH
PR: MAC 2283 or MAC 2313. First order linear and nonlinear differential equations, higher order linear equations, applications.

MAP 5316 Ordinary Differential Equations I (3) AS MTH
PR: MAP 2302 and MAA 4211, or CI. Existence and uniqueness theory, properties of solutions, linear systems, stability theory. Sturm-Liouville theory.

MAP 5317 Ordinary Differential Equations II (3) AS MTH
PR: MAP 5316 and MAA 5307 or CI. Topics selected from fixed point theory, comparison theory, oscillation theory, Poincare-Bendixson Theory, Lyapunov functions, eigenfunction expansions.

MAP 5345 Applied Partial Differential Equations (3) AS MTH
PR: MAP 5407 or CI. Separation of variables, the heat equation, wave equation, Laplace's equation, classification, Green's functions with emphasis on applications.

MAP 5407 Methods of Applied Mathematics (3) AS MTH
PR: MAP 2302 or CI. Sturm-Liouville theory, Fourier series, Green's functions, matrix methods for linear systems of ordinary differential equations, and topics from calculus of variations, control theory, numerical solutions of differential equations.

MAR 2931 Selected Topics in Marketing (1-4) BU MKT
Not available for credit to upper-level students who have
been admitted to the College of Business. Topics to be selected by department chairman.

MAR 3023 Basic Marketing (3) BU MKT
PR: Junior standing. Survey of the marketing of goods and services within the economy. Attention is paid to the impact of marketing on other functional areas of business as well as society.

MAR 3400 Professional Selling (3) BU MKT
PR: MAR 3023 or CI. A study of the stages of the professional selling process, and the role of sales in today’s marketing environment. Emphasis on learning adaptive selling techniques and developing effective interpersonal communications skills. Sales careers are examined.

MAR 3613 Marketing Research (3) BU MKT
PR: QMB 2100, MAR 3023. A study of research methods and techniques applicable to problem solving in marketing. Attention is also given to defining information needs, determining the value of information, interpreting and reporting information for use in marketing decision making.

MAR 3823 Marketing Management (3) BU MKT
PR: MAR 3023. An applications oriented study of the marketing function at an intermediate level. Emphasis upon techniques for analysis and problem-solving. Builds upon the principles and concepts learned in MAR 3023, and provides a strong foundation for the remaining courses in the marketing curriculum.

MAR 4156 International Marketing (3) BU MKT
PR: MAR 3023. A study of procedures and problems associated with establishing marketing operations in foreign countries. Includes the institutions, principles and methods involved in the solution of these business problems as well as the effects of national differences on business practices and buyer behavior.

MAR 4213 Logistics and Physical Distribution Management (3) BU MKT
PR: MAR 3023 or CI. A study of logistics in the marketing of goods and services. Includes a description and analysis of the logistics environment as well as components of the physical distribution system with emphasis on information flows and the application of quantitative techniques used in establishing and controlling customer service levels.

MAR 4231 Retailing Management (3) BU MKT
PR: MAR 3023. A comprehensive study of the retailing structure, institutions, and environment. Includes pertinent management theories and practices in analyzing, organizing, planning and controlling retail operations, both large and small.

MAR 4333 Promotion Management (3) BU MKT
PR: MAR 3023 or CI. A study of the role of promotion in the marketing program of the firm, including the promotional tools available to the marketing manager and the various types of decisions made in the promotional area. Decision making process in development of a promotional program is emphasized.

MAR 4403 Sales Management (3) BU MKT
PR: MAR 3023 or CI. A study of sales management and strategy as a subset of marketing management. Emphasis is placed on developing the problem-solving and decision-making skills required of the sales manager in the modern market-oriented company.

MAR 4453 Business to Business Marketing (3) BU MKT
PR: MAR 3023. A study of the marketing of goods and services to the industrial and institutional sectors. Includes characteristics of the markets and channels of distribution, sales, management, research and promotional practices, marketing policies and strategies.

MAR 4503 Buyer Behavior (3) BU MKT
PR: MAR 3023. A study of the basic concepts of buyer behavior, including pre- and post-purchase attitudes and behavior patterns, information processing relating to the functional areas of marketing and the buyer’s decision-making process. Managerial applications to marketing are emphasized.

MAR 4824 Marketing Management Problems (3) BU MKT
PR: Senior Standing, MAR 3823, MAR 3613, MAR 4333. The integration of marketing knowledge applied to decision roles in managing the total marketing effort of firms, and coordination with other major functional areas on specific problems.

MAR 4903 Independent Research (1-3) BU MKT
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor.

MAR 4905 Independent Study (1-3) BU MKT
PR: CI. S/U only. Specialized independent study determined by the students’ needs and interests.

MAR 4933 Selected Topics In Marketing (1-3) BU MKT
Topics to be selected by instructor and department chairperson.

MAS 1100 Constructive Number Theory and Linear Algebra (2) US DEA
PR: Acceptance in USF-Hillsborough County Mathematics and Science Program. Computational and constructive aspects of number theory. Topics include: properties of integers, Diophantine Equations, congruence, quadratic residues polynomials over the integers, systems of linear equations, matrices and determinants.

MAS 3105 Linear Algebra 6A (4) AS MTH
CP: MGF 3301 and either MAC 2283 or MAC 2313. Linear systems, matrix algebra, vector spaces, linear independence, inner product spaces, Gram-Schmidt algorithm, linear transformations and matrix representations, determinants, eigenvalues, diagonalization, quadratic forms.

MAS 4156 Vector Calculus 6A (4) AS MTH
PR: MAS 3105 and either MAC 2313 or MAC 2283. Implicit function and inverse function theorems, parameterized surfaces, submanifolds on Euclidean space, exterior calculus of differential forms, differentiation of vector fields, line and surface integrals, Stokes' Theorem, elementary continuous groups.

MAS 4214 Elementary Number Theory 6A (3) AS MTH
PR: MAC 2312. No credit towards Mathematics major. Divisibility, prime numbers, Fundamental Theorem of Arithmetic, Diophantine equations, the algebra of congruencies, number functions and other selected topics.

MAS 4301 Elementary Abstract Algebra 6A (3) AS MTH
PR: MAS 3105. An introduction to the basic algebraic structures; groups, rings, integral domains, and fields; homeomorphisms and isomorphisms.
MAS 5107 Advanced Linear Algebra (3) AS MTH

MAS 5215 Number Theory (3) AS MTH
PR: MAS 3105 and MAS 4301, or CI. Fundamental theorem of arithmetic, modular arithmetic, Chinese remainder theorem, Mersenne primes, perfect numbers, Euler-Fermat theorem, pseudo primes, primitive roots, law of quadratic reciprocity, factorization and primality testing algorithms.

MAS 5311 Algebra I (3) AS MTH
PR: MAS 3105 and MAS 4301 or CI. Group theory: Sylow theorems; classification of groups of small order. Ring theory: ideals, quotient rings, polynomial rings, Euclidean domains, principal ideal domains and unique factorization.

MAS 5312 Algebra II (3) AS MTH
PR: MAS 5311 or CI. Continuation of MAS 5311. Finely generated modules over a principal ideal domain, basic field theory, finite fields, Galois theory.

MAT 1033 Intermediate Algebra (3) ED EDI
PR: MAT 0024 with a grade of “C” or better or appropriate score on the Scholastic Aptitude Test, Mathematics (SATM) This course provides students with an opportunity to develop algebraic knowledge needed for further study in several fields such as engineering, business, science, computer technology, and mathematics.

MAT 1033L Intermediate Algebra Laboratory (1) AS EDI
PR: MAT 0024 with a grade of “C” or better or appropriate score on the Scholastic Aptitude Test, Mathematics (SATM) Note: students with SATM scores below a cut off”. CR: MAT 1033. This course provides students with an opportunity to develop algebraic knowledge needed for further study in several fields such as engineering, business, science, computer technology, and mathematics.

MAT 2936 Technology Seminar 6A (1) AS MTH
S/U only. A two-week/week technology seminar to acquaint students majoring in mathematics, physics, and other sciences with the computer tools necessary in scientific communication and document preparation.

MAT 4906 Independent Study 6A (1-4) AS MTH
PR: CI. S/U only. Specialized independent study determined by the student’s needs and interests. The written contract required by the College of Arts and Sciences specifies the regulations governing independent study.

MAT 4930 Selected Topics in Mathematics 6A (1-4) AS MTH
PR: CI. The course content will depend on the interest of faculty members and student demand.

MAT 4937 Mathematics Majors Seminar 6A (1) AS MTH
PR: MAS 4301.

MAT 4970 Mathematics Senior Thesis 6A (3) AS MTH
PR: Admission to Mathematics Honors Program and CC. S/U only. Course restricted to mathematics majors.

MAT 5932 Selected Topics (1-4) AS MTH
PR: CI. Each course covers a single topic outside the usual curriculum.
MCB 4503 Virology (3) AS BCM
PR: MCB 3020C and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 and CHM 2211. The biology of viruses associated with plants, animals, and bacteria will be considered; the nature of viruses, mechanisms of viral pathogenesis, and interactions with host cells.

MCB 4905 Microbiology Undergraduate Research (1-4) AS BCM
PR: CHM 2210 & MAC 1105 or higher-level MAC course or STA 2023 and CI. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3714 & CHM 2211. S/U only. Junior standing and 3.0 GPA required. Individual investigation with faculty supervision. Written contract by Department is necessary prior to registration.

MCB 4934 Seminar in Microbiology (1) AS BCM
PR: Senior or advanced junior standing. S/U only. Biology majors may take for elective credit.

MCB 5206 Public Health and Pathogenic Microbiology (3) AS BCM
PR: MCB 3020C, CI. A comprehensive survey of pathogenic microbes responsible for disease in man and other animals and the impact of these infectious agents on the public health. These pathogens will be studied with respect to their morphology, cultivation, mechanisms of pathogenicity, laboratory diagnosis, and epidemiology.

MCB 5208 Cellular Microbiology (3) AS BCM
PCB 3023; MCB 3033 Cellular Microbiology is a lecture-based and literature-based course on the interactions between mammalian cells and microbial pathogens and/or their toxins, with a special emphasis on bacteria.

MCB 5655 Applied and Environmental Microbiology (3) AS BIN
PR: MCB 3020C. A study of the applications of microbiology to the food/beverage industry, agriculture, public health and bioremediation. This course is a microbiology elective and has a mandatory field trip.

MCB 5815 Medical Mycology (3) AS BCM
PR: MCB 3020C or CI. A modern biological survey of the medically important fungi (yeasts and molds) important to microbiologists and environmental scientists.

MET 4002 Climatology (4) AS GPY
PR: GEO 2200 or CI. An introductory survey of climatology. A qualitative study of the dynamics and general circulation of the atmosphere. Surface and upper level atmosphere linkages in the mid latitudes will be examined. Discussion of the regional climatic patterns and anomalies throughout the world.

MET 4010C Meteorology (4) AS GPY
PR: GEO 2200 or CI. The earth’s atmosphere and its processes; weather forecasting and analysis; instrumentation.

MGF 1106 Finite Mathematics 6A QM CAMA (3) AS MTH
PR: C (2.0) or better in MAT 1033, or 440 or better SAT Math score, or 19 or better ACT Math Score, or 72 or better Elementary Algebra CPT score. Concepts and analytical skills in areas of logic, linear equations, linear programming, mathematics of finance, permutations and combinations, probability, and descriptive statistics.
and skills. This open enrollment course offers a practical multidisciplinary look at service delivery. Students will examine their career and educational goals in context.

**MHS 4002 Behavioral Health Systems Delivery (3) BC FMH**
PR: MHS 3411 This course is designed to provide students with an understanding of the significant issues and trends in behavioral health delivery systems in America. Four major areas will be emphasized: 1) history and legislation; 2) systems delivery; 3) programs and policies; 4) selected at-risk populations. This course is not repeatable for credit and is open to non-minors in behavioral healthcare.

**MHS 4052 Human Relations Skills in Counseling MW (4) ED EDG**
Introduction to the theory of human relations dynamics and development of skills required for effective interpersonal relations. Lecture sessions and experiential training.

**MHS 4408 Exemplary Practices in Behavioral Healthcare Strategy (3) BC FMH**
PR: MHS 3411 This course explores exemplary clinical practices in public behavioral health service delivery. Best or exemplary practices are defined as those that have both a track record and their efficacy has been empirically validated. Modules may begin with a historical perspective of the treatment of a specific population or a treatment strategy but will primarily focus on emerging methodologies.

**MHS 4425 Field Experience in Behavioral Healthcare (3) BC FMH**
PR: MHS 3411, MHS 4002, MHS 4408 This experiential class allows the student to observe and participate with multidisciplinary staff of a provider agency. The student will attend team meetings, observe individual, group, and case management services. Assignments will be made to maximize the student's time investment in the field. Observations and experiences will be discussed in biweekly class meetings. Students are required to spend 120 hours (an average of 8 hours per week for 15 weeks) in an agency. Advisor approval required two months in advance of semester.

**MHS 4731 Writing for Research and Publication in Behavioral and Community Sciences 6A WRIN (3) BC FMH**
This course is a writing intensive exit course that fulfills the Gordon rule requirement. Students will develop a research problem statement, complete a literature review, and learn to prepare manuscripts for publication.

**MHS 4741 Research Processes in Behavioral Health (3-5) BC FMH**
PR: 1 course in statistics; 1 course in research methods. Application of research processes used in the interdisciplinary field of behavioral health including research design, quantitative and qualitative methods, measurement, report writing, dissemination, and grant writing. Open to all majors.

**MHS 4905 Independent Study: Guidance and Counseling Education (1-4) ED EDG**
PR: DPR. S/U only. Specialized independent study determined by the student’s needs and interests.

**MHS 4906 Directed Study (1-4) BC FMH**
Directed study. Student must have a contract with an instructor.

**MHS 4912 Independent Research in Behavioral Health (1-4) BC FMH**
PR: 1 course in statistics; 1 course in research methods. Students will conduct an independent research project in behavioral health (mental health and/or substance abuse) under the guidance of a faculty mentor. May be repeated for maximum of 8 credits.

**MHS 4931 Selected Topics (1-4) BC FMH**
The course content will depend on student demand and instructor’s interest. The course may be repeated for different topics up to 9 hours.

**MHS 5020 Foundations of Mental Health Counseling (3) BC REH**
PR: CC. A skill-building course on the utilization of one’s self in mental health counseling relationships. Includes study of the origin, history, professional functions and current issues in the discipline of mental health counseling.

**MHS 5480 Human Growth and Development (3) BC REH**
PR: RCS 5780, MHS 5020, Majors only. Human development theory as applied in psychotherapy and case management rehabilitation, mental health, and addiction settings.

**MHS 5905 Directed Studies (1-4) ED EDG**
Independent studies on a selected topic.

**MLS 4038 Introduction to Medical Technology (1-2) AS CHM**
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on principles and methods of medical technology, including professional ethics, safety regulations, quality control, phlebotomy, medical terminology, labor.

**MLS 4860 Clinical Urinalysis and Body Fluids (2) AS CHM**
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on laboratory methodology and diagnosis using urine and other fluids such as semen, spinal, pleural, peritoneal, and joint fluids.

**MLS 4861 Clinical Immunology (2) AS CHM**
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on the tissues, cells, and molecules of the human immune system, emphasizing the detection of serum antibodies and disease states.

**MLS 4862 Clinical Hematology (6) AS CHM**
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on cellular components of the blood as related to laboratory diagnosis and disease, including blood coagulation and morphological and biochemical aspects of blood cells.

**MLS 4863 Clinical Microbiology (6) AS CHM**
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course emphasizing pathogens responsible for diseases in man, including morphology, physiology, and laboratory diagnosis of bacteria, fungi, parasites, and viruses.

**MLS 4864 Clinical Chemistry (6) AS CHM**
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on the analysis of chemical substances found in the body as related to the diagnosis of human disease, including topics such as instrumentation, electrophoresis, therapeutic drug-monitoring assays, tumor markers, and toxicology.

**MLS 4865 Clinical Immunohematology (6) AS CHM**
PR: Senior standing and acceptance into an approved
MMC 4200 History and Principles of Communications Law (3) AS COM
PR: MMC 2100 and MMC 3602. Historical and constitutional backgrounds of freedom and control of expression, statutory enactments, major court decisions and administrative rulings which affect print media, telecommunications, advertising, public relations, and new media.

MMC 4203 Communication Ethics (3) AS COM
PR: MMC 2100 and MMC 3602 or CI. A study of the fundamental principles and philosophies of ethics and their application to the decision-making process in the various professions of mass communications.

MMC 4420 Research Methods in Mass Communications (3) AS COM
PR: MMC 2100 and MMC 3602. An introduction to the theory and practice of quantitative and historical research methods as applicable to the study of media and mass communications. Emphasis on survey research, evaluation of data, and report writing.

MMC 4503 Literary Journalism (3) AP COM
PR: JOU 2100 and MMC 2100 or CI. Students will read, discuss, and analyze major works of literary journalism, demonstrating their ability to think critically about the works covered by submitting written commentaries about them.

MMC 4900 Directed Reading in Mass Communications (1-3) AS COM
PR: Junior standing and CI. Reading and directed study in special topics.

MMC 4910 Individual Research in Mass Communications (1-3) AS COM
PR: Junior standing and CI. The course provides means for a student to do independent study in an area not covered by a numbered course.

MMC 4936 Selected Topics in Mass Communications Studies (1-3) AS COM
PR: MMC 2100, MMC 3602 and CI. Courses designed to meet current or specific topics of interest to instructors and students.

MMC 4945 Media Internship-Seminar (3) AS COM
PR: CI and 15 hours in Mass Comm. courses and completion of an 8-12 week paid media internship with newspaper, broadcast station, or other media-related agency approved by the School. S/U only. Reports on experiences for discussion and evaluation.

MMC 4946 Media Internship-Seminar (3) AS COM
PR: CI and 15 hours in Mass Comm. courses and completion of an 8-12 week paid media internship with newspaper, broadcast station, or other media-related agency approved by the School. S/U only. Reports on experiences for discussion and evaluation.
MSL 2900 Army Physical Readiness (1) US MIS
This course will train students in the unique role of Army physical readiness in sustaining military operations. It will also prepare students to plan, prepare, and conduct military fitness training. Repeatable for 8 semesters, but only 4 credit hours will be counted toward the program.

MSL 2901 Basic Leader Training (4) US MIS
PR: Cl. A 35 day internship at Fort Knox, Kentucky that incorporates a wide range of military subjects designed to develop/evaluate leadership and officer potential. The course is intentionally stressful and designed to build individual confidence through the accomplishment of tough and demanding training. Students completing the course may qualify for entry into the ROTC Advanced Course.

MSL 3201C Adaptive Team Leadership (3) US MIS
Challenges to study, practice, & evaluate adaptive team leadership skills as demands of the ROTC LDAC are presented. Uses challenging scenarios to develop self-awareness & critical thinking skills. Provides specific feedback on leadership abilities.

MSL 3202C Leadership in Changing Environments (3) US MIS
Challenges to study, practice, & evaluate adaptive leadership skills as demands of ROTC Leader Development Assessment Course are presented. Develops self-awareness & critical thinking skills with challenging scenarios. Provides feedback on leader skills.

MSL 4301C Developing Adaptive Leaders (3) US MIS
Develops ability to plan, & assess complex operations, functioning as member of a staff; provides performance feedback to subordinates; gives opportunities to assess risk, make ethical decisions, & lead fellow cadets; prepares in becoming Army officer.

MSL 4302C Leadership in a Complex World (3) US MIS
Explores dynamics of leadership in complex situations of current military operations in current operating environment; examines differences in courtesies, military law, principles of war & rules of engagement in face of international terror & more.

MSL 4930 Advanced Directed Study and Research (1-3) US MIS
PR: Cl and permission of Professor of Military Science. Intensive individual study in a particular aspect of military science that is not covered in regular course offerings. Request for enrollment must be made prior to registration in the form of a written proposal.

MTG 3212 Geometry 6A (3) AS MTH
PR: MAC 2311. No credit towards Mathematics major. Emphasis on axiomatics, advanced Euclidean geometry, elements of projective geometry, non-Euclidean geometry.

MTG 4214 Modern Geometry 6A (3) AS MTH
CP MAS 4301 or Cl. Topics will be selected from modern plane geometry. Mobius geometry, elliptic and hyperbolic geometry.

MTG 4302 Introduction to Topology 6A (3) AS MTH

MTG 5256 Differential Geometry (3) AS MTH
PR: MAA 4211, MAS 3105. Exterior calculus, differentiable manifolds, integration of differential forms, surfaces in 3-space, covariant derivative, curvature, matrix groups.

MTG 5316 Topology I (3) AS MTH

MTG 5317 Topology II (3) AS MTH
PR: MTG 5316. The fundamental group; elements of homotopy theory and homology theory.

MUC 2221 Composition (3) TA MUS
PR: MUT 1112 and DPR. Private instruction in original composition. Required of composition majors.

MUC 2301 Introduction To Electronic Music FA CAFA (3) TA MUS
History and repertory of electronic music; standard sound studio techniques; basic electronics as applied in electronic sound synthesis; mathematics for music, composition and electronic music.

MUC 3231 Composition (3) TA MUS
PR: Necessary competency at junior level determined by faculty jury. DPR. Private instruction in original composition. Required of composition majors.

MUC 3401 Electronic Music-Analog Synthesis I (3) TA MUS
PR: MUC 2301 and DPR. Composition for tape medium with analog synthesizers; use of sound recording studio; repertory or analog music synthesis; technical basis of analog systems design and construction.

MUC 3402 Electronic Music-Analog Synthesis II (3) TA MUS
PR: MUC 2301 and DPR. Composition for tape medium with analog synthesizers; use of sound recording studio; repertory or analog music synthesis; technical basis of analog systems design and construction.

MUC 3441 Electronic Music-Digital Synthesis I (3) TA MUS
PR: MUC 3401 or MUC 3402 and DPR. Computer assisted composition for conventional instruments; composition for tape medium with computer controlled analog synthesizers; direct digital synthesis; digital systems design and construction.

MUC 3442 Electronic Music-Digital Synthesis II (3) TA MUS
PR: MUC 3401 or MUC 3402 and DPR. Computer assisted composition for conventional instruments; composition for tape medium with computer controlled analog synthesizers; direct digital synthesis; digital systems design and construction.

MUC 4241 Composition (3) TA MUS
PR: Necessary competency at senior level determined by faculty jury. DPR. Private instruction in original composition. Required of composition majors, a minimum of six semester hours.

MUC 4403 Electronic Music-Real-Time Performance I (3) TA MUS
PR: MUC 3402 and MUC 3442 or equivalent. DPR. Composition for analog/digital equipment, performance applications; sound synthesis, interfacing electronics with conventional instruments.

MUC 4404 Electronic Music-Real-Time Performance II (3) TA MUS
PR: MUC 3402 and MUC 3442 or equivalent. DPR. Composition for analog/digital equipment, performance applications; sound synthesis, interfacing electronics with conventional instruments.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUE 4620</td>
<td>Jazz Composition (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: MUT 3354 and/or DPR. Private instruction in original jazz composition. Required of All Jazz Studies Comp. majors, minimum six of hours.</td>
</tr>
<tr>
<td>MUE 5625</td>
<td>Jazz Composition (2) TA MUS</td>
<td>2</td>
<td>TA</td>
<td>PR: Cl. Required of all composition majors. Private instruction in original composition.</td>
</tr>
<tr>
<td>MUE 2090</td>
<td>Foundations of Music Education (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: DPR. The course is designed to investigate music education practices in the schools. Through the experience and information offered in this course a student will be able to determine his/her commitment to professional music education.</td>
</tr>
<tr>
<td>MUE 3414</td>
<td>Creative Performance Chamber Ensemble (1) TA MUS</td>
<td>1</td>
<td>TA</td>
<td>PR: MUE 2090. CR: MUE 3424 or MUE 3425. This course will provide students opportunities to apply concepts of informal learning, gained through various course work, in a non-traditional, student directed, music education performance setting. The course is repeatable for a total of four credits.</td>
</tr>
<tr>
<td>MUE 3421</td>
<td>Choral Techniques (1) TA MUS</td>
<td>1</td>
<td>TA</td>
<td>A study of choral materials in a laboratory setting appropriate to elementary and secondary school music programs. Course content will change each semester.</td>
</tr>
<tr>
<td>MUE 3422</td>
<td>Wind Techniques (1) TA MUS</td>
<td>1</td>
<td>TA</td>
<td>PR: MUG 3104 A two-semester sequence intended to equip music education students with basic performance, pedagogical, and rehearsal techniques, applicable to brass and woodwind instruments and ensembles.</td>
</tr>
<tr>
<td>MUE 3423</td>
<td>String Techniques (1) TA MUS</td>
<td>1</td>
<td>TA</td>
<td>PR: DPR. A study of orchestra materials, in a laboratory setting, appropriate to elementary and secondary school music programs. Course content will change each semester.</td>
</tr>
<tr>
<td>MUE 3424</td>
<td>Progressive Music Education Methods I (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: MUE 2090 This course will provide students a grounding in methods for music education settings outside the traditional general, band, choir and string programs.</td>
</tr>
<tr>
<td>MUE 3425</td>
<td>Progressive Music Education Methods II (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: MUE 3424. CR: MUE 3414. This course will provide students a further grounding in methods for music education settings outside the traditional general, band, choir and string programs.</td>
</tr>
<tr>
<td>MUE 3475</td>
<td>Percussion Techniques (1) TA MUS</td>
<td>1</td>
<td>TA</td>
<td>Introduction to percussion pedagogy for the music educator.</td>
</tr>
<tr>
<td>MUE 3930</td>
<td>Music Education Forum (1) TA MUS</td>
<td>1</td>
<td>TA</td>
<td>PR: Status as a music education major; permission of the Music Advisor. Discuss MusEd professional organizations (MENC, CMENC, ISME, etc.). Students join CMENC and attend the FMEA conference. Add'l topics: classroom management, school safety, professional ethics, education law, and MusEd for special students. Required for MusEd majors 4 semesters @ 1 credit hour per term.</td>
</tr>
<tr>
<td>MUE 4210</td>
<td>Music For The Child (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: Admission to the College of Education. DPR. Music fundamentals, the development of music skills and knowledge of music materials and teaching strategies for presenting music to children in the elementary school.</td>
</tr>
<tr>
<td>MUE 4311</td>
<td>General Music Methods (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: MUE 2090 This course will consist of theoretical and practical training in teaching General Music Education K-12. It will include the study of philosophies, strategies and methodologies in contemporary General Music Education used in the USA and internationally.</td>
</tr>
<tr>
<td>MUE 4331</td>
<td>Choral Methods (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: DPR. Junior standing. Development and implementation of methods techniques for teaching secondary school choral music.</td>
</tr>
<tr>
<td>MUE 4480</td>
<td>Special Ensemble Methods (2) TA MUS</td>
<td>2</td>
<td>TA</td>
<td>This course is restricted to majors and is repeatable for up to 6 credits.</td>
</tr>
<tr>
<td>MUE 4936</td>
<td>Senior Seminar In Music (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>CR: MUE 4940. DPR. Synthesis of teacher candidate's courses in complete college program. Required concurrently with internship.</td>
</tr>
<tr>
<td>MUG 3104</td>
<td>Basic Conducting (2) TA MUS</td>
<td>2</td>
<td>TA</td>
<td>PR: DPR. The study and practical application of basic conducting techniques. Development of skills related to the conducting of musical scores.</td>
</tr>
<tr>
<td>MUG 3108</td>
<td>Advanced Conducting (2) TA MUS</td>
<td>2</td>
<td>TA</td>
<td>PR: MUG 3104. Provides USF music education majors with a competency-based lab experience in conducting while placing an emphasis on developing advanced skills necessary to lead an ensemble in rehearsal and performance. Restricted to Music Education Majors.</td>
</tr>
<tr>
<td>MUG 4302</td>
<td>Instrumental Conducting (2) TA MUS</td>
<td>2</td>
<td>TA</td>
<td>PR: MUG 3404 and DPR. A study of those techniques of conducting unique to instrumental music ensembles: baton technique, score reading, terminology, rehearsal management.</td>
</tr>
<tr>
<td>MUH 2020</td>
<td>The History of Blues and Rock FA CAFA HHCP (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>PR: MUE 2090 This course will consist of theoretical and practical training in teaching General Music Education K-12. It will include the study of philosophies, strategies and methodologies in contemporary General Music Education used in the USA and internationally.</td>
</tr>
<tr>
<td>MUH 2051</td>
<td>Folk And Traditional Music Of World Cultures FA AF CAFA (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>A comparative survey of the stylistic traits and functions of folk and traditional music, both sacred and secular, of diverse Western and non-Western cultures. For non-majors and music education majors; may be taken by applied music majors.</td>
</tr>
<tr>
<td>MUH 2632</td>
<td>Music In The United States FA (3) TA MUS</td>
<td>3</td>
<td>TA</td>
<td>Designed for majors and non-majors, this course will use live performances, videotapes, and recordings to illustrate music as practiced in America from Colonial to present times. Included in the course will be study of the contributions of various ethnic/minority groups, and discussions of the relevant social issues connected with these contributions.</td>
</tr>
</tbody>
</table>
MUH 3016 Survey Of Jazz FA CAFA (3) TA MUS
For non-music majors. Not repeatable. This course introduces undergraduate students to Jazz music. Students will study historical, cultural, and social issues associated with the evolution of jazz music and learn to hear and discern specific musical traits found in jazz music.

MUH 3300 Music History/Meval And Renaissance (2) TA MUS
PR: DPR. Required of music majors; a study of the historical development of musical styles of the Medieval and Renaissance periods and of the music of those periods.

MUH 3301 Music History/Baroque And Classic MW (3) TA MUS
PR: MUL 2111, DPR. Required of music majors; open to non-majors with DPR. A study of the historical development of musical styles of the Baroque and Classic periods and of the music of those periods.

MUH 3302 Music History/Romantic And 20th Century MW (3) TA MUS
PR: MUL 2111, DPR. Required of music majors; open to non-majors with DPR. A study of the historical development of musical styles of the Romantic and Twentieth Century eras and of the music of those periods.

MUH 4058 Intercultural Music In The Twentieth Century MW (3) TA MUS
PR: MUH 2051 or MUL 2111, DPR. An in-depth investigation of composers born after c. 1880, from all parts of the world, who have attempted to integrate elements from two or more cultures into their compositions.

MUH 4372 Representing the United States in Music 6A WRIN (3) TA MUS
PR: MUH 3300, 3301 or 3302. This course explores works by twentieth-century composers that define aspects of American life. We will examine a diverse selection of pieces and genres ranging from traditional European art music forms to jazz, rock, and hip hop.

MUH 4801 History Of Jazz (3) TA MUS
PR: MUT 1112, DPR. An in-depth study of the historical development of Jazz, including the representative musical literature and sociological implications.

MUL 2111 Introduction To Music Literature 6A HP FA (3) TA MUS
PR: MUT 1112, DPR. A survey of representative music exemplars of the past and present with emphasis on the study of styles and form. Required for music majors.

MUL 3001 Issues In Music FA AF (2-3) TA MUS
Open only to non-music majors. Lectures and live performances by artist faculty of significant works from the literature for the piano; analysis and illustration in performance of the abstract and aesthetic elements in music which vitally concern the artist-performer.

MUL 3012 Music in Your Life FA CAFA (3) TA MUS
Open only to non-music majors. A study in the art of music and its materials, designed to develop an understanding of basic principles of music and a technique for listening to music.

MUL 3600 Vocal Literature - Undergraduate (2) TA MUS
PR: Four terms of studio grade. Open to all USF undergraduate vocal performance majors that have completed four terms of vocal study with a passing grade. Other students may petition to enroll with the approval of the instructor. Provides a survey of standard vocal literature.

MUN 3143 Wind Ensemble (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments.

MUN 3213 University Orchestra (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments.

MUN 3313 University Singers (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments.

MUN 3323 Bel Canto Women’s Choir (1) TA MUS
PR: CI. Open to all university students with the necessary proficiency in their performing media (singing); study and performance of treble-voice music and treble-voice music in combination with, string, woodwind, brass, or percussion instruments.

MUN 3333 Singing Stampede (1) TA MUS
PR: CI. Open to all university students with the necessary proficiency in their performing media (singing); study and performance of male-chorus music and male-chorus music in combination with string, woodwind, brass, or percussion instruments.

MUN 3343 Chamber Singers (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

MUN 3383 University-Community Chorus (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments.

MUN 3411 String Quartet (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

MUN 3420 Saxophone Ensemble (1) TA MUS
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

MUN 3421 Flute Choir (1) TA MUS
PR: DPR. Open to all university students with the necessary...
proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUN 3424 Woodwind Quintet (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUN 3431 Brass Quintet (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUN 3443 Percussion Ensemble (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUN 3444 Marimba Ensemble (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUN 3453 Piano Ensemble (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments.

**MUN 3474 Collegium Musicum (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUN 3713 Jazz Ensemble (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments.

**MUN 3714 Jazz Chamber Ensemble (1) TA MUS**
PR: DPR. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano.

**MUS 2010 Recital Attendance (0) TA MUS**
S/U only. This course is required whenever a student registers for applied music. The requirement for the successful completion of the course is attendance at ten (10) department-approved recitals/concerts throughout the semester.

**MUS 2201 Language Diction For Singers (1) TA MUS**
PR: DPR. Required of voice performance majors. Specialized study in Language Diction for Singers. Specific language varies, to be arranged at each course offering.

**MUS 4900 Directed Reading (1-3) TA MUS**
PR: DPR. Selection of topic and materials must be agreed upon and appropriate credit must be assigned prior to registration. A contract with all necessary signatures is required for registration.

**MUS 4905 Directed Study (1-4) TA MUS**
PR: DPR. Independent studies in the various areas of music; course of study and credits must be assigned prior to registration.

**MUS 4930 Selected Topics In Music (1-4) TA MUS**
PR: DPR. The content of the course will be governed by student demand and instructor interest.

**MUS 4931 Selected Studio Topics In Music (1-4) TA MUS**
PR: DPR. The content of the course will be governed by student demand and instructor interest.

**MUS 4935 Music Senior Seminar (1) TA MUS**
PR: DPR. S/U only. To aid majors to understand, appraise and perfect their own art through critical and aesthetic judgments of their colleagues.

**MUS 4936 Music Senior Seminar (1) TA MUS**
PR: DPR. S/U only. To aid majors to understand, appraise and perfect their own art through critical and aesthetic judgments of their colleagues.

**MUS 4937 Music Senior Seminar (1) TA MUS**
PR: DPR. S/U only. To aid majors to understand, appraise and perfect their own art through critical and aesthetic judgments of their colleagues.

**MUS 5000 Independent Study (1-3) TA MUS**
PR: DPR. Independent studies in the various areas of music; course of study and credits must be assigned prior to registration.

**MUT 1001 Rudiments Of Music (2) TA MUS**
Open to non-music majors; development of skills in hearing and performing music and in basic notation. Will not count as degree credit for music majors.

**MUT 1111 Music Theory I (3) TA MUS**
PR: DPR. Required of music majors; development of skills in perceiving and writing music through the use of aural and visual analysis and examples from all historical periods of music literature.

**MUT 1112 Music Theory II (3) TA MUS**
PR: MUT 1111, DPR. Required of music majors; development of skills in perceiving and writing music through the use of aural and visual analysis and examples from all historical periods of music literature.

**MUT 1241 Aural Theory I (1) TA MUS**
PR: DPR. To be taken concurrently with MUT 1111, MUT 1112. Course designed to begin training in aural recognition and vocal realization of materials used in music composition. Includes rhythmic, melodic and harmonic dictation, and sight singing.
MUT 1242 Aural Theory II (1) TA MUS  
PR: MUT 1241, DPR. Course designed to begin training in aural recognition and vocal realization of materials used in music composition. Includes rhythmic, melodic and harmonic dictation, and sight singing.

MUT 2116 Music Theory III (3) TA MUS  
PR: MUT 2112, DPR. Required of music majors, continuation of MUT 2111 and 1112.

MUT 2117 Music Theory IV (3) TA MUS  
PR: MUT 2116, DPR. Required of music majors, continuation of MUT 2111, 1112, and 2116.

MUT 2246 Aural Theory III (1) TA MUS  
PR: MUT 1242. To be taken concurrently with MUT 2116, MUT 2117, DPR. Course designed to continue training in aural recognition and vocal realization of materials used in music composition. Includes rhythmic, melodic and harmonic dictation, and sight singing.

MUT 2247 Aural Theory IV (1) TA MUS  
PR: MUT 2246. To be taken concurrently with MUT 2116, MUT 2117, DPR. Course designed to continue training in aural recognition and vocal realization of materials used in music composition. Includes rhythmic, melodic and harmonic dictation, and sight singing.

MUT 2641 Jazz Theory And Improvisation I (2) TA MUS  
PR: MUT 1112 and/or DPR. A study of jazz improvisational techniques and related jazz theory.

MUT 2642 Jazz Theory And Improvisation II (2) TA MUS  
PR: MUT 2641 or DPR. A study of jazz improvisational techniques and related jazz theory.

MUT 3353 Jazz Composition and Arranging I (3) TA MUS  
PR: MUT 1112 and DPR. Course designed to develop arranging and/or compositional skills in the jazz idiom through the study of jazz orchestration, harmonic, and melodic practices.

MUT 3354 Jazz Composition And Arranging II (3) TA MUS  
PR: MUT 3353 and DPR. Course designed to develop arranging and/or compositional skills in the jazz idiom through the study of jazz orchestration, harmonic and melodic practices.

MUT 3663 Advanced Jazz Improvisation I (2) TA MUS  
PR: MUT 2642 or DPR. A studio course study of the improvised solos of the major innovators in jazz. Oriented toward the continuing development of students’ soloing ability. Students are required to enroll in Jazz Chamber Ensemble as a lab. Open to majors and non-majors.

MUT 3664 Advanced Jazz Improvisation II (2) TA MUS  
PR: MUT 3663, DPR. A continuation of Jazz Styles and Analysis I with the emphasis on contemporary jazz artists. Students are required to enroll in Jazz Chamber Ensemble as a lab. Open to majors and non-majors.

MUT 4310 Orchestration I (2) TA MUS  
PR: DPR. Intensive study and practice in scoring music for various combinations of instruments, including symphony orchestra, band, and smaller ensembles of string, woodwind, brass, and percussion instruments.

MUT 4311 Orchestration II (2) TA MUS  
PR: MUT 4310, DPR. Intensive study and practice in scoring music for various combinations of instruments, including symphony orchestra, band, and smaller ensembles of string, woodwind, brass, and percussion instruments.

MUT 4421 Eighteenth Century Practice (3) TA MUS  
PR: MUT 2117, DPR. An intensive study of the contrapuntal practice of the 18th century; development of skills in perceiving and writing music in the style of the period through the use of aural and visual analysis.

MUT 4571 Twentieth Century Practice (3) TA MUS  
PR: MUT 2117, DPR. A study of 20th century theoretical concepts; development of skills in perceiving and writing music in contemporary styles through the use of aural and visual analysis.

MUT 5051 Graduate Review Of Music Theory (2) TA MUS  
PR: DPR. A graduate level review of basic theoretical concepts with emphasis on the common practice period. The course serves to satisfy deficiencies in music theory and does not count toward the graduate degree requirements.

MVB 1211 Applied Trumpet (1) TA MUS  
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVB 1212 Applied French Horn (1) TA MUS  
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVB 1213 Applied Trombone (1) TA MUS  
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVB 1214 Applied Euphonium (1) TA MUS  
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVB 1215 Applied Tuba (1) TA MUS  
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVB 1311 Trumpet Principal (2) TA MUS  
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1312 French Horn Principal (2) TA MUS  
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1313 Trombone Principal (2) TA MUS  
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.
MVB 1314 Euphonium Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1315 Tuba Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1411 Trumpet Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1412 French Horn Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1413 Trombone Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1414 Euphonium Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 1415 Tuba Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 2321 Trumpet Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 2322 French Horn Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 2323 Trombone Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 2324 Euphonium Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 2325 Tuba Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 2421 Trumpet Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 2422 French Horn Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 2423 Trombone Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 2424 Euphonium Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 2425 Tuba Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 3331 Trumpet Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 3332 French Horn Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 3333 Trombone Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 3334 Euphonium Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 3335 Tuba Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 3431 Trumpet Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 3432 French Horn Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 3433 Trombone Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 3434 Euphonium Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.
MVB 3435 Tuba Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 4341 Trumpet Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 4342 French Horn Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 4343 Trombone Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 4344 Euphonium Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 4345 Tuba Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVB 4441 Trumpet Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 4442 French Horn Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 4443 Trombone Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 4444 Euphonium Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 4445 Tuba Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVB 5251 Applied Trumpet (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVB 5252 Applied French Horn (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVB 5253 Applied Trombone (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVB 5254 Applied Euphonium (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVB 5255 Applied Tuba (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVJ 1210 Applied Jazz Piano (1) TA MUS
PR: DPR. Course is open by audition only. One-half hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVJ 1211 Applied Jazz Guitar (1) TA MUS
PR: DPR. Course is open by audition only. One-half hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVJ 1212 Applied Jazz Bass (1) TA MUS
PR: DPR. Course is open by audition only. One-half hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVJ 1213 Applied Jazz Bass (1) TA MUS
PR: DPR. Course is open by audition only. One-half hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVJ 1214 Applied Jazz Percussion (1) TA MUS
PR: DPR. Course is open by audition only. One-half hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVJ 1310 Applied Jazz Piano Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 1311 Jazz Guitar Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 1312 Jazz Bass Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 1313 Jazz Percussion Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.
MVJ 1410 Applied Jazz Piano Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 1413 Jazz Guitar Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 1414 Jazz Bass Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 2320 Applied Jazz Piano Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 2323 Jazz Guitar Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 2324 Jazz Bass Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 2329 Applied Jazz Percussion Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 2420 Applied Jazz Piano Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 2423 Jazz Guitar Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 2424 Jazz Bass Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 3330 Applied Jazz Piano Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 3333 Jazz Guitar Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 3334 Jazz Bass Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 3339 Applied Jazz Percussion Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 3430 Applied Jazz Piano Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 3433 Jazz Guitar Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 3434 Jazz Bass Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 3439 Applied Jazz Percussion (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 4340 Jazz Piano Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 4343 Jazz Guitar Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 4344 Jazz Bass Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 4349 Jazz Percussion Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVJ 4440 Jazz Piano Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 4443 Jazz Guitar Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 4444 Jazz Bass Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVJ 4449 Jazz Percussion Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.
MVJ 4950 Applied Jazz Performance (3) TA MUS  
PR: MUT 2642 and DPR. Necessary competency at junior level determined by faculty jury examination. Private and class instruction.

MVJ 5250 Applied Jazz Piano Secondary (2) TA MUS  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Required registration in major performance ensemble. Private and class instruction.

MVJ 5252 Applied Jazz Bass Secondary (2) TA MUS  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Required registration in major performance ensemble. Private and class instruction.

MVJ 5253 Applied Jazz Guitar Secondary (2) TA MUS  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Required registration in major performance ensemble. Private and class instruction.

MVJ 5254 Applied Jazz Bass Secondary (2) TA MUS  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Required registration in major performance ensemble. Private and class instruction.

MVJ 5259 Applied Jazz Percussion Secondary (2) TA MUS  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Required registration in major performance ensemble. Private and class instruction.

MVJ 5951 Applied Jazz Performance (2) TA MUS  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Required registration in major performance ensemble. Private and class instruction.

MVK 1111 Keyboard Skills I (2) TA MUS  
PR: DPR. Class is elementary piano and music fundamentals designed for students with limited keyboard experience. Primary emphasis is placed on sight-reading, accompanying, transposition, harmonization, basic technique, and appropriate literature.

MVK 1121 Keyboard Skills II (2) TA MUS  
PR: MVK 1111 or DPR. Class is elementary piano and music fundamentals designed for students with limited keyboard experience. Primary emphasis is placed on sight-reading, accompanying, transposition, harmonization, basic technique, and appropriate literature.

MVK 1211 Keyboard Skills III (2) TA MUS  
PR: DPR. Class is elementary piano and music fundamentals designed for students with limited keyboard experience. Primary emphasis is placed on sight-reading, accompanying, transposition, harmonization, basic technique, and appropriate literature.

MVK 1821 Beginning Piano II (2) TA MUS  
PR: DPR. Class is elementary piano and music fundamentals designed for students with limited keyboard experience. Primary emphasis is placed on sight-reading, accompanying, transposition, harmonization, basic technique, and appropriate literature.

MVK 2111 Keyboard Skills III (2) TA MUS  
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVK 2421 Piano Major (3) TA MUS  
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVK 3111 Music Majors, Level V (2) TA MUS  
PR: DPR. Class is elementary piano and music fundamentals designed for students with limited keyboard experience. Primary emphasis is placed on sight-reading, accompanying, transposition, harmonization, basic technique, and appropriate literature.

MVK 3331 Piano Principal (2) TA MUS  
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVK 3431 Piano Major (3) TA MUS  
PR: DPR. Necessary competency at Junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVK 4341 Piano Principal (2) TA MUS  
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVK 4441 Piano Major (3) TA MUS  
PR: DPR. Necessary competency at Senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVK 4640 Piano Pedagogy I (4) TA MUS  
PR: DPR. May be elected by undergraduate music majors; emphasis on the business management of the music
MVP 5251 Applied Percussion, Secondary (2-4) TA MUS
PR: MVP 4341, DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVP 1411 Violin Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors who have had prior musical training. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVP 1311 Violin Principal (2) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVP 4331 Percussion Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVP 1231 Percussion Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVP 1411 Applied Percussion (1) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVP 1311 Percussion Principal (2) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVP 1312 Viola Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVP 2421 Percussion Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVP 3431 Percussion Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVP 4441 Percussion Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVP 5251 Applied Percussion, Secondary (2-4) TA MUS
PR: DPR. Necessary competency determined by faculty jury audition. Required registration in major performance ensemble. Required of all applied music majors. Private and class instruction.
limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 2321 Violin Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 2322 Viola Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 2323 Violoncello Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 2421 Violin Major (3) TA MUS**
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 2422 Viola Major (3) TA MUS**
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 2423 Cello Major (3) TA MUS**
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 2424 Double Bass Major (3) TA MUS**
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 3331 Violin Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 3332 Viola Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 3333 Violoncello Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 3334 Double Bass Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 3431 Violin Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 3432 Viola Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 3433 Cello Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 3434 Double Bass Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 4341 Violin Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 4342 Viola Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 4343 Violoncello Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 4344 Double Bass Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVS 4441 Violin Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 4442 Viola Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 4443 Cello Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 4444 Double Bass Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVS 5251 Applied Violin (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

**MVS 5252 Applied Viola (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.
MVV 5253 Applied Cello (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVV 5254 Applied Double Bass (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVV 1211 Applied Voice (1) TA MUS
One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVV 1311 Voice Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVV 1411 Voice Major (3) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVV 2321 Voice Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVV 2421 Voice Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 3331 Voice Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVV 3431 Voice Major (3) TA MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 3630 Vocal Pedagogy - Undergraduate (2) TA MUS
PR: Four terms of studio voice. Open to USF undergraduate vocal performance majors that have completed four terms of vocal study (passing grade). Other students may petition to enroll with the approval of the instructor. Covers the fundamental principles of the teaching of singing.

MVV 4341 Voice Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVV 4441 Voice Major (3) TA MUS
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 5251 Applied Voice (2-4) TA MUS
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

MVW 1211 Applied Flute (1) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVW 1212 Applied Oboe (1) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVW 1213 Applied Clarinet (1) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVW 1214 Applied Bassoon (1) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVW 1215 Applied Saxophone (1) TA MUS
PR: DPR. Course is open by audition only. One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training.

MVW 1311 Flute Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 1312 Oboe Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 1313 Clarinet Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 1314 Bassoon Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 1315 Saxophone Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only.
MVW 2422 Oboe Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVW 2421 Flute Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVW 2325 Saxophone Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2324 Bassoon Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2323 Clarinet Principal (2) TA MUS
PR: DPR. Required of all applied music majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2423 Clarinet Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVW 2424 Bassoon Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVW 2425 Saxophone Major (3) TA MUS
PR: DPR. Necessary competency at Sophomore level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVW 2322 Flute Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2321 Flute Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2315 Saxophone Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2314 Bassoon Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2313 Clarinet Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2312 Oboe Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2311 Flute Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2305 Saxophone Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2304 Bassoon Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2303 Clarinet Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2302 Oboe Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 2301 Flute Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3334 Bassoon Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3333 Clarinet Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3332 Oboe Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3331 Flute Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3325 Saxophone Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3324 Bassoon Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3323 Clarinet Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3322 Oboe Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3321 Flute Principal (2) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3315 Saxophone Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3314 Bassoon Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

MVW 3313 Clarinet Major (3) TA MUS
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.
audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVW 4342 Oboe Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVW 4343 Clarinet Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVW 4344 Bassoon Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVW 4345 Saxophone Principal (2) TA MUS**
PR: DPR. Required of all music education and composition majors. Open to a limited number of non-music majors by audition only. Applied music courses are NOT available on S/U basis. Private and class instruction.

**MVW 4441 Flute Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVW 4442 Oboe Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVW 4443 Clarinet Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVW 4444 Bassoon Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVW 4445 Saxophone Major (3) TA MUS**
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

**MVW 5251 Applied Flute (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

**MVW 5252 Applied Oboe (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

**MVW 5253 Applied Clarinet (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

**MVW 5254 Applied Bassoon (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

**MVW 5255 Applied Saxophone (2-4) TA MUS**
PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.

**NGR 5871 Informatics in Nursing and Healthcare (3) NU NUR**
PR: CI. Foundations course with emphasis on essential content and applications in healthcare informatics and clinical systems. Provides understanding of the interdisciplinary issues in medical and nursing informatics and a foundation for those seeking expertise in healthcare informatics. Focus on technologies in healthcare, nomenclature and classification systems, health care documentation, electronic medical records, and web-based technologies for healthcare.

**NSC 1101L Naval Science Laboratory (0) US NVY**
A weekly two-hour laboratory covering professional and military subject matter. Attendance is mandatory for all midshipmen.

**NSC 1110 Introduction to Naval Science (3) US NVY**
Emphasis on the mission, organization, regulations and components of the U.S. Navy and Marine Corps.

**NSC 1140 Sea Power and Maritime Affairs (3) US NVY**
This course deals with the importance of seapower in historical events, including emphasis on worldwide political-military confrontations following the cold war.

**NSC 2121 Naval Ships Systems I (3) US NVY**

**NSC 2212C Navigation/Naval Operations I: Navigation (3) US NVY**
Piloting and celestial navigation theory, principles, and procedures. Tides, currents, weather, use of navigation instruments and equipment, and practicum. Laboratory required.

**NSC 2221 Evolution of Warfare (3) US NVY**
A survey of military history emphasizing principles of warfare, strategy and tactics, and significant military leaders and organizations.

**NSC 2231 Principles of Naval Management I (3) US NVY**
Theory and principles of management, focusing on the officer-manager as an organizational decision maker. Includes interpersonal skills, behavior factors, and group dynamics.

**NSC 2931 Directed Study in Naval ROTC (1-3) US NVY**
PR: Permission of Professor of Naval Science. Intensive individualized study in particular aspects of Naval Science that are not covered in regular course offerings. Enrollment is recommended for NROTC students who are anticipating attending the Naval Science Institute in Newport, RI, during
sophomore/junior summer. Course content and title may vary from term to term.

**NSC 3123 Naval Ships Systems II (3) US NVY**
PR: NSC 2121. Capabilities and limitations of fire control systems and weapons, radar and underwater sound for target acquisition, threat analysis, tracking, weapons selection, delivery, and guidance. Various aspects of explosives, fusing and Naval ordnance.

**NSC 3214C Navigation/Naval Operations II: Seamanship and Ship Operations (3) US NVY**
PR: NSC 2212C. International and inland rules of the road; relative motion-vector analysis; ship handling, employment, and tactics, afloat communications; and operations analysis. Laboratory required.

**NSC 4224 Amphibious Warfare (3) US NVY**
History of amphibious warfare emphasizing doctrine and techniques as well as an understanding of the interrelations of political, strategic, operational, tactical, and technical levels of war from the past.

**NSC 4232 Principles of Naval Management II (Leadership and Ethics) (3) US NVY**
PR: NSC 2231. Integration of professional competencies and qualities of effective leadership with emphasis on moral and ethical responsibilities, accountability, communications and military law for the junior officer.

**NSP 4095 Registered Nurse First Assistant Course (3) NU NUR**
CR: CI. This course will provide a foundation of knowledge and technical skills necessary for the experienced preoperative registered nurse to function in the role of registered nurse first assistant (RNFA).

**NSP 4096 Internship for the Registered Nurse First Assistant (4) NU NUR**
PR: CI. This course provides 120 hours of clinical experiences in the roles and responsibilities and technical skills required of the registered nurse first assistant (RNFA).

**NSP 4485 An Interdisciplinary Perspective in HIV Disease 6A MW LW (3) NU NUR**
Provides an interdisciplinary perspective on HIV disease. Topics include the etiology, spectrum, and treatment of HIV disease; international perspectives; issues of race, gender, and ethnicity; values, ethics, and their influences on responses to HIV; and how the media has shaped the epidemic.

**NSP 4545 Substance Abuse Across the Lifespan (3) NU NUR**
Introduction to concepts of substance abuse and theories of addiction. The applicability of theories and concepts of substance use/abuse to clinical assessment, diagnosis and intervention with client populations across the lifespan is explored.

**NUR 3026 Fundamentals of Nursing Practice and Foundations for Clinical Judgment (4) NU NUR**
PR: NUR 3145; CR: NUR 3026L and NUR 3066. Fundamentals of Nursing Practice and Foundations for Clinical Judgment. Focus is on developing critical thinking and communication skills when applying concepts of health to meet the basic needs of the individual across the life span from within the context of the family.

**NUR 3026L Nursing Fundamentals Clinical (4) NU NUR**
CR: NUR 3026 and NUR 3066. Clinical experiences in the fundamentals of nursing practice and foundations for clinical judgment. Focus is on developing effective communication and critical thinking in applying nursing process, physical assessment, and concepts of health and illness.

**NUR 3066 Physical Examination and Assessment (2) NU NUR**
CR: NUR 3026, NUR 3026L. Focus is on the use of techniques and instruments necessary for the examination of infants, children and adults. Emphasizes assessment phase of critical thinking to enable student to perform evaluations of health status throughout the lifespan.

**NUR 3066L Clinical Experience in Health Assessment - RN (1) NU NUR**
PR: Admission to nursing major or CI. CR: NUR 3066. Clinical experience on history taking, physical assessment skills basic to biopsychosocial assessment and physical examination of adults and children. Emphasizes diagnostic reasoning and identification of alteration in functional health patterns.

**NUR 3125 Pathophysiology for Nursing Practice (4) NU NUR**
PR: Admission to the nursing major or CI. Central concepts of pathophysiology: cells, tissues, organs and systems. Provides essential knowledge base in pathophysiology across the lifespan for professional nursing practice.

**NUR 3145 Pharmacology in Nursing Practice (3) NU NUR**
PR: Admission to the nursing major or CI; CP: NUR 3125. Focus on the basic and clinical concepts of pharmacology in nursing practice. Examines pharmacotherapeutics; pharmacodynamics; pharmacokinetics; adverse reactions and contraindications; therapeutic indications and nursing implications.

**NUR 3215 Medical Surgical Nursing I (3) NU NUR**
PR: NUR 3026, NUR 3026L, NUR 3066, NUR 3125, NUR 3145; CR: NUR 3215 or NUR 5580L. Focuses on nursing assessment, prevention, and management of selected health care problems in adults of all ages. Critical thinking is used to analyze the effects of changes in health status and impact of nursing intervention for: patients with alteration in Fluid and Electrolyte Balance, Hematologic System, Integumentary and Immunologic System, Cardiovascular System, Pulmonary System, Musculoskeletal, Sensory System (Visual/Auditory). Patient teaching is incorporated for each topic.

**NUR 3215L Medical Surgical Nursing Clinical I (4) NU NUR**

**NUR 3535 Psychiatric/Mental Health Nursing (3) NU NUR**
PR: NUR 3026, NUR 3026L, NUR 3066, NUR 3125, NUR 3145; CR: NUR 3535. Focus on clinical intervention using...
critical thinking and communication skills with patients who require complex psychiatric rehabilitative care. Opportunities are offered to apply knowledge of psychopathology and psychopharmacologic therapies across the lifespan.

NUR 3805 Education Transitions for Registered Nurses (3) NUR
PR: Admission to the nursing major. Transition to professional nursing for the registered nurse, its theoretical perspective and empirical bases and essential skills for success in nursing education. Focus on developing a variety of learning strategies and approaches to academic achievement.

NUR 3826 Ethical Legal Aspects in Nursing and Health Care MW (3) NUR
PR: CI. Nursing Majors. Introduction to contemporary bioethical and legal issues confronting health care providers in a variety of settings. Focuses on identification of legal and ethical principles underlying the decision-making process in nursing and health care.

NUR 3843 Problem Solving and Critical Thinking in Professional Nursing I (1) NU NUR
PR: Admission to Nursing major. The course is introduces the theoretical component of problem solving & critical thinking in professional nursing. The focus is developing critical thinking skills specific to problem solving in professional nursing.

NUR 3844 Problem Solving and Critical Thinking in Professional Nursing II (1) NU NUR
PR: NUR 3843. This course provides the opportunity for students to demonstrate achievement in problem solving and critical thinking in the nursing curriculum. The focus is applying critical thinking skills specific to problem solving in professional nursing.

NUR 4165 Nursing Inquiry 6A WRIN (3) NU NUR
PR: Admission to the nursing major or CI. An introductory course in statistics is recommended. An analysis of the research process. Emphasis on identification of researchable nursing problems and evaluations of research that is applicable to nursing practice. Focus on evidence-based practice for nursing.

NUR 4194 An Interdisciplinary Perspective in HIV Disease 6A MW LW (3) NU NUR
Provides an interdisciplinary perspective on HIV disease. Topics include the etiology, spectrum, and treatment of HIV disease; international perspectives; issues of race, gender, and ethnicity; values, ethics, and their influences on responses to HIV; and how the media has shaped the epidemic.

NUR 4216 Medical Surgical Nursing II (4) NU NUR

NUR 4216L Medical Surgical Nursing Clinical II (5) NU NUR
PR: NUR 3026, NUR 3026L, NUR 3066, NUR 3125, NUR 3145, NUR 3215, NUR 3215L. Clinical intervention for patients with selected health problems. Emphasizes
NUR 4645 Substance Abuse Across the Lifespan (3) NU NUR
Introduction to concepts of substance abuse and theories of addiction. The applicability of theories and concepts of substance use/abuse to clinical assessment, diagnosis and intervention with client populations across the lifespan is explored.

NUR 4655 Cultural Diversity in Health and Issues MW (3) NU NUR
Explore the impact of culture on health, illness and the meanings these terms carry for members of differing sociocultural populations. Health-related practices, values, strategies for health care and beliefs among cultural groups will be analyzed.

NUR 4807C Leadership & Education Transitions for RNs (3) NUNUR
PR: Admission to the RN-MS Sequence (NAS/NBM) Professional practice and principles of leadership and management for licensed RNs. Focusses on decision making and managing nursing care using multiple learning strategies for academic success. Clinical experiences build upon a practice background.

NUR 4827C Leadership and Management in Professional Nursing Practice (3) NU NUR
PR: NUR 4216, NUR 4216L, NUR 4636, NUR 4636L Principles of nursing leadership and management with an emphasis on decision-making, priority-setting, delegating, and managing nursing care. Focus on the preparation of the professional nurse to work collaboratively in the interdisciplinary healthcare environment. There will be in depth examination of process improvement with a focus on the quality indicator process. Clinical experiences for registered nurse students will be designed to build upon a practice background.

NUR 4905C Independent Study (1-5) NU NUR
PR: Permission of faculty. Open to majors and non-majors. Individual or group investigation of problems relevant to the health of individuals or groups. Project requirements individually planned with faculty preceptor.

NUR 4930 Registered Nurse First Assistant Course (3) NU NUR
PR: CI. This course will provide a foundation of knowledge and technical skills necessary for the experienced preoperative registered nurse to function in the role of registered nurse first assistant (RNFA).

NUR 4935 Selected Topics In Nursing (1-8) NU NUR
PR: Junior or senior standing or permission of faculty. Content will depend upon student demand and faculty interest and may focus on any area relevant to nursing practice. May involve class, seminar, and/or clinical laboratory.

NUR 4940 Internship for the Registered Nurse First Assistant (4) NU NUR
PR: CI. This course provides 120 hours of clinical experiences in the role of RNFA collaboratively planned by students, faculty, and agency personnel. Opportunity to synthesize theory and clinical practice for professional nursing.

OCE 2001 Introduction to Oceanography NS CANP (3) MS MSC
This is a class in basic oceanography covering chemical (what is the sea made of), physical (tides, currents, waves), geological (ocean floor and coasts) and biological (all life in the oceans) aspects, and their interactions.

OCE 4930 Selected Topics in Marine Science (1-4) MS MSC
Selected topics in marine science including marine biology, marine chemistry, marine geology and geophysics, physical oceanography, and interdisciplinary topics relating to marine environments.

ORI 2000 Introduction to Communication As Performance (3) AS SPE
Designed to develop proficiency in the understanding and oral communication of literary and other written materials.

ORI 3950 Communication As Performance Laboratory (1-3) AS SPE
PR: SPC 2608 AND COM 2000 AND ORI 2000, each with a grade of C or above, or CI. Focuses on theory and practice of identity and culture as performed in ritual, community, and aesthetic contexts. Majors only; nonmajors by permit only. May not be repeated for credit.

ORI 4120 Performance of Poetry (3) AS SPE
PR: SPC 2608 AND COM 2000 AND ORI 2000, each with a grade of C or above, or CI. Critical appreciation of lyric and narrative poetry and communication of that appreciation to audience. Study of poetic theory and prosodic techniques.

ORI 4150 Performing Nonfiction (3) AS SPE
PR: ORI 2000. Explores the genre of nonfiction, including diaries, memoirs, travelogues, new journalism, personal essays, and weblogs, through performance. For majors; nonmajors by permit. May not be repeated for credit.

ORI 4220 Performing Young Adult Literature (3) AS SPE
PR: ORI 2000. Performance of literature written for young adults with an emphasis on cultural values and beliefs. For majors; nonmajors by permit only. May not be repeated for credit.

ORI 4310 Group Performance of Literature (3) AS SPE
PR: SPC 2608 AND COM 2000 AND ORI 2000, each with a grade of C or above, or CI. Designed to introduce the student to and give experience in various forms of group approaches to performance.

ORI 4320 Writing for Performance (3) AS SPE
PR: ORI 2000. Explores the intersection of writing and performance as aesthetic and communicative practices. For majors; nonmajors by permit only. May not be repeated for credit.

ORI 4410 Performance Art (3) AS SPE

ORI 4460 Performing Relationships (3) AS SPE
PR: ORI 2000. Explores interpersonal, organizational, and
intercultural theories of human relationships as realized in literary texts through performance. For majors; nonmajors permit only. May not be repeated for credit.

ORI 4931 Performance and Video (3) AS SPE
PR: ORI 2000. CR: ORI 3950. This course features adaptation, direction, and performance of literature for video productions.

ORI 5930 Topics in Performance Genres (3) AS SPE
Variable topics course.

PAD 3003 Introduction to Public Administration SS (3) AS PAD
Examination of organizational behavior and change, policy process, public management, financial administration, and personnel management from the perspective of public and social delivery.

PAD 4144 Nonprofit Organizations and Public Policy 6A MW (3) AS PAD
Role and importance of third sector (voluntary) organizations in American society; focus on public policy through service in a voluntary organization.

PAD 4204 Public Financial Administration (3) AS PAD
Analysis of problems in the growth and development of public budgetary theory and Federal budgetary innovations.

PAD 4419 Personnel & Supervision in Today’s Organizations (3) AS PAD
Introduces students to concepts, principles and practices of personnel management and supervision that influence the attainment of desired performance goals in today's public and not-for profit organizations. Course participants will explore issues that influence the successful management of human resources in dynamic employment settings.

PAD 4712 Managing Information Resources in the Public Sector (3) AS PAD
Introduces students to the fundamental concepts, theories, principles and practices in public information management. Internet access is required.

PAD 4930 Selected Topics in Public Administration and Public Policy (3) AS PAD
Selected issues and topics in Public Administration and Public Policy with course content based on student demand and instructor’s interest. May be repeated for up to 6 credits as topics vary.

PAD 5035 Issues in Public Administration and Public Policy (3) AS PAD
Sr. & GS only. Selected issues and topics in Public Administration and Public Policy.

PAD 5044 Environment of Public Administration (3) AS PAD
Examination of the legal, political, and ethical environment in which public managers work.

PAD 5333 Concepts and Issues in Public Planning (3) AS PAD
PR: URP 4050 or URP 6056, GS or Sr. Analysis of basic concepts, issues, and strategies of planning, policy determination, collection of information, and decision-making.

PAD 5605 Administrative Law and Regulation (3) AS PAD
An examination of the constitutional and statutory base and limitations of the administrative process, administrative adjudication, rule-making, and the judicial review of such actions. An examination of the Constitutional and statutory acts, rules, regulations and their relationship with other branches of government.

PAD 5700 Research Methods in Public Administration (3) AS PAD
PR: MPA, GCPM, and GCNM majors only. Research design; skills in public agencies. Must be prepared to demonstrate proficiency in EXCEL, Access, and other relevant software programs.

PAD 5807 Urban and Local Government Administration (3) AS PAD
GS or Sr. Analysis of the role of the administrator at the municipal level, the division of functions, policy formation, alternative governmental structures, effects on the administrative process.

PAD 5836 Comparative Public Administration (3) AS PAD
GS or Sr. How organizations and managers perform within a particular environment, potential impact of innovation, and how service is accomplished in a variety of socio-economic environments.

PCB 1511 Molecular and Human Genetics (3) US DEA
PR: Acceptance in USF-Hillsborough County Biomedical and Life Science Program. Molecular genetics with applications to biomedical science; genetic engineering; chromosomes, their molecular architecture, abnormalities, and other topics. Laboratory included.

PCB 1910 Topics in Biomedical Science (3) US DEA
PR: Acceptance in USF-Hillsborough County Biomedical and Life Science Program. Designed to initiate high school students to the fundamentals of scientific research. Students are given lectures and perform laboratory exercises in pathogenic microbiology, immunology, marine biology, and plant biochemistry. Most of their time is spent working on individual research projects.

PCB 3023 Cell Biology (3) AS BCM
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course or STA 2023. CP: CHM 2210. A survey of the marine environment, the types of organisms found inhabiting a variety of marine habitats, and the adaptations of the organisms to those habitats. Emphasis is placed on shallow water Florida environments. Lecture only.

PCB 3023L Cell Biology Laboratory (1) AS BCM
CP: PCB 3023. Laboratory portion of Cell Biology. Metabolic processes within the cell.

PCB 3043 Principles of Ecology (3) AS BIN
BSC 2010, BSC 2010L, BSC 2011, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course or STA 2023. An introduction to the basic principles and concepts of ecology at the ecosystem, community, and population level of organization. Lecture only.

PCB 3043L Principles of Ecology Laboratory (1) AS BIN

PCB 3063 General Genetics (3) AS BCM
BSC 2010, BSC 2010L, BSC 2011, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course or STA 2023. CP: CHM 2210. Introduction to genetics including the fundamental concepts of Mendelian,
molecular and population genetics. Lecture only.

PCB 3063L General Genetics Laboratory (1) AS BCM
CP: PCB 3063. Laboratory investigation techniques in general genetics including Mendelian and non-Mendelian relationships, and gene interactions.

PCB 3712 General Physiology (3) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L and CHM 2045, CHM 2046 and MAC 1105 or higher-level MAC course or STA 2023. Comparative analysis of animal structure and function: organ systems and activities of body tissue and organs. Functional responses of plants to both internal and environmental signals lecture only.

PCB 3713L General Physiology Laboratory (1) AS BIN
PR: PCB 3712. Laboratory portion of General Physiology.

PCB 4024 Molecular Biology of the Cell (3) AS BCM
PR: PCB3023, PCB3063. This lecture-based course will focus on advanced principles of molecular cell biology with emphasis on protein structure and function in key cellular pathways. The course is suitable for majors/nonmajors.

PCB 4026 Molecular Biology of the Gene (3) AS BCM
PR: PCB3023, PCB3063. This lecture-based course will provide fundamental knowledge of scientific concepts and principles of the molecular aspects of DNA metabolism in pro- and eukaryotes for majors/nonmajors.

PCB 4234 Principles of Immunology (3) AS BCM
PR: PCB 3023 or PCB 3063 or MCB 3020C and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 and CHM 2211. Emphasis is on organization and functions of vertebrate immune system. Basic cellular and molecular mechanisms of immune responses in health and disease are addressed as well as the principles and applications of immunological methods. Lecture only.

PCB 4522C Experimental Genetics (3) AS BCM
Experimental analysis of genetic systems. Lec-Lab.

PCB 4663 Human Genetics (3) AS BCM
PR: PCB3023, PCB3063. A lecture-based course building upon principles introduced in Cell Biology and Genetics to explore advanced topics applied to human heredity and inherited disorders. Instruction includes problem solving, group activities, internet and individual projects.

PCB 4674 Organic Evolution (3) AS BIN
PR: PCB 3063. An introduction to modern evolutionary theory. Lecture on population genetics, adaptations, speciation theory, phylogeny, human evolution and related areas. Lec-dis.

PCB 4723L Animal Physiology Laboratory (1) AS BIN
CR: PCB 4723. Laboratory portion of Animal Physiology.

PCB 4744 Mammalian Physiology (3) AS BCM
PR: PCB 3023. Detailed examination of mammalian physiology focusing on the cellular and molecular mechanisms that underlie and regulate physiological function.

PCB 4843 Principles of Neuroscience (3) AS BCM
PR: PCB 4723 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and PHY 2053. CP: CHM 2211. Study of the mammalian brain's structure and function, with an emphasis on human neuroanatomy, neuropharmacology, and neurophysiology. Topics include brain imaging, dementia, mechanisms of learning/memory, and neuropathological processes. Lecture only.

PCB 5256 Developmental Mechanisms (3) AS BCM
PR: ZOO 4695. Topics in modern developmental biology to be covered in lecture and through readings so as to gain a detailed understanding of cellular and molecular mechanisms of differentiation and pattern formation in various eukaryotic species for majors/nonmajors.

PCB 5307 Limnology (3) AS BIN
PR: PCB 3043 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and PHY 2053. CP: CHM 2211. An introduction to the physical, chemical, and biological nature of fresh-water environments. Lecture only.

PCB 5307L Limnology Laboratory (1) AS BIN
PR: CI. CP: PCB 5307. Laboratory portion of Limnology. Laboratory and field experience in the area of aquatic ecology.

PCB 5415 Behavioral Ecology (3) AS BIN
PR: PCB 3043 and PCB 3063 or PCB 4674 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: CHM 2211. An emphasis on the evolutionary mechanisms that influence an organisms behavioral responses to environmental events. The theoretical framework is presented and analyzed. Lecture only.

PCB 5525 Molecular Genetics (3) AS BCM
PR: PCB 3063, CI. Detailed examination of DNA, RNA and protein synthesis; the effects of mutations on proteins, cellular control; selected aspects of viral, bacterial, and fungal genetics.

PCB 5616 Molecular Phylogenetics (3) AS BCM
PR: PCB 3063. Provides a theoretical (lecture) and practical (computer lab) framework to allow students to carry out phylogenetic analysis using molecular data. Majors or nonmajors.

PEL 1121 Golf I (2) ED EDJ
S/U only. Introductory experience in the sport of golf. Fundamental skills, information, strategy, and participation.

PEL 1341 Tennis I (2) ED EDJ
S/U only. Introductory experiences in the sport of tennis. Basic skills, playing strategies, lecture, demonstration, and participation.

PEL 2122 Golf II (2) ED EDJ
S/U only. Continuation of PEL 1121. Emphasis on course play and refinement of strokes.

PEL 2342 Tennis II (2) ED EDJ
S/U only. Continuation of PEL 1341L. Refinement of basic skills, supplementary strokes, greater emphasis on tactics and playing strategies.

PEL 2441 Racquetball (2) ED EDJ
S/U only. Development and refinement of the skills and strategies of racquetball with opportunity for competition and tournament play.

PEM 2131 Weight Training (2) ED EDJ
S/U only. Knowledge and techniques necessary for increasing muscle function. Assessment of status and development of a personal program.

PEM 2441 Karate (2) ED EDJ
S/U only. Introductory experiences in the sport of Karate. Fundamental skills, strategy, information, and participation.

PEM 2930 Selected Topics (1-2) ED EDJ
S/U only. DPR. Activities offered are selected to reflect student need and faculty interest.
PET 1121 Swimming I (2) ED EDJ
S/U only. Development and refinement of the essential skills and information necessary for enjoying swimming. Emphasis on personal safety.

PET 2113 Lifeguard Training (2) ED EDJ
PR: PET 1121 or equivalent. S/U only. Knowledge and skills necessary for saving the lives of others in the event of aquatic emergency. ARC certification offered.

PET 2136 Skin & Scuba Diving (2) ED EDJ
PR: PET 1121 or equivalent. S/U only. Development of the essential skills and knowledge necessary for enjoying the sport of Skin & Scuba Diving. Correct utilization and care of equipment; emphasis on personal safety.

PET 2622C Care and Prevention of Physical Injuries (3) ED EDP
DPR. Principles and techniques of conditioning athletes for competition; prevention and care of injuries in physical education and athletic activities.

PET 3010 Personal/Professional Development Seminar (3) EDEDP
PR: Entry into the K-12 Physical Education Program. The purpose of this course is to introduce students to the historical, philosophical, and sociological foundations of physical education. It is also designed to help students understand all aspects of becoming a professional.

PET 3012 Professional Development in Physical Education I (1) ED EDP
PR: CC. This is the first of a two course sequence of orientation and socialization into the profession and is intended to develop dispositions necessary for successful professional practice.

PET 3013 Professional Development in Physical Education II (1) ED EDP
PR: PET 3012. This is the second of a two-course sequence of orientation and socialization into the profession and is intended to develop dispositions necessary for successful professional practice.

PET 3031 Motor Behavior (3) ED EDP
PR: CC. Study of the assessment, evaluation and motor development performance of children and adolescents and application of principles of motor skills acquisition in physical education instruction. Open to non-majors.

PET 3211 Stress Management (2) ED EDP
PR: Admission to the Exercise Science Program. This course will focus on the health and psycho physiological aspects of stress. A variety of topics will be addressed for self-regulating stress such as changing perceptions, time management, communication, biofeedback, exercise, and muscle relaxation.

PET 3310 Kinesiology (3) ME ATH
A study of the structure and function of the skeletal and muscular systems and of mechanical principles related to psycho-motor performance. Open to non-majors.

PET 3312 Biomechanics (3) ED EDP
PR: Admission to the Exercise Science Program or Permission of Instructor. This course will focus on the structure and function of the skeletal and muscular systems as well as the mechanical principles related to motor performance.

PET 3314 Professional Development Seminar (1) ED EDP
PR: Admission to the Exercise Science Program. This course will introduce the student to the exercise science field. Focus will be on professional conduct, job opportunities, organizations, certifications, and trends/issues. Students will develop skills to critique fitness/wellness information.

PET 3351 Exercise Physiology I (3) ME ATH
A study of the effects of physical activity on the body. Topics include acute and chronic adaptation of the cardiovascular, muscular, metabolic, hormonal, and energy systems to exercise. Open to non-majors.

PET 3353 Exercise Physiology (3) ED EDP
PR: Admission to the Exercise Science Program or Permission of Instructor. This course is designed to explore physiological adjustments and adaptations that occur as the result of exercise. The main focus will be on exercise-induced changes in the metabolic, cardiovascular, respiratory, neuromuscular, and endocrine systems.

PET 3361 Nutrition for Fitness and Sport (3) ED EDP
PR: Admission to the Exercise Science Program. This course will address weight management/weight loss, common diets, dietary supplements, ergogenic aids, and eating disorders. Content will focus on nutrition and weight management guidelines established by the American College of Sports Medicine.

PET 3365 Physical Activity Epidemiology (3) ED EDP
PR: Admission to the Exercise Science Program. A presentation of the background and main concepts of epidemiology and discussion and summary of original research. Major topics include coronary artery disease, cerebrovascular disease, peripheral vascular disease, diabetes, arthritis, and COPD.

PET 3384 Exercise Testing and Prescription (3) ED EDP
PR: Admission to the Exercise Science Program. This course students will become proficient in performing a variety of exercise tests and prescribe appropriate exercises for aerobic capacity, muscular strength and endurance, body composition, flexibility and other parameters of physical fitness.

PET 3404 Emergency Response and Planning (3) ED EDP
PR: Admission to the Exercise Science Program. Students will develop emergency response knowledge and skills through ARC first aid emergency response, CPR/AED certifications and will proactively assess, develop and implement a plan of response for emergency situations in fitness/wellness centers.

PET 3421 Curriculum and Instruction in Physical Education (3) EDP
Physical Education majors only. Development of knowledge and skills related to the instruction process of physical education. Preparation of materials and planning instruction.

PET 3441 Instructional Design and Content: Middle School Physical Education (3) ED EDP
Physical Education majors only. The development of physical education content and instructional practices for middle school students. The focus is upon matching appropriate content and learning experiences to the unique needs of the pre- and early adolescent learner.

PET 3613 Measurement and Evaluation in Athletic Training (3) ME ATH
PR: PET 3696. This course is an introduction to the study
and practice of measurement and evaluation techniques used in the assessment and rehabilitation of orthopaedic injuries. AT majors only. Credit not repeatable.

PET 3617C Upper Extremity Assessment (3) ME ATH
Athletic Training majors only. The study and practice of techniques used when assessing athletic injuries to the upper extremity, head and spine.

PET 3618C Lower Extremity Assessment (3) ME ATH
Athletic Training majors only. The study and practice of techniques used when assessing injuries to the lower extremity, hip, pelvis, low back and gait.

PET 3621C Athletic Training Techniques (3) ME ATH
Athletic Training majors only. Overview course including basic components of the athletic training profession including the prevention, recognition and evaluation and immediate care of athletic injuries. Medical terminology, emergency procedures, and taping procedures will be covered.

PET 3640 Adapted Physical Education (3) ED EDP
Physical Education majors only. A study of characteristics, programming needs and teaching of physical education for students with disabilities.

PET 3660 Athletic Training Administration and Policy (3) ME ATH
Athletic Training majors only. Analysis and application of organizational skills and administrative structure of the athletic training profession, including current theory and administration of physical education programs. CR: PET 3621C. Athletic Training majors only. Performance of basic athletic training skills under the supervision of a professional at various sites. Students will develop competence in introductory and mid-level athletic training skills. Weekly seminar also required.

PET 3670L Clinical Experience in Athletic Training II (3) ME ATH
PR: PET 3671L. Athletic Training majors only. Performance of basic athletic training skills under the supervision of a professional at various sites. Students will develop competence in introductory athletic training skills. A weekly seminar is also required.

PET 3671L Clinical Experience in Athletic Training I (3) ME ATH
PR: PET 3621C. Athletic Training majors only. Performance of basic athletic training skills under the supervision of a professional at various sites. Students will develop competence in introductory athletic training skills. A weekly seminar is also required.

PET 3696 Documentation in Athletic Training (1) ME ATH
PR: Admission to Athletic Training Program. CR: PET 3613. Designed to prepare athletic training students with an introduction to the foundation of appropriate terminology, documentation, and communication methods as they relate to athletic training and sports medicine. Majors only.

PET 3713 Theory and Practice of Teaching Group Exercise (3) ED EDP
PR: Admission to the Exercise Science Program. In developing group exercise leadership skills, students will learn how to apply principles of teaching safe and effective exercises designed to enhance cardiovascular endurance, muscular strength/endurance, and flexibility.

PET 3931 Selected Topics in Sports Medicine (1-3) ME ATH
DPR. Topics offered are selected to reflect student need and faculty interest.

PET 3940 Practicum in Fitness/Wellness (3) ED EDP
PR: Admission to the Exercise Science Program. This course will provide the initial field experience in a community fitness/wellness center serving general populations. Students will gain practical experience with regard to teaching group exercise and conducting fitness testing and prescription.

PET 4093 Strength and Conditioning (3) ED EDP
PR: Admission to the Exercise Science Program. This course will provide students with the information necessary for designing and implementing a successful strength and conditioning program through assessment and analysis of fitness and sport movement.

PET 4141 Trends and Tasks-Elementary Physical Education (3) ED EDP
Taken concurrently with PET 4942 Physical Education Internship: Elementary. Physical Education Majors only. Current trends are evaluated from a historical and philosophical perspective. Non-teaching tasks are identified as part of the professional role. Evaluate and continue personal-professional development plan developed in previous semesters.

PET 4142 Trends and Tasks-Secondary Physical Education (1) ED EDP
Taken concurrently with PET 4944 Physical Education Internship: Secondary. Physical Education Majors only. Current trends are evaluated from a historical and philosophical perspective. Non-teaching tasks are identified as part of the professional role. Evaluate and continue personal-professional development plan developed in previous semesters.

PET 4219 Exercise Psychology (3) ED EDP
PR: Admission to the Exercise Science Program. A presentation of the basic concepts related to exercise behavior. The content will include topics related to the psychosocial dimensions of exercise behavior to include participation, motivation, and adherence. Theoretical models will also be presented.

PET 4304 Principles and Issues in Coaching (3) ED EDP
Physical Education majors only. The application of principles from philosophy, psychology, sociology, and physiology to competitive athletics and coaching.

PET 4353 Exercise Physiology II (3) ED EDP
PR: PET 3351. A study of Exercise Physiology focusing on the adult. Includes specific populations such as the obese, heart patients, arthritics, elderly, and high performance athletes. Open to non-majors.

PET 4384 Exercise Prescription for Strength & Conditioning (3) ME ATH
PR: PET 3351. Athletic Training majors only. Techniques in conducting health-fitness test and exercise prescription for adults. Includes cardiovascular strength, flexibility, body composition, health risk testing, exercise prescribing, and monitoring.

PET 4401 Class Management, Safety, Ethics, Law, and Organization and Administration of Physical Education (3) ED EDP
Physical Education majors only. This course will examine the various classroom management approaches, professional ethics, school law, safety, and the organization and administration of physical education programs.
PET 4402 Planning and Evaluating Fitness/Wellness Programs (3) ED EDP
PR: Admission to the Exercise Science Program. This course will focus on the design of high quality fitness/wellness programs in worksite and other settings. Students will learn and apply the major components of program planning – needs assessment, development, implementation, and evaluation.

PET 4406 Individualized Fitness/Wellness Programming (3) EDEDP
PR: Admission to the Exercise Science Program. In this course students will learn how to assess, evaluate, and design safe and effective programs for individual clients. Students will also learn how to incorporate appropriate activities for specialized clients or populations.

PET 4416 Administration of Fitness/Wellness Centers (3) EDEDP
PR: Admission to the Exercise Science Program. This course will examine management issues in the areas of human resources, budgeting, marketing, legal liability, and risk management. Students will develop skills to manage safe/effective programs and services in various fitness/wellness settings.

PET 4432 Instructional Design and Content: Physical Education Elementary (3) ED EDP
Physical Education majors only. This is the first in a two-course sequence in which students study movement forms and instructional processes suitable for elementary age students. Majors only.

PET 4433 Instructional Design and Content: Physical Education Elementary II (3) ED EDP
Physical Education majors only. This course prepares students to select, plan, conduct complex movement experiences for students K-6.

PET 4442 Instructional Design and Content: Physical Education Secondary (3) ED EDP
Physical Education majors only. Development of knowledge and skills related to the teaching of selected movement activities such as team sports, gymnastics, and physical fitness. Focus is on understanding mechanical principles utilized within those activities as well as on instructional progression and the preparation of materials for instruction at the secondary school level.

PET 4550 Clinical Exercise Testing and Prescription (3) ED EDP
PR: Admission to the Exercise Science Program. A presentation of concepts related to the clinical aspects of fitness assessment and exercise programming. Clinical conditions that will be considered include: cardiovascular disease, pulmonary disease, metabolic disease, arthritis, and geriatrics.

PET 4625 Advanced Athletic Training (3) ME ATH
PR: PET 3617C and PET 3618C. Athletic Training majors only. Advanced techniques in athletic training including orthopedic assessment, casting and bracing and imaging techniques.

PET 4627 General Medical Conditions in the Athlete (3) ME ATH
PR: PET 3617C and PET 3618C. Advanced theory of pathology in injury, management of tissue and bone healing environments, disease, internal illness and injury and other general medical conditions. Issues related to radiology and pharmacology are also discussed.

PET 4632C Therapeutic Modalities (3) ME ATH
Athletic Training majors only. This course provides an introduction to the theoretical and practical applications of modalities for the prevention, management and rehabilitation of physically active individuals. Concepts pertaining to the use of pharmacology, thermotherapy, cryotherapy, electrical stimulation, hydrotherapy, fluidotherapy, ultrasound, biofeedback and manual techniques will be emphasized.

PET 4633C Therapeutic Rehabilitation (3) ME ATH
Athletic Training majors only. Theories and applications of comprehensive therapeutic treatment and rehabilitation programs for injuries commonly sustained by the physically active.

PET 4672L Clinical Experience in Athletic Training III (3) ME ATH
PR: PET 3671L. Athletic Training majors only. Performance of mid-level athletic training skills under the supervision of a clinical instructor at various sites. Students develop competence in mid-level and advanced athletic training skills. Weekly seminar also required.

PET 4673L Clinical Experience in Athletic Training IV (3) ME ATH
PR: PET4672L. Athletic Training majors only. Continuation of clinical experience utilizing new skills under the direction of an NATABOC certified/state licensed athletic trainer accompanied by a one-hour seminar each week. This course provides students with the opportunity to develop competence in a variety of mid-level and advanced athletic training skills. Students may be assigned to a USF athletic team and/or one or more off-campus clinical affiliations. Students at this level will develop instruction skills by acting as peer-supervisors for level I, II and III students.

PET 4905 Independent Study: Professional Physical Education (1-4) ED EDP
PR: DPR. S/U only. Specialized independent study determined by the student's needs and interests.

PET 4908 Independent Study in Sports Medicine (1-3) ME ATH
S/U Only. Specialized independent study determined by the student's needs and interests. Repeatable 1 time.

PET 4931 Selected Topics in Sports Medicine (3) ED EDP
PR: PET 3310, PET 3351. Pertinent and timely topics in sports medicine will be discussed. Topics and issues may vary but could include psychology of injury, environmental issues, reimbursement, pharmacology, ethical/legal issues, and performance enhancement. A.T. majors only.

PET 4933 Seminar in Sports Medicine 6A LW WRIN (3) ME ATH
PR: PET 4627. The advanced study, writing, reflection and discussion of current athletic training issues. Emphasis is on professional preparation, scientific inquiry, credentialing, governance, employment practices, ethics, and scope of practice issues.

PET 4935 Case Studies in Athletic Health Care (3) ME ATH
Athletic Training majors only. Capstone course intended to provide a unifying opportunity to utilize concepts, principles and skills learned from other athletic training courses.
PET 4941 Internship in Fitness/Wellness (9) ED EDP
PR: Admission to the Exercise Science Program. This course will provide the final field experience in a community fitness/wellness center serving both general and special populations. Practical experiences will focus on all aspects of program development, delivery, and management.

PET 4942 Physical Education Pre-Internship: Elementary (3) ED EDP
PR: CC. A part-time internship in elementary school physical education. Focus on the nature of the total elementary school curriculum, characteristics of students, and application of appropriate content and instructional competencies.

PET 4944 Physical Education Pre-Internship: Secondary (3) EDED P
CC. A part time internship in middle or high school level physical education with focus on the relationship of physical education to the needs of the adolescent and the implementation of appropriate content and methodology.

PET 4946 Internship in Physical Education: Elementary (6) EDED P
CC. A full-time internship in the elementary school in which the student undertakes the full range of teaching responsibilities in elementary physical education.

PET 4947 Internship in Physical Education: Secondary (6) EDED P
S/U only. Physical Education majors only. A full-day internship in middle, junior or senior high school physical education programs with focus on the implementation of appropriate content and methodology to meet the needs of secondary students.

PGY 2110C Color Photography (3) TA ART
Development of knowledge and skills of color photography for publication and presentation. Emphasis is on the use of transparency and negative color materials in their application to the media.

PGY 2401C Beginning Photography (3) TA ART
Introduction to the expressive possibilities of photographic media. Projects and assignments will introduce students to both traditional and experimental ways of working with light-sensitive materials with an emphasis on the interdependence of form, technique, and concept. The course will also provide an overview of significant trends and directions in contemporary art photography.

PGY 3001 Photography in American Culture (3) AS AMS
PR: Majors only. A survey of photography as an art and a craft in America since the mid-nineteenth century. Attention devoted to technological innovations, leading personalities, major movements, and memorable icons. Open to majors and non-majors.

PGY 3410C Intermediate Photography (3) TA ART
PR: ART 2201C, ART 2203C, ART 2301C, ART 3310C, ARH 2050, ARH 2051, PGY 2401C. Majors only. A mid level course expanding the student’s visual and technical skills while establishing the beginning of a personal artistic direction. Repeatable up to 9 hours.

PGY 3610C Photojournalism I (3) AS COM

PGY 3620 Photojournalism II (3) AS COM
PR: PGY 3610C. Laboratory required. Advanced process and practice of photography for publication.

PGY 3820C Digital Media I (3) TA ART
Restricted to majors. This course builds upon the concepts introduced in Introduction to Multimedia Systems and focuses upon digital photographic creation and editing.

PGY 3930C Special Topics: Photography (3) TA ART
PR: ART 2201C, ART 2203C, ARH 2050, ARH 2051, ART 2301C, ART 3310C, PGY 2401C, PGY 3410C. Majors only. A mid-level course expanding the student’s visual and technical skills while establishing the beginning of a personal artistic direction by exposing the student to new ideas, technical skills and genres, including, but not limited to: color photography, digital photography, non-silver and documentary photography. Repeatable up to 9 hours.

PGY 4420C Advanced Photography (3) TA ART
PR: PGY 3410C (3 cr.), PGY 3930C (9 cr.) and a 3.25 major GPA. Majors only. Continued problems in photography. May be repeated.

PGY 4822C Digital Media II (3) TA ART
Restricted to majors. This course builds upon the concepts introduced in Digital Media I and focuses upon digital photographic, web and digital video creation.

PGY 5425C Art Photography III (4) TA ART
PR: CI. Advanced work in photography and related media leading to development of personal/expressive statements.

PHC 3302 Introduction to Environmental & Occupational Health (3) PH EOH
Introduces the principles of environmental health from a public health perspective. This course is designed for students with an interest in the environment, assessment of risk, human health issues, and control strategies to reduce health risks.

PHC 4030 Introduction to Epidemiology (3) PH EPB
Course provides an overview of epidemiological methods and the application to understanding health- and non- health issues. Students will develop critical thinking skills and apply the concepts applied problems, both in and outside the field of health.

PHC 4069 Biostatistics in Society (3) PH EPB
This course exposes students to the role of biostatistics in advancing healthcare and improving health through landmark studies and cases in a wide range of fields, including clinical trials, epidemiology, environmental studies, and healthcare evaluation.

PHC 4101 Introduction to Public Health (3) PH PHC
A survey of policies and programs in public/community health with emphasis on specific needs and problems of Florida.

PHC 4406 Informed Decision Making in Public Health (3) PH EPB
This course provides the skills, data and information for students to become informed consumers when making decisions regarding their health and safety. There are no prerequisites required.

PHC 4542 Stress, Health and College Life (3) PH CFH
The purpose of this course is to examine the relationship between stress, as a multi-casual concept, health and disease. Focus areas include: the historical evolution and
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<tr>
<th>Course Code</th>
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<th>Credits</th>
<th>Core Requirement(s)</th>
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<tr>
<td>PHH 4720</td>
<td>Foundation to Professional Writing in Public Health (3) PH EPB</td>
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<td>PHC 4931</td>
<td>Health Care Ethics (3) PH EOH</td>
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<td>Field Experiences in Public Health (2) PH EPB</td>
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<td>Contemporary Philosophy 6A MW (3) AS PHI</td>
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<td>American Philosophy 6A MW (3) AS PHI</td>
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<td>PHI 4820</td>
<td>Chinese Philosophy (3) AS PHI</td>
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**PHH 4720: Foundation to Professional Writing in Public Health**
- Provides students the opportunity to learn about all aspects of professional writing techniques including grammar and spelling errors, writing styles, authorship, reference and citation systems, and guidance for scientific communication.

**PHC 4931: Health Care Ethics**
- Provides students the opportunity to learn about the multiple ways to view controversial topics in public health. It covers current public health topics including biomedical issues, social and behavioral factors, and environmental issues.

**PHC 4942: Field Experiences in Public Health**
- This course provides students with an overview of field experiences in public health. Representatives from public health organizations will speak about worksites. Students will observe public health professionals in their practice environment.

**PHC 5933: Special Topics**
- Provides students the opportunity to learn about the multiple ways to view controversial topics in public health. It covers current public health topics including biomedical issues, social and behavioral factors, and environmental issues.

**PHI 2101: Introduction to Formal Logic 6A QM CAQR (3) AS PHI**
- This course is an introduction to the basic terms, concepts, and methods of formal logic.

**PHI 2630: Contemporary Moral Issues SS (3) AS PHI**
- Open to all students. A study of contemporary moral issues concerning racism, sex, sexism, abortion, poverty, crime, war, suicide, and human rights in general.

**PHI 2631: Ethics and Business SS (3) AS PHI**
- An application of traditional ethical theories to contemporary problems in business.

**PHI 3130: Formal Logic 6A CAQR (3) AS PHI**
- PR: PHI 2101 or MGF 1106 or MGF 1107 or one semester of calculus. A study of predicate calculus, predicate calculus with identity, formal semantics, and elementary metalogic. Strongly recommended for philosophy majors.

**PHI 3404: Philosophy of Science (3) AS PHI**
- How is science different from other methods of inquiry about the world? What distinguishes science from pseudoscience? From religion? How we do test scientific theories? What are the factors that lead scientists to accept a theory?

**PHI 3633: Biomedical Ethics (3) AS PHI**
- This course will focus on the ethical issues arising from advances in medical practice, delivery of health care, and scientific research.

**PHI 3636: Professional Ethics (3) AS PHI**
- An examination of the ethical problems that professionals will face in the complex, global society of the next few decades: confidentiality, divided loyalty, racism/sexism, etc.

**PHI 3640: Environmental Ethics SS (3) AS PHI**
- A study of alternative theories of environmental ethics, including the application of these theories to contemporary environmental problems, such as pollution, resource depletion, species extinction, and land use.

**PHI 3700: Philosophy of Religion 6A SS (3) AS PHI**
- Analysis of religious experience and activity and examination of principal religious ideas in light of modern philosophy.

**PHI 3905: Directed Study (1-4) AS PHI**
- PR: CI. Approval slip from instructor required. Individual study directed by a faculty member.
PHI 3930 Selected Topics (1-4) AS PHI
PR: CI. Selected topics according to the needs of the student.

PHI 4073 African Philosophy MW (3) AS PHI
A descriptive and analytical study of African philosophical thought, featuring reflective comparisons of African and Western categories of thought.

PHI 4300 Theory of Knowledge 6A MW (3) AS PHI
An examination of human knowledge; its scope and limits, and an evaluation of evidence, criteria of truth, the nature of belief, conditions for meaningfulness, theories of perception, and a study of memory and sense perception in the four major fields of nature, history, personal experience, and the a priori.

PHI 4320 Philosophy of Mind 6A MW WRIN (3) AS PHI
A study of historical and current issues in philosophy of mind, including the nature and status of mind, mind/body dualism, the relationship of mind and body, the problems of other minds, the physical basis for intelligence.

PHI 4632 Feminist Ethics MW (3) AS PHI
A study of the varied approaches to moral reasoning taken by feminist ethical writers such as Wollstonecraft, Mill, Gilligan, Daly, Hoagland and others.

PHI 4670 Contemporary Ethical Theory (3) AS PHI
A survey of contemporary ethical theory, focusing both on the literature about the status of ethical theorizing—moral skepticism, moral nihilism, narrative ethics—and on specific types of theories—deontological theories, consequentialist theories, rights-based theories, virtue theories.

PHI 4800 Aesthetics 6A MW (3) AS PHI
A study of traditional and contemporary aesthetic theories with emphasis on creative process, the nature of the art work, the aesthetic response, expressiveness, form and content, as well as art and morality.

PHI 4905 Directed Study (1-4) AS PHI
PR: CI. Approval slip from instructor required. Individual study directed by a faculty member.

PHI 4930 Selected Topics (1-3) AS PHI
PR: CI. Approval slip from instructor required. Selected topics according to the needs of the senior students.

PHI 4938 Philosophy Capstone Seminar 6A CPST (3) AS PHI
PR: Junior or senior standing; declared philosophy major. Exit course for philosophy majors. Topics will vary at instructor’s discretion, but are expected to span conventional boundaries between the branches of philosophical inquiry.

PHI 5135 Symbolic Logic (3) AS PHI
PR: PHI 2101 or CI. Study of topics such as the following: Metatheory of propositional and predicate logic, related metatheatetic results, alternative logic.

PHI 5225 Philosophy of Language (3) AS PHI
PR: Eight hours of philosophy, major in linguistics, or CI. An examination of semantically, syntactically, and functionally theories of language with special attention given to the problems of meaning, linguistic reference, syntactical form, and the relations between scientific languages and ordinary linguistic usage. Seminar format.

PHI 5913 Research (1-4) AS PHI
PR: CI. Approval slip from instructor required. Individual research supervised by a faculty member.

PHI 5934 Selected Topics (1-3) AS PHI
PR: CI. Approval slip from instructor required. Selected topics according to the needs of the student.

PHM 3020 Philosophies of Love and Sex (3) AS PHI
Discussion of Philosophies of Love/Sex of Plato, Aristotle, Epicurus, Aquinas, Hume, Kant, Schopenhauer, Russell, Sartre, Marx, etc.

PHM 3100 Social Philosophy 6A SS HP (3) AS PHI
An analysis of rival theories of social order and their philosophical foundations.

PHM 3400 Introduction to Philosophy of Law (3) AS PHI
A study of the fundamental concepts of law from a philosophical standpoint including crime, justice, punishment, free speech, insanity.

PHM 4120 Major Black Thinkers MW (3) AS AFA
PR: Junior or Senior standing. Survey of major themes and issues in African/African-American intellectual and political thought with an emphasis on theories of nationalism. Works of individuals such as Martin Delany, Booker T. Washington, W. E. B. DuBois, Marcus Garvey, Malcolm X, and Angela Davis are considered.

PHM 4331 Modern Political Philosophy 6A MW (3) AS PHI
A survey of political philosophy from 1600 A.D. until 1900 A.D., including an examination of the ethical, metaphysical, and epistemological bases of these philosophies.

PHM 4340 Contemporary Political Philosophy 6A MW (3) AS PHI
A survey of political philosophy in the twentieth century, including an examination of the ethical, metaphysical and epistemological bases of these philosophies.

PHM 5125 Topics in Feminist Philosophy (3) AS PHI
A survey of recent feminist philosophical approaches to epistemology, aesthetics and political philosophy. May also be taken for credit in Women’s Studies.

PHM 5126 Social Issues in Biomedical Ethics (3) AS PHI
An examination of the social and political issues arising from rapid changes in medicine and technology. Topics covered may include social issues related to the just distribution of health care, reproductive technologies, HIV and AIDS, eugenics, genetic testing, and maternal-fetal relations.

PHP 3786 Existentialism 6A HP (3) AS PHI
A study of the religious and atheistic existentialists and the bearing of their views on religion, ethics, metaphysics, and theory of knowledge.

PHP 4000 Plato 6A MW (3) AS PHI
The examination of Plato will include the dialogues Protagoras, Georgias, Meno, Republic.

PHP 4010 Aristotle 6A MW (3) AS PHI
Study of Aristotle’s philosophy.

PHP 4410 Kant (3) AS PHI
Lecture and discussion of Kant’s philosophy, especially the Critique of Pure Reason.

PHP 4740 The Rationalists 6A MW (3) AS PHI
A careful study of the metaphysics and epistemologies of Descartes, Spinoza, Leibniz, and Malebranche.

PHP 4745 The Empiricists 6A MW (3) AS PHI
A careful study of the metaphysics and epistemologies of Locke, Berkeley, Hume, and Thomas Reid.

PHP 4784 Analytical Philosophy 6A (3) AS PHI
A study of the method devoted to clarifying philosophical problems through analysis of the language in which these problems are stated.
Learners apply principles of patient/client management to related movement dysfunction. Restricted to majors.

PHT 5021 Professional Issues I (2) ME PHT
An introduction to critical injury and educator roles and responsibilities; explores the concepts of decision-making, evaluation of research, theories of learning, research and clinical pathways. Restricted to majors.

PHT 5022 Professional Issues II (2) ME PHT
A critical survey of Marxist philosophy from Marx and Engels to Mao Tse-Tung and Herbert Marcuse. Hegelian foundations of Marxist philosophy analyzed in detail.

PHT 5023 Professional Issues III (3) ME PHT
Focus on legal, ethical, and professional responsibility and accountability of the physical therapist. Learners will further develop their abilities to make legal and ethical decisions. The class will examine state laws governing the practice of physical therapy and other health care services. Restricted to majors.

PHT 5171C Foundational Science I (3) ME PHT
Introduction to the peripheral neuromuscular, skeletal, integumentary, and circulatory systems in normal and pathological states. Includes the anatomy and physiology of bones, joints, skin, nerves, and blood vessels, as well as the response of these tissues to injury and their potential for healing. Restricted to majors.

PHT 5172C Foundational Science II (1) ME PHT
Emphasis on physiology of the peripheral sensorimotor and cardiopulmonary systems. Restricted to majors.

PHT 5173C Foundational Science III (2) ME PHT
Emphasis on physiology of the peripheral sensorimotor and cardiopulmonary systems. Restricted to majors.

PHT 5184 Movement Science I (2) ME PHT
A basic introduction to movement science and its foundational principles from four different perspectives: biomechanics; kinesiology; exercise physiology; and motor control, learning and development. Restricted to majors. Repeatable for 2 cr.

PHT 5185 Movement Science II (3) ME PHT
PR: PHT 5184 Elaboration of movement science principles with emphasis on biomechanics, kinesiology, functional anatomy, exercise physiology, histopathology, motor control and connective tissue properties. Restricted to majors. Repeatable for 3 cr.

PHT 5271 Patient/Client Management I (3) ME PHT
Foundational principles of histology, pathology, histopathology, applied biomechanics, pharmacology and clinical medicine are introduced and applied to the physical therapy management of individuals with musculoskeletal disorders involving the limbs. Restricted to majors.

PHT 5272 Patient/Client Management II (2) ME PHT
Application of principles of patient/client management to patients with cardiopulmonary disease or dysfunction and diabetes in order to identify and write plans of care for related movement dysfunction. Restricted to majors.

PHT 5273 Patient/Client Management III (3) ME PHT
Learners apply principles of patient/client management to patients with progressive, non-progressive diseases and injuries of the nervous system. Restricted to majors.

PHT 5275C Physical Therapy Science I (4) ME PHT
Introduction to physical therapy skills in examination, evaluation, and diagnosis for clients with uncomplicated musculoskeletal impairments involving the extremities. Emphasis on obtaining a history and performing physical therapy tests and measures leading to a differential diagnosis by application of principles of movement. Restricted to majors.

PHT 5276C Physical Therapy Science II (4) ME PHT
Introduction to physical therapy skills used in examination, evaluation, diagnosis of and intervention for clients with activity limitations associated with cardiovascular, hematological, or pulmonary disorders. Major emphasis on selecting, justifying, administering, and interpreting physiological responses to physical agents and therapeutic exercises. Restricted to majors.

PHT 5277C Physical Therapy Science III (3) ME PHT
Examination, evaluation, diagnosis, and intervention for movement-related problems secondary to impairments of the nervous system. Contemporary theories of motor development, motor learning and motor control will be introduced. Student knowledge will be demonstrated with clinical problem-solving scenarios. Restricted to majors.

PHT 5283C Physical Therapy Procedures (3) ME PHT
Introduction to selected physical therapy interventions, obtaining a patient history, and conducting a systems screen. Restricted to majors. Repeatable for 3 cr.

PHT 5316 Medical Management I (1) ME PHT
Introduction to medical diagnostics, pharmacological principles, and common orthopedic surgical procedures as components of medical management including repair of bone and soft tissue. Restricted to majors. Repeatable for 1 credit.

PHT 5380 Medical Management II (1) ME PHT
PR: PHT 5316 Seminar on the medical and surgical management; epidemiology; pathophysiology; pharmacology of injuries and diseases of the cardiopulmonary system including repair and regeneration. Restricted to majors. Repeatable for 1 credit.

PHT 5822 Clinical Education I (3) ME PHT
Initial clinical practice experience for the development of patient care skills. The course is graded Satisfactory/Unsatisfactory. Restricted to majors.

PHT 5906 Directed Independent Study (1-10) ME PHT
Directed independent study, content to be decided. Restricted to majors.

PHT 5934 Special Topics I (1-10) ME PHT
Exploration of physical therapy practice issues. Topics may vary each semester the course is offered. A seminar and/or lab course. Restricted to majors. Not repeatable for credit.

PHT 5960 Clinical Proficiency and Problem Solving I (1) ME PHT
Practicum for patient/client management of individuals with musculoskeletal related movement disorders complemented by direct patient care learning. Restricted to majors. Repeatable for 1 credit hour.
PHY 2054 General Physics II NS CANP (3) AS PHY
PR: PHY 2053, PHY 2053L. Must be taken concurrently with lecture and, if dropped, then dropped simultaneously. May not receive credit for both the PHY 2054 and PHY 2049 courses. Second semester of non-calculus based general physics. Topics studied include electricity and magnetism, optics and modern physics.

PHY 2054L General Physics II Laboratory (1) AS PHY
PR: PHY 2053, PHY 2053L. Must be taken concurrently with lecture and, if dropped, then dropped simultaneously. May not receive credit for both the PHY 2054L and PHY 2049L courses. Second semester of general physics lab for science students.

PHY 3101 Modern Physics (3) AS PHY

PHY 3221 Mechanics I (3) AS PHY
PR: PHY 3101 and PHZ 3113. First semester of a two-semester sequence. Review of vector algebra and vector calculus. Dynamics of single particles and systems of particles; central forces; rotation about an axis; statics; and virtual work.

PHY 3323 Electricity and Magnetism I (3) AS PHY

PHY 3424 Optics (4) AS PHY
PR: PHY 2049; CR: MAC 2283 or MAC 2313. Reflection, refraction, dispersion, interference, diffraction, polarization, and laboratory.

PHY 3822L Intermediate Laboratory (3) AS PHY
CP: PHY 3101. Experiments in modern physics, including the areas of atomic, nuclear, solid state and wave phenomena.

PHY 4031 Great Themes in Physics 6A MW (3) AS PHY

PHY 4222 Mechanics II (3) AS PHY
PR: PHY 3221. Continuation of PHY 3221. Coupled oscillators and normal modes; moving coordinate systems; Lagrange’s and Hamilton’s equations; inertia tensor; general rotation of rigid bodies.

PHY 4324 Electricity and Magnetism II (3) AS PHY
PR: PHY 3323. Introduction to special relativity, magnetic fields and potentials, magnetic materials, RL and RLC circuits, Maxwell’s equations and applications.

PHY 4523 Statistical Physics (3) AS PHY
PR: PHY 3221 or PHY 3323 of PHY 4604. Statistical approach to thermodynamics and kinetic theory and introduction to statistical mechanics.

PHY 4604 Introduction to Quantum Mechanics (3) AS PHY
PR: PHY 3101 and PHZ 3113. Basic concepts of quantum mechanics with applications in atomic, nuclear, and condensed matter Physics.

PHY 4744C Introduction to Electronics and Test Instrumentation (3) AS PHY
PR: General Physics or CI. Introduces the fundamentals of
analog and digital electronics used in measurements and instrumentation. Weekly labs give hands-on experience in breadboarding electronic circuits and using test instrumentation (oscilloscopes, digital multimeters, etc.)

**PHY 4823L Advanced Laboratory (3) AS PHY**
PR: PHY 3822L. Experimental work primarily related to modern physics. Emphasis on experimental techniques used in current research.

**PHY 4905 Independent Study (1-3) AS PHY**
PR: Cl. S/U only. Specialized, independent study determined by the student's need and interest. The written contract required by the College of Arts and Sciences specifies the regulations governing independent study.

**PHY 4910 Undergraduate Research (1-4) AS PHY**
PR: Senior or advanced junior standing and CC. S/U only. An individual investigation in the laboratory or library or both, under the supervision of the instructor. Credit hours and other contractual terms, are to be determined by student/instructor agreement.

**PHY 4930 Undergraduate Seminar (1) AS PHY**
PR: Senior or advanced junior standing or CC. S/U only. All undergraduate physics majors must enroll in this course at least once. Regular attendance is required. This course introduces students to the research areas in the Physics Department.

**PHY 4936 Selected Topics in Physics (1-4) AS PHY**
PR: Senior or advanced junior standing and CC. Each topic is a course in directed study and under the supervision of a faculty member.

**PHY 5720C Electronics for Research (3) AS PHY**
A rigorous introduction to the fundamentals of analog and digital electronics. Theoretical circuit analysis and weekly labs introduce practical use of diodes, transistors, analog and digital lcs, breadboarding techniques and electronics test instrumentation. Spring Semester.

**PHY 5937 Selected Topics in Physics (1-4) AS PHY**
PR: Senior or advanced standing and CC. Each topic is a course in directed study under the supervision of a faculty member.

**PHZ 2102 Problems in General Physics I (1) AS PHY**
CR: PHY 2048 or PHY 2053. First semester of a two-semester sequence on solving problems in General Physics I. A course designed to be taken with the lecture course and to help students with developing problem-solving skills.

**PHZ 2103 Problems in General Physics II (1) AS PHY**
CR: PHY 2049 or PHY 2054. Second semester of a two-semester sequence on solving problems in General Physics II. A course designed to be taken with the lecture course and to help students with developing problem-solving skills.

**PHZ 3113 Mathematical Methods in Physics (3) AS PHY**
PR: PHY 2049. CP: MAC 2283 or MAC 2313. The course is designed to develop the basic mathematical skills required in subsequent courses in physics, as well as form the basis for a fundamental understanding of the mathematics needed for the study of physics.

**PHZ 4151C Computational Physics (3) AS PHY**
Introduction to computer applications in physics. Emphasis on numerical modeling and simulation of physics problems using linear algebra, differential equations and Monte Carlo methods. No prior programming experience required.

**PHZ 4434 Materials Physics NS (3) AS PHY**
PR: PHY 2048, PHY 2049, PHY 3101. The physics and physical properties of materials. Strong emphasis is on the underlying physics of materials. Particular topics covered include crystal structure, phase, and electrical, thermal, optical, and magnetic properties of materials.

**PHZ 4702 Applications of Physics to Biology and Medicine I (4) AS PHY**
PR: PHY-2054, PHY-2054L or PHY-2049, PHY 2049L. The first semester of a two-semester sequence, to discuss the applications of the physical concepts introduced in the General Physics sequence to biological systems and for medical applications. Restricted to non-majors.

**PHZ 4703 Applications of Physics to Biology and Medicine II (4) AS PHY**
PR: PHY-2054, PHY-2054L or PHY-2049, PHY 2049L. The second semester of a two-semester sequence, to discuss the applications of the physical concepts introduced in the General Physics sequence to biological systems and for medical applications. Restricted to non-majors.

**PHZ 5115 Methods of Theoretical Physics I (3) AS PHY**
PR: MAP 2302 or Cl. Applications of mathematical techniques to classical and modern physics. Vector spaces including Hilbert space, orthogonal functions, generalized functions, Fourier analysis, transform calculus, and variational calculus.

**PHZ 5116 Methods of Theoretical Physics II (3) AS PHY**
PR: MAP 2302 or Cl. Applications of mathematical techniques to classical and modern physics. Selected topics in complex analysis, differential and integral equations, numerical methods, and probability theory.

**PHZ 5156C Computational Physics I (3) AS PHY**
PR: CGS 5765 or Cl. C programming applied to real science and engineering problems. Data analysis, numerical algorithms, modeling, parallel computation. Subjects selected from current research may include neurobiology, quantum magnetism, chaos, finance, materials science.

**PHZ 5304 Nuclear Physics (3) AS PHY**
PR: PHY 4604 or Cl. Nuclear forces, nuclear models, nuclear structure, decay, nuclear reactions, and high energy physics.

**PHZ 5405 Solid State Physics I (3) AS PHY**
PR: PHY 3101, MAP 2302. Cl. Crystal structure, x-ray and electron diffraction, mechanical and thermal properties of solids, electrical and magnetic properties of metals, band theory of metals, insulators, and semiconductors. First semester of sequence PHZ 5405, PHZ 6426.

**POL 1120 Beginning Polish I Laboratory (1) AS WLE**
CR: POL 1120L. This course features all four major skills: listening, reading, speaking, and writing. Grammar exercises, dictation, readings and vocabulary-building are central in this first course. Knowledge of Russian can help. S/U available.

**POL 1120L Beginning Polish I Laboratory (1) AS WLE**
CR: POL 1120. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.
POL 1121 Beginning Polish II (4) AS WLE
PR: POL 1120 or equivalent. CR: POL 1121L. Continued development of basic skills in listening and reading comprehension, speaking and writing of Polish.

POL 1120 Beginning Portuguese I (4) AS WLE
CR: POR 1120L. Development of basic skills in listening and reading comprehension, speaking and writing of Portuguese.

POL 1120L Beginning Portuguese Laboratory I (1) AS WLE
CR: POR 1120. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

POL 1121 Beginning Portuguese II (4) AS WLE
PR: POR 1120 or equivalent. CR: POR 1121L. Continued development of basic skills in listening and reading comprehension, speaking and writing of Portuguese.

POR 1120L Beginning Portuguese Laboratory I (1) AS WLE
CR: POR 1120. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

POR 1121 Beginning Portuguese II (4) AS WLE
PR: POR 1120 or equivalent. CR: POR 1121L. Continued development of basic skills in listening and reading comprehension, speaking and writing of Portuguese.

POS 2041 American National Government (3) AS POL
Analysis of the basic political attitudes and behaviors that shape public opinion, the role of interest groups and the state and federal government in facilitating change.

POS 3182 Florida Politics and Government (3) AS POL
A study of Florida political culture, political parties and elections, the legislative, executive, and judicial systems, and policy patterns.

POS 3283 Judicial Process and Politics (3) AS POL
The organization, development, and functioning of American court systems and the causes and consequences of judicial behavior from an empirical perspective.

POS 3453 Political Parties and Interest Groups (3) AS POL
Analysis and understanding of role, functions, structure, and composition of such, and their impact on American governmental institutions.

POS 3691 Introduction to Law and Politics (3) AS POL
Nature of law, legal process, relationship to political life of constitutional law, administrative law, the judicial process, and private law.

POS 3697 Environmental Law (3) AS POL
Examines some of the major issues involving environmental law. Specially, the course provides a survey and analysis of statutes, both state and federal, regulating water, air, soil pollution, and resource conservation and recovery. It will also address questions pertaining to problems of implementation, interpretation, enforcement, and development of environmental laws.

POS 3713 Empirical Political Analysis (3) AS POL
Fundamentals of empirical political inquiry: systematic data collection and quantitative analysis techniques. Laboratory exercises using the computer are required.

POS 3931 Selected Topics (3) AS POL
Selected topics in political science with course content based upon student demand and instructor's interest.

POS 4204 Political Behavior, Public Opinion, and Elections (3) AS POL
Analysis of economic and socio-psychological factors influencing mass and elite political behavior; voting behavior, public opinion, and political activism.

POS 4413 The American Presidency 6A (3) AS POL
The presidency as a political institution; analysis of powers; legislative, administrative, political, and foreign policy leadership; crisis management and decision making; White House staffing; limits on power.

POS 4424 The American Congress (3) AS POL
Organization, procedures, committee system, party leadership, relations with governmental and non-governmental organizations and agencies, oversight, decision-making processes, House/Senate comparisons.

POS 4614 Constitutional Law I (3) AS POL
PR: POS 2041. Leading social problems, principle institutions, and the scope of powers. Analysis of Supreme Court decisions, scholarly commentaries, and the writings of leading public figures.

POS 4624 Constitutional Law II (3) AS POL
PR: POS 2041. Analysis of Supreme Court decisions and scholarly commentaries on the constitutional rights of individuals.

POS 4693 Women and Law I (3) AS WST
Introduction to issues concerning the legal aspects of sex and sex-based discrimination as embodied in statutory laws.
and case law, focusing on constitutional and family law and reproductive freedom issues.

POS 4694 Women and Law II 6A MW (3) AS WST
PR: POS 4693 or CI. Legal position of women in American society and remedies available to challenge current laws and practices, with specific emphasis on employment and education issues as they relate to both women and men.

POS 4905 Independent Study (1-3) AS POL
PR: 3.0 average in Political Science and CI. S/U only. Specialized study determined by the student's needs and interests.

POS 4910 Individual Research (1-3) AS POL
PR: 3.0 average in Political Science and CI. Investigation of some aspect of political science culminating in the preparation of an original research paper.

POS 4936 Senior Seminar (3) AS POL
PR: Senior standing and CI. An opportunity to work with others in a seminar format, exploring specialized topics.

POS 4941 Field Work (3-15) AS POL
PR: 3.0 average in Political Science and CI. Opportunity for students to obtain practical experience as aides to agencies of government and political parties.

POS 4970 Honor Thesis (3) AS POL
PR: Admission to Honor option. Writing of honor thesis under direction of faculty members.

POS 5094 Issues in American National and State Government (3) AS POL
Selected topics of study in American government.

POS 5155 Issues in Urban Government and Politics (3) AS POL
Selected issues and topics in Urban Government and politics.

POS 5159 Urban Policy Analysis (3) AS PAD
Application of policy framework for urban government & policies. Examine forms of government and how policies such as economic development, law enforcement, community policing, neighborhood policies (with non-profit groups) can be analyzed.

POT 3003 Introduction to Political Theory (3) AS POL
Examines various kinds of theory used in political science for understanding political life: normative theory, empirical theory, historicism theory, analytical theory, and critical theory.

POT 3013 Classical Political Theory (3) AS POL
Analysis of basic ideas of Plato, Aristotle, Cicero, St. Thomas, and other leading pre-modern political philosophers.

POT 4054 Modern Political Theory (3) AS POL
Analysis of basic political ideas of Machiavelli, Hobbes, Locke, Rousseau, Burke, and other modern philosophers.

POT 4064 Contemporary Political Thought (3) AS POL
Examines various political views and political phenomena in the nineteenth and twentieth centuries. Diverse theoretical types and salient political phenomena will be presented.

POT 4109 Politics and Literature 6A LW (3) AS POL
Critical examination of the connections between politics and literature.

POT 4204 American Political Thought (3) AS POL
Examines political writings in the U.S. and responses to critical periods in history, beginning with the Founding Fathers, and culminating in recent contributions and understanding contemporary political problems and solutions.

POT 4661 The Politics of Identity, Difference and Inequality MW (3) AS POL
PR: POT 3003. An analysis of how relationships of social identity and difference become the basis of social, political and economic inequality in modern society. It incorporates both contemporary and classical discussions of inequality.

POT 4936 Selected Topics in Political Theory (3) AS POL
Selected topics or thinkers in political theory.

PPE 4003 Personality (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Methods and findings of personality theories and an evaluation of constitutional, biosocial, and psychological determinants of personality.

PSB 3444 Drugs and Behavior (3) AS PSY
This is a basic introduction to drugs and their effects on society and behavior. Specifically, drug regulations and laws will be covered as well as how drugs interact with the brain to alter consciousness.

PSB 4004C Physiological Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Gross neural and physiological components of behavior. Structure and function of the central nervous system and theory of brain functions.

PSC 2515 Energy and Humanity NS CANP (3) AS PHY
Explores energy use and its environmental impacts, including climate change. Energy resources, including alternatives to fossil fuels, are discussed. Basic science concepts as well as contemporary technologies are covered.

PSY 2012 Introduction to Psychological Science SS CASB (3) AS PSY
This course is an introduction to psychology for majors and nonmajors. It presents psychological theory and methods in a survey of various areas of psychology including clinical, cognitive, developmental, health, industrial, social and biopsychology.

PSY 3017 Psychological Science II SS (3) AS PSY
PR: PSY 2012, psychology major or CI. Designed as an in-depth examination of the basic principles and concepts of psychological science. Extensive coverage will be given to the areas of learning, perception, physiological psychology, and cognition.

PSY 3204 Psychological Statistics 6A QM CAQR (3) AS PSY
PR: PSY 2012. Introduction to analyzing psychological data, in the context of behavioral research. Covers basic research design, descriptive statistics, analysis procedures, use of computer analysis packages, interpretation of outputs, and implications for research.

PSY 3213 Research Methods in Psychology (4) AS PSY
PR: PSY 2012 with a grade of C or better or CI. This course considers the logic of experimental design, concept of control and the analysis of experimentally obtained data. The laboratory section provides experience applying the concepts discussed in lecture. Two lectures plus two-hour lab.

PSY 4205 Experimental Design and Analysis (3) AS PSY
PR: PSY 3213 with grade of C or better or CI. Detailed coverage of those research designs and statistical techniques having the greatest utility for research problems.
in psychology. Emphasis on topics from analysis of variance.

PSY 4604 History and Systems of Psychology (3) AS PSY  
PR: PSY 3213 with a grade of C or better or CI. The historical roots of modern psychological theories, investigation of the various schools of psychology such as behaviorism, Gestalt psychology, psychoanalysis, and phenomenological psychology.

PSY 4913 Directed Study (1-3) AS PSY  
PR: PSY 3213. S/U only. A maximum of 3 credits of either PSY 4913 or PSY 4970 may count toward the major. The student plans and conducts an individual research project or program of directed readings under the supervision of a faculty member. S/U only.

PSY 4931 Selected Topics: Seminar (3) AS PSY  
PR: PSY 3213 with a grade of C or better. Upper-level standing, psychology major and CI. Graduate-type seminar designed to provide the advanced undergraduate student with an in-depth understanding of a selected sub-area within psychology.

PSY 4932 Honors Seminar (3) AS PSY  
PR: PSY 3213 with a grade of C or better, admission to honors program in psychology and CI. A maximum of 3 credits of either PSY 4913 or PSY 4970 may count toward the major. The student, under supervision of a faculty member, will complete a thesis project.

PSY 4933 Advanced Topics in Applied Behavior Analysis (4) AS PSY  
PR: EXP 4404 and CLP 4414. Restricted to Psychology majors admitted to the Concentration in Applied Behavioral Analysis. Advanced seminar in the effective and ethical application of behavior analysis to human problems. Includes theoretical and conceptual issues; assessment and treatment procedures; legal, ethical and socio-cultural issues.

PSY 4970 Honors Thesis (1-3) AS PSY  
PR: PSY 3213 with a grade of C or better, admission to honors program in psychology and CI. A maximum of 3 credits of either PSY 4913 or PSY 4970 may count toward the major. The student, under supervision of a faculty member, will complete a thesis project.

PUP 4002 Public Policy (3) AS POL  
Examines the formation and implementation of public policy in areas such as the economy, health, etc.

PUP 4203 Environmental Politics and Policy (3) AS POL  
Examines the politics of environmental issues, formation and implementation of environmental policy.

PUP 4323 Women and Politics 6A MW (3) AS WST  
An analysis of the impact of gender on power and influence in American society, and women’s changing role in the political process.

PUP 5607 Public Policy and Health Care (3) AS POL  
The study of health care policy as it relates to the policy process in the American setting.

PUR 3000 Principles of Public Relations (3) AS COM  
PR: MMC 2100 and MMC 3602. The underlying theory and professional practice of public relations within corporate and institutional structures and its vital role in society; ethical standards of practice, and relationships of the practice to the public media; public relations problem-solving process.

PUR 3500 Public Relations Research (3) AS COM  
PR: PUR 3000 and LIS 2005. The theory and practice of quantitative and qualitative research methods as applicable to the study of public relations and public relations campaigns. Emphasis is on the scope of research methods available to public relations practitioners, evaluation of data and report writing.

PUR 4100 Writing For Public Relations (3) AS COM  
PR: JOU 2100 and PUR 3000. Techniques for creating effective written public relations communications to achieve organizational goals, including news releases, proposal letters, broadcast scripts, and memos. Exercises based on case study scenarios.

PUR 4101 Public Relations Design and Production (3) AS COM  
PR: PUR 3000. Theoretical and practical applications of design for public relations publications. Design software. Study of visual design, page architecture, typography, color and illustrations. Integration of design elements in the design of different types of public relations publications.

PUR 4401 Public Relations: Issues, Practices and Problems (3) AS COM  
PR: PUR 3000. The theory of public relations practice and its application in the real world. The role of the public relations practitioner in business, government, and social institutions, and the nature of specialized areas of the practice. Identification of public issues, analysis of potential impact on organizations and development of strategies to deal with them successfully and responsibly. Communication techniques and trends.

PUR 4700 Public Relations Practicum (1) AS COM  
PR: Senior standing and CI. For public relations sequence majors. S/U. Practical experience outside the classroom where the student works for academic credit under the supervision of a professional practitioner. Periodic written and oral reports to the faculty member coordinating the study.

PUR 4801 Advanced Public Relations (3) AS COM  
PR: PUR 3500, PUR 4100 and PUR 4401 As final course in Public Relations sequence, it involves intensive study of counseling and problem-solving techniques used in professional practice. Analysis of case studies and preparation of complete Public Relations program. Extensive reading in the literature of contemporary practice.

PUR 5505 Introduction to Strategic Communication Theory and Practice (3) AS COM  
The course is designed to act as a “bridge” between undergraduate and graduate public relations and advertising education, and between professional communication practices and strategic communication scholarship.

QMB 2100 Business and Economic Statistics I 6A QM CAQR (3) BU QMB  
PR: MAC 1105. Data description; exploratory data analysis; introduction to probability; binomial and normal distributions; sampling distributions; estimation with confidence intervals; tests of hypotheses; control charts for quality improvement.

QMB 3200 Business and Economic Statistics II (3) BU QMB  
PR: MAC 2233 or MAC 2241, QMB 2100. Simple linear regression and correlation; multiple regression and model
To explore the most recent advances in learning theory and then intentionally select effective strategies for each learning challenge.

**REA 2930 Selected Topics (1-4) US REA**
Topics will vary to meet the needs of students. Will not be counted toward the English major.

**RED 4310 Reading and Learning to Read (3) ED EDE**
PR: Admission to College of Education. This course will prepare pre-service teachers to understand the foundations of reading and the inherent learning principles to produce successful readers. The course focuses on appropriate instructional strategies to enhance reading development and reading across the curriculum.

**RED 4335 Teaching Reading in Secondary English Curriculum (3) ED EDI**
Analysis of the reading process; introduction to diagnosis of reading abilities; reading and study skill strategies to increase student achievement in reading.

**RED 4348 Literacy Development (3) EP EDE**
PR: BXE Majors only. CR: EDG 3943. This course for preservice teachers focuses on foundations of reading and learning principles that lead to successful readers, including ESOL and ESE students. Instructional strategies and materials for early literacy development are introduced.

**RED 4511 Linking Literacy Assessment to Instruction (3) ED EDR**
PR: RED 4310. This course will prepare pre-service teachers to use multiple assessment measures to assess and diagnose students’ strengths and needs in literacy learning. Based on individual student profiles, teachers will design instruction to enhance literacy development.

**REE 3043 Real Estate Decision Making (3) BU FIN**
PR: FIN 3403. Acquaints students with the range of knowledge required to engage in real estate decision-making in the United States. Integrates the institutional framework with which decisions are made, the elements of financial analysis, deal structuring and marketing, and the pricing, financing, and allocation of real property in the real estate markets.

**REE 4303 Real Estate Investment Analysis (3) BU FIN**
PR: FIN 4504. A comprehensive study of the determinants of the market and financial feasibility of the real estate investment decision. The development of market and site analyses, theories of urban development patterns, and the role of taxation will be studied along with the application of analytical techniques for decision making.

**REL 2210 Hebrew Bible/Old Testament (4) AS REL**
An introduction to the critical study of the Hebrew Scriptures against the background of the ancient Near East, with attention to the history and religion of the Hebrew people.
REL 2240 Introduction to the New Testament (4) AS REL
An introduction to the critical study of the New Testament in the context of Christian beginnings in the first century C.E. This will include readings from the Apocrypha, other Gospels, and letters.

REL 2300 Introduction to World Religions HP SS CAGCHHCP (4) AS REL
Introduction to World Religions is designed to give students a broad and general overview of the major religious traditions of the world. Students will be exposed to the history, primary beliefs, and information necessary for a primary understanding of each of the religions studied in the course.

REL 2306 Contemporary World Religions HP (4) AS REL
This course will explore the unity and diversity of religious traditions in our contemporary global context in order to understand the mutual interactions between religions and cultures. Emphasis will be placed on the role of religions in shaping human values which can either create or resolve social conflicts, and the impact these values can have on issues of race, ethnicity and religious diversity in a multicultural world.

REL 3000 Ancient Religions in Context (4) AS REL
Study of the religions in their cultural setting of the peoples of the Ancient Middle East and Mediterranean.

REL 3003 Introduction to Religious Studies (4) AS REL
This course introduces students to the academic study of religion. Religious thought and behavior are examined from a variety of methodological perspectives. Restricted to majors and minors. Required for the major and the minor in Religious Studies.

REL 3014 Introduction to Major Religious Texts (3) AS REL
The course provides an introduction to the study of some of the foundational texts of selected religious traditions by focusing on reading and interpretative strategies in order to understand the central beliefs and practices presented in these texts.

REL 3101 Religion and Popular Culture SS HP (3) AS REL
An exploration and analysis of the relationship between religion and popular culture, which will include inquiry into the definition and meaning of both religion and popular culture, the impact of secularization on traditional religious systems, and the widely diverse expressions of religion in contemporary popular culture.

REL 3111 The Religious Quest in Contemporary Films 6A SS HP CAHU (4) AS REL
This course uses contemporary films such as Gandhi, Malcolm X, The Long Walk Home, The Chosen, and Grand Canyon to explore the personal and social aspects of religion in modern secular societies, pinpointing issues of racism, sexism, liberation, etc.

REL 3114 Comedy, Tragedy, and Religion 6A MW (3) AS REL
Examines the visions of life in comedy and tragedy, and relates both to Judaism, Christianity, and Zen Buddhism.

REL 3116 Religion and Contemporary American Holidays HP SS (3) AS REL
Introduces students to the academic study of religion through an exploration of issues and questions related to the character and function of holidays in contemporary America. Open to majors and non-majors.

REL 3117 Religion and Contemporary American Sports HP SS (3) AS REL
This course explores the function of sports in America. It covers the history of sports; the status of American sports; and sports as religious events. The course is open to majors and nonmajors and is not repeatable for credit.

REL 3120 Religion in America (3) AS REL
To examine the movement from state church to pluralism in American religious institutions, the religious results of non-Protestant immigration; the Jewish factor; the effect of home missions and social concern programs upon American life; political entanglements and the concept of church/state separation.

REL 3131 New Religions in America CAGCHHCP (3) AS REL
This course entitled New Religions in America is designed to give students an overview of the rich religious history of America particularly in regard to the unique cultivation of new religious movements in America spanning from 1850 – the present.

REL 3132 Witchcraft and Paganism in America (3) AS REL
A study of contemporary witchcraft and paganism, including theories, methods, history, myths and symbols, beliefs, rituals and practices, believers, recruitment, socialization, and organizations.

REL 3140 Religion, Culture, and Society (3) AS REL
Introductory scholarly survey of religion in its complex relationship to culture and society, including definitions and theories of religion, research methods, becoming religious, social organization, and interconnections with other social institutions. Open to non majors.

REL 3145 Women and Religion 6A (3) AS REL
Analysis of the status and roles of women as compared to men in the Judeo-Christian tradition. Contemporary issues of feminist theology, and the controversies surrounding them.

REL 3146 Womanist Vision in Religion MW (3) AS REL
This course examines the works of Black Womanist writers in religion for their contributions to and insights into the phenomena of religion in America and the world.

REL 3170 Religion, Ethics and Society Through Film 6A SS HP (4) AS REL
An ethical analysis of contemporary social issues through contemporary films such as Wall Street and Crimes and Misdemeanors, drawing on religious narrative traditions from Eastern and Western cultures which have contributed to the development of an ethic of human dignity, human rights and human liberation after Auschwitz and Hiroshima.

REL 3191 Life After Death MW (4) AS REL
An exploration of ideas about life after death and its relations to this life in Judaism, Christianity, Islam, Hinduism, and Buddhism.

REL 3280 Biblical Archaeology MW (3) AS REL
An in depth examination of the archaeological data relating to the background and content of the Bible, including ancient customs, Biblical sites and cities, Biblical history, and material culture of the Biblical period. Special attention will also be given to excavation methods and interpretation of archaeological evidence.

REL 3303 Comparative Religion: Judaism and Islam MW (4) AS REL
This course is framed within the academic study of religion,
REL 3308 World Religions 6A HP SS (3) AS REL
World Religions gives students an overview of the major religions of the world from their origins through the modern period. Special attention is given to the analysis of myths, rituals, history, and other features of the religions.

REL 3335 Gods and Goddesses of India (3) AS REL
This course explores the ways Hindu see, speak about, and encounter the Divine through an examination of the multitude of stories about the gods and goddesses and their various physical manifestations in the sacred geography of India.

REL 3330 Religions of South Asia AF (3) AS REL
All religions of the world came to India and all became Indian. What is this “Indiaanness” which stems from Hinduism, Buddhism, Jainism and Sikhism, but extended itself to include Judaism, Christianity, Islam, Zoroastrianism and Baha’i. Readings from classical texts and modern literature.

REL 3318 Introduction to Chinese Religion AF HP SS (3) AS REL
The course is for majors and nonmajors, and may not be repeated for credit. The course introduces the history and present state of the religious thoughts and practices in mainland China and the geographical areas in which the Chinese language is spoken.

REL 3340 Buddhism Truths and Paths (3) AS REL
This course provides an historical survey of Buddhist religion from its inception through today by focusing on the life and teachings of the historical Buddha, doctrinal development, the various denominations, and canon formation.

REL 3363 Introduction to Islam HP AF (3) AS REL
This course introduces the basic elements of Islamic belief and practice, placing the rise of Islam in its historical context in the Middle East, and stressing issues of diversity (including ethnicity and gender).

REL 3367 Islam in the Modern World 6A HP AF (3) AS REL
Examines the major developments in Islamic thought since the 13th century, with emphasis on the 19th and 20th century Islamic resurgence. Issues of diversity, gender, and social values will be stressed.

REL 3375 Issues in Caribbean Religions MW CPST (3) AS REL
The course examines major social, political, economic, and cultural issues in Caribbean religions mainly in Jamaica, Cuba, Haiti, and Trinidad. Issues reflected in African diasporan religions and encounters with Western and Eastern ones are studied.

REL 3380 Native American Religions (3) AS REL
Introduction to and survey of Native American Religions. A variety of multiplicity of perspectives, including anthropological, historical, social psychological, sociological, and philosophical.

REL 3391 In Search of the Goddess AF HP SS (3) AS REL
This course explores Goddess religion/sacred Feminine, from prehistory, to the pagan Near East and Mediterranean, Western monotheistic religions, pluralistic religions of the East, and revivals of Goddess spirituality in contemporary Europe/N. America.

REL 3420 Contemporary Religious Thought (3) AS REL
An examination of the central ideas of recent religious thinkers; such as Gandhi, Martin Luther King, Jr., Elie Wiesel, Thich Nhat Hanh, Dorothy Day, Dorothee Soelle, Howard Thurman, Thomas Merton and others.

REL 3465 Religion and the Meaning of Life 6A MW (3) AS REL
What is the meaning of life? An exploration of answers to this question in Eastern and Western religions, and in humanistic philosophies of life.

REL 3500 History of Christianity 6A HP (4) AS REL
Historical development of Western Christianity, its ideas and institutions, from the first century to the rise of religious modernism in the 19th century.

REL 3505 Introduction to Christianity (3) AS REL
Introduction to fundamental elements of Christianity, including: foundational texts and core beliefs; the background and historical development of Christian thought; the expression of the religion throughout culture; Christianity as a global religion.

REL 3561 Roman Catholicism 6A MW (3) AS REL
An examination of the history, doctrine, and ethics of the Roman Catholic Church.

REL 3602 Classics of Judaism 6A MW (3) AS REL
PR: One course in Religious Studies. How to read the principal documents of Judaism beyond the Hebrew Bible, including the Mishnah, Talmud, Midrash, and classics of philosophy, mysticism, and theology through the modern period.

REL 3607 Introduction to Judaism 6A SS HP AF (3) AS REL
An introduction to Judaism: its religious tenets; its codes of ethics; its rites and customs. This course is intended as a description of what it means to be a Jew.

REL 3611 History of Judaism (4) AS REL
A study of the evolution of the religion of ancient Israel from the Second Temple period to the end of the second century B.C.E., seen against the background of its historical, geographical, political, social and spiritual setting.

REL 3613 Modern Judaism 6A MW LW (3) AS REL
A study of modern Jewish life and thought in the West, including the study of beliefs, practices, institutions, major thinkers, and intellectual trends.

REL 3801 History of Writing (2) AS REL
Study, in reasonable detail, of the history and evolution of writing within its societal context. We will stress the development of writing in Mesopotamia, Egypt, and the Mediterranean World, looking at the transition from oral to written literature and its impact on religion.

REL 3900 Directed Readings (1-4) AS REL
PR: CI. Individual guidance in concentrated reading on a selected topic.

REL 3936 Selected Topics (1-4) AS REL
Course contents depend on students’ needs.

REL 4113 The Hero and Religion 6A MW (3) AS REL
A study of the way in which embedded religious models help to fashion the representation of an heroic protagonist. The focus of the course will be on the relationship between the hero and the “other,” as differentiated by race, gender, ethnicity, or merely inner being.
REL 4133 Mormonism in America MW (3) AS REL
A study of Mormonism in America as an example of a new religion. Includes the study of history, myths and symbols, texts, beliefs, rituals and practices, believers, recruitment, socialization, and organizations.

REL 4161 Religion, Technology and Society (3) AS REL
An exploration of the way in which religion and technology have interacted in Western civilization so as to both express and transform human values and identity. Special emphasis will be given to the value questions raised by modern technology.

REL 4171 Contemporary Christian Ethics 6A MW (4) AS REL
PR: Jr. standing or CI. A survey of representative approaches to contemporary Christian ethics and their application to a number of ethical issues peculiar to personal and social life in contemporary society, with an emphasis on issues of race and gender and of violence and non-violence.

REL 4177 Comparative Religious Ethics 6A MW LW (4) AS REL
A comparative study of religious ethics emphasizing how 20th century social activists, such as Ghandi and M. L. King Jr. and eco-feminists such as Rosemary Ruether and Joanna Macy, have drawn upon and transformed traditional religious stories and spiritual practices in order to create a cross-cultural and inter-religious ethic for a multi-cultural world.

REL 4193 Comparative Mysticism (4) AS REL
A course designed to acquaint the student with the nature of mystical experience, and some of the varieties of mystical experience recorded in the writings of the mystics, East and West.

REL 4215 Ancient Israel and the Development of the Hebrew Bible 6A HP AF MW LW (3) AS REL
An exploration of the formation and composition of the Hebrew Bible in light of the religious, social, political, and historical developments in antiquity.

REL 4217 Who Wrote the Bible (Genesis-Kings) 6A MW LW (4) AS REL
A critical examination of Genesis through 2 Kings. This course focuses on the history of the formation of the text and the development of the religious traditions represented therein. Special attention will be paid to Israelite Law, Covenant Theology, and the history of the religion(s) of the Children of Israel in their Ancient Near Eastern context.

REL 4218 Women and the Bible 6A HP AF MW LW (3) AS REL
How the redactors of Genesis through 2 Kings viewed women; the role women played in the society of the time in which they are portrayed and in that of the redactors; and, an attempt to find the "women's voices," however muted, within the biblical text.

An exploration of the Gospels and Acts, including their backgrounds in Judaism and Greco-Roman religion, literary and form criticism, historical Jesus research, and the social history of earliest Christianity.

REL 4250 Jesus’ Life and Teachings (4) AS REL
An examination of the various historical studies made in the quest of identifying Jesus as an historical figure. the concern is to make a reasonable assessment of who Jesus was and what he was saying to the Jews in Palestine at the beginning of the common era.

REL 4252 New Testament II: Pauline Letters (4) AS REL

REL 4333 Hindu Texts and Contexts (3) AS REL
PR: REL 3330 or similar course focusing on Hinduism; consult instructor. An in-depth of the classical texts of the Hindu Tradition. We will examine religious, philosophical, ethical, ritual, and mythological themes presented in these texts in order to gain a deeper understanding to the larger tradition we call "Hinduism".

REL 4343 Buddhism in India, Sri Lanka, and South East Asia (4) AS REL
The life and teachings of the Buddha; the order of monks and nuns; the Buddhist Emperor Ashoka; schisms; the rise of the Great Vehicle and the philosophy of emptiness; Buddhist missions; Buddhist art and culture; Buddhism and national liberation; contemporary social and political issues.

REL 4344 Buddhism in China, Japan, and Tibet (4) AS REL
Mahayana Buddhism followed the silk routes to China and Japan, and later it crossed the Himalayas into Tibet. An overview of the variety of schools and practices of Buddhism and its adaptation by these ancient cultures.

REL 4626 Reason in Religion: Talmudic Logic MW (3) AS REL
Analyzes the modes of thought and of logical analysis of the Talmud of Babylonia; the way in which applied logic and practical reason work in a religious definition of the social order; the dialectical argument.

REL 4670 Judaism and Christianity After the Holocaust 6A MW LW (4) AS REL
This course will explore the impact of the Holocaust on Jewish and Christian thought and identity in the light of the history of religious and cultural anti-Semitism in Western civilization.

REL 4910 Undergraduate Research (1-4) AS REL
PR: Junior standing and CI. Individual investigations with faculty supervision.

REL 4911 Undergraduate Research (1-4) AS REL
PR: Junior standing and CI. Individual investigations with faculty supervision.

REL 4930 Selected Topics (3) AS REL
Course contents depend on student demand and instructor’s interest and may range over the whole field of Ancient Religions. Offerings on a semi-regular basis include the Bible as History 3.

REL 4931 Seminar in Religion (3) AS REL
PR: Majors and minors only or CI A course required for Religious Studies majors and minors, whose prior religious studies have prepared them for a cooperative creative and/or research effort in the area of religion.

REL 4936 Selected Topics (1-4) AS REL
PR: Junior standing. Individual investigations with faculty supervision.

REL 4937 Selected Topics: Fall Honors Seminar (3) AS REL
PR: Acceptance into the Religious Studies Honors Program. The course content will depend upon student demand and instructor’s interest.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTV 4220</td>
<td>TV Production and Direction</td>
<td>3</td>
<td>AS COM</td>
<td>Restricted to majors only.</td>
</tr>
<tr>
<td>RTV 4938</td>
<td>Selected Topics: Spring Honors Seminar</td>
<td>2</td>
<td>AS REL</td>
<td>PR: Acceptance into the Religious Studies Honors Program. The course content will depend upon student demand and instructor's interest.</td>
</tr>
<tr>
<td>RMI 4210</td>
<td>Property Insurance</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: RTV 4320. Advanced television reporting, integrating broadcast news writing, ENG production and television programming.</td>
</tr>
<tr>
<td>RMI 4115</td>
<td>Life, Health, And Disability Insurance</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: RTV 3001 and RTV 3301. Advanced producing, scripting, lighting, camera, and editing for video and news production. Introduction to computer editing and graphics.</td>
</tr>
<tr>
<td>RMI 3011</td>
<td>Principles of Insurance</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: RMI 3011. Course dealing with recognition of personal and business property risks, and coverage that can be used in dealing with these risks. Considers the underwriting, marketing, and social problems associated with these coverages. Topics include commercial and residential fire insurance, inland marine and transportation coverages, and multi peril contracts. Not limited to Finance majors.</td>
</tr>
<tr>
<td>RUS 3470</td>
<td>Overseas Study</td>
<td>1-6</td>
<td>AS WLE</td>
<td>Must be enrolled in the USF Summer Study in Moscow program. Two years Russian required. Intensive Russian at Moscow Linguistic University with excursions in Moscow.</td>
</tr>
<tr>
<td>RUS 3240</td>
<td>Conversation I</td>
<td>4</td>
<td>AS WLE</td>
<td>PR: First year Russian or equivalent. Review and development of basic skills in conversation, composition, and reading.</td>
</tr>
<tr>
<td>RUS 3301</td>
<td>Introduction to Telecommunications</td>
<td>3</td>
<td>AS COM</td>
<td>PR: MMC 2100 and MMC 3602. A survey of the organization, structure, and function of the broadcasting industry.</td>
</tr>
<tr>
<td>RUS 3240</td>
<td>Conversation I</td>
<td>4</td>
<td>AS WLE</td>
<td>PR: Second year Russian or equivalent. Development of basic conversational skills.</td>
</tr>
<tr>
<td>RUS 3221</td>
<td>Russian IV</td>
<td>4</td>
<td>AS WLE</td>
<td>PR: RUS 2220 or equivalent. Review and development of basic skills in conversation, composition, and reading.</td>
</tr>
<tr>
<td>RUS 2270</td>
<td>Overseas Study</td>
<td>1-6</td>
<td>AS WLE</td>
<td>Intensive study of the Russian language in Russia involving at least 20 hours per week of classroom instruction and cultural excursions conducted in Russian around Moscow and other parts of Russia.</td>
</tr>
<tr>
<td>RUS 3240</td>
<td>Conversation I</td>
<td>4</td>
<td>AS WLE</td>
<td>PR: Second year Russian or equivalent. Development of basic conversational skills.</td>
</tr>
<tr>
<td>RUS 3470</td>
<td>Overseas Study</td>
<td>1-6</td>
<td>AS WLE</td>
<td>Must be enrolled in the USF Summer Study in Moscow program. Two years Russian required. Intensive Russian at Moscow Linguistic University with excursions in Moscow.</td>
</tr>
</tbody>
</table>
and Russia. Students from other institutions eligible.

RUS 3500 Russian Civilization 6A MW (3) AS WLE
A survey of the cultural history of Russia.

RUS 4241 Conversation II (4) AS WLE
PR: Previous course in series or equivalent. Development of conversational skills.

RUS 4402 Advanced Russian Conversation & Composition I (4) AS WLE
PR: RUS 4241 or Cl. Third year Russian.

RUS 4403 Advanced Russian Conversation & Composition II (4) AS WLE
PR: RUS 4241 or Cl. Third year Russian.

RUS 4471 Advanced Overseas Study (1-6) AS WLE
Must be enrolled in the USF Summer Study in Moscow program. Three years Russian required. Intensive Russian at Moscow Linguistic University with excursions in Moscow and Russia. Students from other institutions eligible.

RUS 4900 Selected Topics (1-3) AS WLE
Study of an author, movement or theme.

RUS 4905 Directed Study (1-3) AS WLE
Departmental approval required.

RUT 3110 Nineteen Century Russian Literature in English 6A MW LW WRIN (3) AS WLE

RUT 3111 Twentieth-Century Russian Literature in English 6A MW LW CPST WRIN (3) AS WLE
Survey of the major authors of 20th Century Russian literature in English. Major works of Babel, Bulgakov, Olesha, Pasternak, Solzhenitsyn, and Zamyatin.

SCE 4305 Communication Skills in the Science Classroom (3) ED EDN
Reading and communication skills important in understanding scientific and science education literature and communicating findings to others.

SCE 4310 Teaching Elementary School Science (3) ED EDE
PR: Admission to College of Education and completion of General Distribution Requirements in the Natural Science area. Techniques and materials for teaching science in the elementary school.

SCE 4313 Science for all Students (3) EP EDN
Designed to equip students with inquiry- and standards-based techniques and materials for teaching elementary school-aged children science. Includes strategies and resources for teaching English language learners and students with exceptionalities.

SCE 4320 Teaching Methods in Middle Grade Science (3) ED EDN
PR: Completion of 25 semester hours of Science or CC. Not designed for high school certification purposes. Survey techniques and materials unique to science, grades 5-9.

SCE 4330 Teaching Methods in the Secondary School Sciences (3) ED EDN
PR: Completion of 26 hours in approved science areas, EDG 4620 or CP, and CC. Techniques and materials of instruction in secondary school sciences.

SCE 4863 Science, Technology, Society Interaction 6A MW (4) ED EDN
Achieve an historical and philosophical understanding of (1) the nature of the scientific enterprise: interaction of science, technology, and society (STS), (2) how to teach STS including the use of computers and related technologies, and (3) intricacies of sample STS topics.

SCE 4936 Senior Seminar in Science Education CPST (3) ED EDN
PR: Senior standing; CR: SCE 4940. Synthesis of teacher candidate’s courses in complete college program.

SCE 4940 Internship: Science Education (1-12) ED EDN
CR: SCE 4936. One full semester of internship in a public or private school.

SCE 5325 Methods of Middle Grades Science Education (3) EDE
PR: 18 sem hrs in science, meeting FL content standards for mid grades general science. Prepare 5-9 sci teachers to tch sci skills, content; interrelationship, applications of sci as a human endeavor; nature of sci; instructional methods; nature scientific inquiry; development of sci process skills; integration of subj areas; & assessment.

SCE 5337 Methods of Secondary Science Education (3) ED EDN
Course concentrates on goals, subject matter teaching strategies for high school curricula; assessment and using data to improve student achievement; and development pedagogical content knowledge as it pertains to the teaching and learning of science.

SCE 5564 Reading and Communication in Science Education (3) ED EDN
This course prepares secondary science teachers to teach literacy practices in science. It includes methods for selecting appropriate reading and language approaches. Communication in science and functional aspects of scientific literacy are examined.

SCE 5937 Selected Topics in Science Education (1-4) ED EDN

SLS 1101 The University Experience (1-3) US DEA
PR: Freshman only. An extended introduction to USF. Topics include purposes of higher education, structure and function of USF, career planning, selecting a major, study skills, managing time, academic advising, computer resources, and decision-making.

SLS 2401 Career Development Process (2) US DEA
Students will study vocational choice theories and participate in career decision processes. Development of self-awareness and knowledge of career opportunities and requirements necessary for decision making. Available to lower level majors or non-majors.

SOP 3742 Psychology of Women SS (3) AS WST
An examination of theories of female personality in historical perspective. Current research on sex differences, socialization, sexuality, psychology of reproduction. Emerging roles of women as related to social change and developmental tasks of the life cycle.

SOP 4004 Social Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Survey of methods, empirical findings, and theoretical interpretations in the study of an individual’s behavior as it is affected by others.

SOP 4330 Social Psychology of HIV/AIDS (3) AS PSY
PR: PSY 2012, PSY 3017, PSY 3213 Students study social psychology theory and research while working at an AIDS service organization. They use the research as a framework
SOP 4514 The Holocaust, Social Prejudice, and Morality (3) AS PSY
PR: PSY 2012. Examines the Holocaust from social, psychological, and communication/language perspectives. Reviews root causes of prejudice, the manifestations of hatred in language, relationships, and the ultimate impacts on victims and survivors and rescuers.

SOP 4714C Environmental Psychology (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Explores the influences of environment on behavior. Topics considered include crowding, privacy, territorial behavior, environmental design, and pollution effects. Designed for both psychology majors and non-majors.

SOW 3101 Human Behavior and the Social Environment I (4) BC SOK
PR: All provisional major courses. Restricted to full Social Work majors, others by School permission. An integrating human behavior-social environment course emphasizing dynamics of behavior and environmental factors as they relate to social work practice with individuals, and families.

SOW 3102 Human Behavior And The Social Environment II (3) BC SOK
PR: SOW 3101, SOW 4341, SOW 4522. Restricted to Full Social Work majors, others by School permission. An integrating course emphasizing dynamics of behavior and environmental factors as they relate to social work practice with families, groups, organizations and communities.

SOW 3203 Introduction to Social Work (3) BC SOK
An introductory course tracing the development of social work as a profession including an examination of the knowledge, skill and attitudinal base of the profession and professional roles and functions.

SOW 3210 The American Social Welfare System SS (3) BC SOK
A general education introductory course which provides students with a framework for understanding the historical development of American social welfare, its value base, and its response to minorities, women, children, the elderly, and the disabled.

SOW 3401 Research and Statistics For Social Work (3) BC SOK
PR: SOW 3101, SOW 4343, SOW 4522. Restricted to Full Social Work majors, others by School permission. The purpose of this course is two-fold: to familiarize the student with research as it is practiced in the profession of Social Work; and to equip the student with those theoretical understandings necessary to be a critical consumer of social work research.

SOW 4233 Social Welfare: Policy & Program (3) BC SOK
PR: All provisional major courses, SOW 3101, SOW 3401, SOW 4341, SOW 4522, SOW 3102, SOW 4343. CR: SOW 4510, SOW 4510L. Restricted to full Social Work majors, others by School permission. An advanced policy course taking an analytical approach to contemporary social welfare policy issues and current social welfare programs.

SOW 4341 Multi-Methods of Social Work Practice I: Micro-System Intervention (5) BC SOK
PR or CR: SOW 3101; SOW 4522. All provisional major courses. Restricted to full Social Work majors; others by School permission. First practice course emphasizing development of social work practice for understanding, and developing solutions to, problems confronting the organization’s staff and clients.

SOW 4343 Multi-Methods of Social Work Practice II: Macro-System Intervention (5) BC SOK
PR: All provisional major courses, SOW 3101, SOW 4522, SOW 4341; must be taken as PR. CR: SOW 3401, and SOW 3102. Restricted to full Social Work majors, others by School permission. Second practice course emphasizing intervention at the community and organizational level. Builds upon theoretical and practical content of SOW 4341. Course includes both didactic and experiential learning components.

SOW 4510 Integrative Seminar (3) BC SOK
PR: SOW 3302, SOW 3210, SOW 3101, SOW 4341, SOW 3102, SOW 4343, SOW 4522. CR: SOW 4233, SOW 4510L. Restricted to full Social Work majors in senior year. Integrates content and theory from core classes with practice experiences students are having in field placement.

SOW 4510L Field Placement (6) BC SOK
PR: SOW 3302, SOW 3210, SOW 3101, SOW 4341, SOW 3102, SOW 4522, SOW 4343. CR: SOW 4233, SOW 4510. S/U only. Supervised field placement in a social welfare organization consisting of 32 hours per week in the field with a total of 480 clock hours per semester.

SOW 4522 Multicultural America (3) BC SOK
PR: All provisional major courses. The course focuses on the students’ understanding of multicultural and intergenerational issues.

SOW 4900 Directed Readings (1-9) BC SOK
PR: Completion of four social work courses including SOW 3401, upper level standing, and School permission. Content dependent upon student interest and ability. A contract will be jointly developed by student and instructor specifying nature of work to be completed.

SOW 4910 Directed Research (1-6) BC SOK
PR: Completion of four social work courses including SOW 3401, upper level standing and school permission. Majors only. Directed Research is intended to provide students with research experience in areas of specific interest in social work. A contract will be developed between student and instructor specifying nature of work to be completed.

SOW 4930 Variable Topics in Social Work (1-3) BC SOK
Restricted to Social Work majors; others by School permission. Variable title courses to expand on the four sequence areas in the Social Work core curriculum. Allows focus on areas relevant to student’s educational interest.

SOW 5930C Selected Topics in Social Work (1-4) BC SOK
PR: CC. Restricted to Social Work majors, both graduate and undergraduate; other by School permission. Course is taken as an elective. Various title course will selectively expand specific social work content areas.

SPA 3002 Introduction to Disorders of Speech and Language SS (3) BC CSD
PR: Junior standing and DPR. The scope of speech-language pathology as a profession and a field of study. An introduction to speech and language disorders, etiologies, major treatment approaches, and research findings.
SPA 3004 Introduction to Language Development and Disorders (3) BC CSD
PR: SPA 3002, SPA 3112 or DPR. This course introduces theoretical concepts and research findings concerning the normal developmental process of language learning as a basis for differentiating developmental delay or disorder of language.

SPA 3011 Introduction to Speech Science (3) BC CSD
PR: SPA 3030, SPA 3101 and SPA 3112. Concentrated study of the acoustic, physiological and perceptual aspects of sound as related to normal and pathological speech communication. Introduction to instrumentation and measurement procedures.

SPA 3030 Introduction to Hearing Science (3) BC CSD
PR: Junior standing, SPA 3101, SPA 3112, SPA 3310. Introduction to the field of hearing including: physics of sound, auditory anatomy and physiology, and psychophysics of hearing.

SPA 3101 Anatomy and Physiology of the Speech and Hearing Mechanism (3) BC CSD
PR: Junior standing. The neurological and anatomical basis of communication disorders. Comparisons of normal and pathological organic structures and their functional dynamics.

SPA 3112 Applied Phonetics in Communication Disorders (3) BC CSD
PR: Junior standing. Introduction to phonetic analysis of normal and disordered speech, including extensive training in transcription using the International Phonetic Alphabet.

SPA 3310 Introduction to Disorders of Hearing (3) BC CSD
PR: SPA 3030 and SPA 3101. The etiology, pathology, and management of disorders of the outer ear, middle ear, inner ear, retrocochlear, and central auditory systems.

SPA 3653 Overview of Language Learning in Deaf Children (3) BC CSD
PR: Admission to ITT Program. CR: SPA 3653L. This course is restricted to majors only. Overview of language development of deaf children from infancy through young adulthood, including various theories of language development in the deaf and communication/language of the deaf assessment techniques, and interpreting skills relating to learning processes.

SPA 3653L Overview of Language Learning in Deaf Children Lab (1) BC CSD
PR: Admission to ITT Program. CR: SPA 3653. This course is restricted to majors only. Exploration and overview of communication modes and language used in public school settings by deaf children. Includes a study of how systems overlap and a development of flexibility in using different modes and languages, and the implications for interpreters.

SPA 3673 Introduction to Auditory Functions (3) BC CSD
PR: Admission to ITT Program. This course is restricted to majors. An overview of hearing science and speech science relating to the educational environment. This course orient the student to the variables extent in oral-aural communication among children who have hearing impairment. It addresses techniques and methods of hearing measurement and amplification of sound as well as the interpreter’s role in audiological evaluation and speech language therapy.

SPA 4000 Communication Disorders in the Public Schools (3) BC CSD
PR: DPR. (Non-major course only). An examination of the speech, language and hearing problems affecting school age children and the classroom teacher's role in the detection, prevention and amelioration of communication disorders.

SPA 4050 Introduction to the Clinical Process MW CPST (3) BC CSD
PR: SPA 3004 and SPA 3310. Observation and participation in speech-language pathology and audiology services provided at USF-CSD clinical laboratory. Professional and ethical issues, oral and written communication skills are stressed through clinical and practical projects.

SPA 4201 Phonological Development and Disorders (3) BC CSD
PR: SPA 3004, SPA 3011. An examination of normal and deviant articulatory and phonological acquisition and behavior. Presentation of major theoretical orientations and the therapeutic principles based upon them.

SPA 4210 Vocal Disorders (3) BC CSD
PR: SPA 3011 and SPA 3310. A comprehensive study of the medical and physical aspects of voice disorders. Differential diagnosis, principles of therapeutic intervention, and procedures for children and adults will be stressed.

SPA 4222 Fluency Disorders (3) BC CSD
PR: SPA 4201. A comprehensive study of disfluent speech behavior. Differential diagnosis, principles of therapeutic intervention, and procedures for children and adults will be studied. Major theories and models of the development and origin of stuttering are also presented.

SPA 4335 Sign Language Codes (3) BC CSD
PR: DPR. A review of the sign systems (SEE I, SEE II, L.O.V.E., and Signed English) used to code messages through the use of sign. The student will have the opportunity to practice one of the sign systems.

SPA 4555 Counseling of Communicatively Handicapped and Family (3) BC CSD
PR: SPA 3011 and SPA 3310. Discussion of role of counseling in the treatment of communication disorders. Based on exploration of theoretical constructs, this course demonstrates application of therapeutic methodologies to reduction of communication handicaps.

SPA 4632 Nature and Needs of the Deaf and Hard of Hearing (3) BC CSD
A study of the effects of auditory disorders upon the organization and expression of behavioral patterns as they relate to motivation, adjustment and personality.

SPA 4906 Independent Study (1-10) BC CSD
Indep. Study will allow UG students to work independently under the supervision of Faculty members in the pursuit of content gained independently. The course is repeatable for a total of 10 credits. Majors only.

SPA 4910 Directed Research (1-10) BC CSD
Directed Research will allow the UG student to obtain supervised research experience under the direction of a Faculty member. The course is repeatable for a total of 10 credits. Majors only.

SPA 4930 Selected Topics (1-6) BC CSD
PR: DPR. Intensive study of topics in Speech-Language
Pathology, Audiology, and/or Aural Rehabilitation conducted under the supervision of a faculty member.

**SPA 4962 Undergraduate Comprehensive Examination (1) BC CSD**
PR: INT 4250. This purpose of this course is to ensure that graduates from ITT are thoroughly prepared for entry into the job market. For majors only and repeatable if necessary. It consists of 2 parts: individual meetings with an advisor and a comprehensive exam.

**SPA 4970 Honors Thesis (1-10) BC CSD**
The student, under the supervision of a Faculty member will formalize, conduct, analyze and report in writing a research project in the Department of Communication Sciences and Disorders. The course is repeatable for a total of 10 credits. Majors only.

**SPA 5120 Psychoacoustics (3) BC CSD**

**SPA 5132 Instrumentation (3) BC CSD**
PR: SPA 5120, SPA 6930, SPA 5506. Instruction in the use of clinical and laboratory instrumentation. Emphasis placed on electronic circuitry, signal generation, filtering, and calibration. Hands-on experience with equipment typically used in clinical auditory research will be provided.

**SPA 5133C Speech Science Instrumentation (3) BC CSD**
PR: DPR or SPA 3011 or equivalent. Underlying principles and laboratory exercises in the use of audio recording, acoustic analysis, and clinical instrumentation.

**SPA 5153 Quantitative Problem Solving in Speech Pathology and Audiology (3) BC CSD**
Covers fundamental mathematical and statistical concepts underlying the field of Communication Sciences and Disorders and application of these concepts to practical and clinical problems. Not restricted to majors or repeatable for credit.

**SPA 5204 Advanced Clinical Phonology (3) BC CSD**
The principles of generative phonology will be applied to the assessment and treatment of phonological disorders. Emphasis is placed on making a child's phonology more functional for communication purposes.

**SPA 5303 Auditory Anatomy and Physiology (3) BC CSD**
Provide a comprehensive understanding of the physiological acoustics of the auditory periphery, neuroanatomy and electrophysiology of the central auditory system, and psychoacoustic principles as they relate to clinical audiologic measurement paradigms.

**SPA 5312 Peripheral and Central Auditory Tests (4) BC CSD**
PR: DPR. The study of behavioral and electrophysiologic clinical tests designed to assess the functions of the peripheral and the central auditory system. Tests that incorporate nonspeech stimuli and those that utilize speech stimuli will be included.

**SPA 5328 Rehabilitative Audiology for Adults (3) BC CSD**

**SPA 5403 Language-Learning in the School-Age Years (3) BCCSD**
PR: SPA 4201 and DPR. Metalinguistic and metacognitive development are linked to the interactional demands of classroom and clinical discourse; observational tools are applied to evaluation and intervention planning.

**SPA 5506 Speech-Language Pathology and Audiology Practicum (1-8) BC CSD**
PR: DPR. Participation in speech-language pathology and audiology practicum in the University Communication Disorders Center and selected field settings.

**SPA 5552 Diagnostic Principles and Practices (3) BC CSD**
PR: Admission to the graduate program or DPR. The administration, evaluation, and reporting of diagnostic tests and procedures used in assessment of speech and language disorders.

**SPC 2541 Persuasion SS (3) AS SPE**
Examines the role of persuasion in public and social life. Students will be introduced to key concepts and theories of persuasion from a variety of historical and contemporary perspectives. Students will use these concepts to create, analyze, and respond to persuasive messages.

**SPC 2608 Public Speaking CAHU SS (3) AS SPE**
The nature and basic principles of human communication; emphasis on improving speaking and listening skills common to all forms of oral communication through a variety of experiences in public discourse.

**SPC 3212 Communication Theory (3) AS SPE**
PR: SPC 2608 and COM 2000 each with C- or above or CI. The study of source, message, and receiver variables in human communication; communication settings; descriptive and predictive models of communication; communication as a process.

**SPC 3230 Rhetorical Theory HP (3) AS SPE**
PR: SPC 2608 and COM 2000 each with C- or above or CI. This course surveys the foundations and historical evolution of major concepts, issues, theorists, and approaches to the study of rhetoric from Plato to recent contemporary theorists.

**SPC 3301 Interpersonal Communication SS CASB (3) AS SPE**
A study of interpersonal communication in informally structured settings with emphasis on the understanding, description, and analysis of human communication.

**SPC 3425 Group Communication 6A (3) AS SPE**
PR: SPC 2608 and COM 2000 each with C- or above or CI. A survey of theory and research in group communication. Group discussions and communication exercises to increase awareness of the dynamics of human communication in small group settings.

**SPC 3513 Argumentation and Debate (3) AS SPE**
PR: Junior standing or CI. Study of principles of argumentation as applied in oral discourse, analysis of evidence and modes of reasoning. Practice in debate preparation and delivery.

**SPC 3602 Advanced Public Speaking (3) AS SPE**
PR: SPC 2608 and COM 2000 each with C- or above or CI. Study and application of communication strategies in speaking extemporaneously and from manuscript. The course includes study of selected public addresses as aids to increased understanding of speaking skills.
SPC 3631 Rhetoric of the Sixties HP (3) AS SPE
Survey of the rhetorics associated with the civil rights movement, the Great Society, the anti-Vietnam War movement, the counterculture, the black power movement, and the women’s movement.

SPC 3653 Popular Forms of Public Communication (3) AS SPE
PR: COM 2000 with C or above or consent of instructor (CI). Analysis of public communication with emphasis on various presentational forms.

SPC 3680 Rhetorical Analysis (3) AS SPE
PR: SPC 2608 and COM 2000 each with C- or above or CI. This course introduces students to fundamentals of message analysis. Student examines persuasive strategies and language in oral and written discourse.

SPC 3710 Communication and Cultural Diversity SS CAGC HHCP (3) AS SPE
Examination of communication and cultural diversity within the United States. Cultural groups include gender, racial and ethnic (e.g., African American, Latino American, Asian American), social class, age and generation, religious (e.g., Jewish) and physical ability.

SPC 4201 Oral Tradition MW (3) AS SPE
Study of orality, its forms, functions, and transformations, in traditional and literate societies from folkloric and psychological traditions and from contemporary communication and cultural studies perspectives.

SPC 4305 Communicating Emotions 6A (3) AS SPE
PR: COM 2000 with C or above or consent of instructor (CI). Study of emotional experience, what emotions mean to us, how we talk about them, and the ways group and cultural membership influence them. Focus on attachment and loss in romantic, family and group relationships.

SPC 4310 Relationships on Film (3) AS SPE
PR: COM 2000 with C or above or consent of instructor (CI). Examination of the ways in which cinema inscribes conceptions and meanings of romance, love, intimacy and sexuality. Focus on systems of interpretation fostered by cinema representations of intimacy, sexuality, emotion, subjectivity, and betrayal.

SPC 4431 Family Communication (3) AS SPE
PR: SPC 3301 and COM 2000 with C- or above or CI. Examines the processes and functions of communication in family relationships. Examination of scholarly and popular literature on family structure, family systems, family development, and family stories. Analysis of families in fiction and cinema.

SPC 4632 Rhetoric and Social Change 6A MW (3) AS SPE
PR: SPC 3230 or SPC 3680. This course examines how social change is symbolized and motivated in the rhetorics of institutions, campaigns, social movements and individuals.

SPC 4683 Rhetorical Analysis of Mass Media (3) AS SPE
PR: SPC 3230 or SPC 3680, SPC 2608 and COM 2000 each with a C or above or CI. An introduction to the criticism of media forms and effects. Contemporary perspectives on the aesthetic and persuasive dimensions of mass media are examined. Students will engage in critical study of media artifacts.

SPC 4714 Communication, Culture and Community MW (3) AS SPE
Examines the relationships among culture, communication, institutions, and public and private life. Students explore the possibilities and problems of contemporary forms of communication through service in a volunteer organization.

SPC 4900 Directed Readings (1-3) AS SPE
PR: Senior standing, COM 2000, a minimum GPA of 2.5, 15 hours of core requirements and 9 elective hours completed, and/or CI. Individualized reading with professor to complement undergraduate research projects.

SPC 4903 Honors Readings (3) AS SPE
PR: Admission to Communication Honors Program, COM 2000 AND SPC 2608 with grades of C or better. Focused readings directed toward preparation of a proposal for an undergraduate honors thesis.

SPC 4905 Undergraduate Research (1-3) AS SPE
PR: Senior standing, COM 2000, a minimum GPA of 2.5, 15 hours of core requirements and 9 elective hours completed, and/or CI. Individual investigations with faculty supervision.

SPC 4930 Selected Topics (1-3) AS SPE
PR: Senior standing, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Variable topics.

SPC 4932 Senior Seminar in Communication (3) AS SPE
PR: Senior standing, COM 2000, a minimum GPA of 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Exploration of selected topics of current significance to the several areas of communication through group discussion and research.

SPC 4970 Honors Thesis (3) AS SPE
PR: Admission to Communication Honors Program. Involves individual research and preparation of an undergraduate honors thesis.

SPC 5238 Topics in Rhetorical Analysis (3) AS SPE
Introduces a variety of critical perspectives applied to rhetoric in specialized contexts. Topics vary depending upon interest of students and faculty.

SPC 5930 Topics in Discourse (3) AS SPE
Variable topics course.

SPM 3256 Sport in Society: Contemporary Issues (3) ED EDP
A study of organized sport in society. Individuals will be able to understand issues such as race, social class, gender, politics, religion, economics, media, physical disabilities, sexual orientation, and ethics as they relate to sports.

SPN 1120 Beginning Spanish I (4) AS WLE
CR: SPN 1120L. Not open to native or near-native speakers of Spanish. Development of basic skills in listening, speaking and writing of Spanish.

SPN 1120L Beginning Spanish I Laboratory (1) AS WLE
CR: SPN 1120. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. Not open to native or near-native speakers of Spanish. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

SPN 1121 Beginning Spanish II (4) AS WLE
CR: SPN 1120 or equivalent. CR: SPN 1121L. Not open to native or near-native speakers of Spanish. Continued development of basic skills in listening and reading comprehension, speaking and writing of Spanish.
SPN 1121L Beginning Spanish II Laboratory (1) AS WLE
CR: SPN 1121. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. Not open to native or near-native speakers of Spanish. S/U only. A laboratory designed to offer additional practice using various instructional technologies and media.

SPN 1130 Accelerated Spanish For Near-Native Speakers and Others (1-6) AS WLE
PR: CL. Accelerated course for near-native speakers and others with some knowledge of Spanish capable of making rapid progress.

SPN 2200 Spanish III (3) AS WLE
PR: SPN 1121 or equivalent. May NOT be taken concurrently with SPN 2201. Not open to native or near-native speakers of Spanish. Continued development of basic skills in listening and reading comprehension, speaking and writing of Spanish.

SPN 2201 Spanish IV (3) AS WLE
PR: SPN 2200 or equivalent. May NOT be taken concurrently with SPN 2201. Not open to native or near-native speakers of Spanish. Continued development of basic skills in listening and reading comprehension, speaking and writing of Spanish.

SPN 2240 Conversation I (3) AS WLE
PR: SPN 2201. Not open to native or near-native speakers of Spanish. For development of basic conversational skills.

SPN 2241 Conversation II (3) AS WLE
PR: SPN 2240 or equivalent. Not open to native or near-native speakers of Spanish. To improve fluency in spoken Spanish.

SPN 2270 Overseas Study (1-6) AS WLE
PR: SPN 1121. Prior departmental approval and early registration are required. An intensive study-travel program in a Spanish-speaking country.

SPN 2340 Advanced Spanish for Native Speakers I (3) AS WLE
PR: Native and near-native oral/aural proficiency. May not count as Spanish major elective. Course for native and near-native speakers of Spanish due to home environment and/or residence in a Spanish speaking country, but without formal training in the language. Emphasis on cultural exploration and the grammatical problems of such speakers.

SPN 2341 Advanced Spanish for Native Speakers II (3) AS WLE
PR: SPN 2340. May not count as Spanish major elective. Continuation of SPN 3340. Course for native and near-native speakers of Spanish due to home environment and/or residence in a Spanish speaking country, but with limited or no training in the language. Emphasis on grammar problems affecting such speakers.

SPN 3300 Advanced Spanish Grammar and Composition (3) AS WLE
PR: SPN 2201 or equivalent. Not open to native or near-native speakers of Spanish. A study of syntax, grammar and writing.

SPN 3440 Spanish for Business and International Trade I (3) AS WLE
PR: SPN 2201 or equivalent. A study of vocabulary and business practices of the Spanish speaking world. Overview of cultural differences within the Spanish speaking world, with emphasis on their impact on business and international trade.

SPN 3441 Spanish for Business and International Trade II (3) AS WLE
PR: SPN 3440 or equivalent. Open to Spanish and Business majors and minors. Continuation of SPN 3440. A study of vocabulary and business practices of the Spanish speaking world. Overview of cultural differences within the Spanish speaking world, with emphasis on their impact on business and international trade.

SPN 3500 Spanish Civilization (3) AS WLE
PR: SPN 2201 or equivalent. The culture and civilization of Spain. For majors and non-majors.

SPN 3520 Spanish American Civilization (3) AS WLE
PR: SPN 2201 or equivalent. Readings and discussions on the culture and civilization of Spanish America. For majors and non-majors.

SPN 4301 Expository Writing (3) AS WLE
PR: SPN 3300 or SPN 2340. Practical training in contemporary Spanish structure, usage and stylistic devices.

SPN 4410 Advanced Conversation (3) AS WLE
PR: SPN 2241 or equivalent. Not open to native or near-native speakers of Spanish. Intensive practice in the formulation and expression of ideas in standard Spanish.

SPN 4470 Advanced Overseas Study (1-6) AS WLE

SPN 4700 Spanish Linguistics (3) AS WLE
PR: LIN 3010 or equivalent (may be taken concurrently with CI) and SPN 2201 or equivalent. An introduction to Hispanic linguistics: Phonology, morphology, syntax, and lexicography.

SPN 5525 Modern Spanish American Civilization (3) AS WLE
PR: SPN 3520 or equivalent or graduate standing. Advanced readings and discussions dealing with Spanish American civilization and culture, including a study of social, artistic and political trends. Text and discussion in Spanish.

SPN 5567 Modern Spanish Civilization (3) AS WLE
PR: SPN 3500 or equivalent or graduate standing. Advanced readings and discussions dealing with contemporary Spanish civilization and culture, including a study of recent social, artistic and political trends. Texts and discussions in Spanish.

SPT 3100 Masterpieces of Hispanic Literature (3) AS WLE
This course analyzes major literary works from Spain and Latin America. Through a selection of works from the medieval period to the present students will view the intellectual and cultural history of the Spanish speaking world.

SPT 3520 Spanish American Civilization (3) AS WLE
Readings and discussions on the culture and civilization of Spanish America. For majors and non-majors.

SPW 3030 Introduction to Hispanic Literary Studies (3) AS WLE
PR: SPN 3300 or SPN 2340. Prose fiction, drama, poetry, and essay; techniques of literary analysis.

SPW 4100 Survey of Spanish Literature I (3) AS WLE
PR: SPW 3030 or equivalent. A study of Spanish literature from its origins through the 17th century.
SSE 4313 Teaching Elementary (K-6) Social Studies (3) AS
PR: Admission to College of Education or CI. This course is designed to study techniques and strategies employed by K-6 social studies teachers that are effective in motivating elementary school aged youth to acquire the information, skills, and modes of reasoning unique to the social sciences. Students are expected to plan and present instructional plan(s) demonstrating use of various methods, techniques, and material that achieve concrete outcomes. Theoretical foundations of social studies are also studied. Field work is required.

SSE 4334 Teaching Secondary Grades Social Science (3) ED
PR: SSE 4333. This course is a continuation of SSE 4333 with further development of the instructional techniques and strategies and the information, skills, and modes of reasoning unique to the social sciences with an emphasis on the secondary school environment. The teaching profession, school settings, legal, and classroom management issues are also studied. Fieldwork in a high school is required.

SSE 4335 Teaching Social Science Themes (3) ED
PR: SSE 4333 for Undergraduate Students; SSE 5331 for Graduate Students; SSE Majors only. The course is a laboratory-based, capstone course in which knowledge, skills, and dispositions are demonstrated by students teaching social studies content using the thematic approaches adopted by the National and State accrediting bodies.

SSE 4380 Global And Multicultural Perspectives in Education MW (3) ED
PR: EDG 3604 and EDG 4620, or DPR. Examination of the major issues surrounding global and multicultural perspectives in education. Available to non-Education majors.

SSE 4600 Reading and Basic Skills in the Social Studies Class (3) ED
Reading skills and other basic skills as applied to the social studies are examined. Students plan and present instruction appropriate to the social studies classroom. Fieldwork in middle or senior high schools is required. Restricted to majors.

SSE 4670 Economics USA: Principles of Economics for Teachers (3) ED
S/U only. A television course focusing on content and teaching methodology related to micro/macroeconomic principles.

SSE 4936 Senior Seminar in Social Science Education CPST (3) ED
PR: Senior standing; CR: SSE 4940. Synthesis of teacher candidate’s courses and preparation for the professional interview and application process.

SSE 4940 Internship: Social Science Education (1-12) ED
CR: SSE 4936. S/U only. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 Semester hours.

SSE 5313 Foundations, Curriculum & Instruction of Social Science Education (3) ED
Social studies curriculum, methods of instruction and social, philosophical and psychological foundations are examined. Students are expected to plan and present instructional plan(s) appropriate to middle and secondary
### SSE 5332 Methods & Strategies in Social Science Education (3) ED EDI
Social studies methods and strategies are examined with an emphasis on the secondary school environment. The teaching profession, school settings, and current issues are examined. Students are expected to plan and present instructional plan(s) appropriate to senior high school demonstrating command of the course content.

### SSE 5641 Reading and Basic Skills in the Content Area (3) EDEDI
Reading skills and the other basic skills as applied to the social studies are examined. Students are expected to plan and present instructional plan(s) appropriate to the social studies classroom demonstrating command of the course content. Fieldwork in a middle school is required.

### SSE 5644 Economic Decision-Making for Teachers (3) ED EDW
PR: Admission to College of Education or DPR. Provides teachers (K-12) with content related to the operation of businesses in a market economy. Teachers analyze economic/business concepts from the perspective of individuals currently operating businesses in the Tampa Bay area. Focus of the instruction is on the application of content to K-12 instructional programs.

### SSE 5946 Practicum in Social Science Education (3) ED EDI
PR: SSE 5331. The course is a practicum course in which pre-service teachers apply the knowledge, skills, and dispositions learned in prerequisite program courses to teach the social studies themes adopted by the National Council for the Social Studies.

### STA 1022 Basic Statistics 6A QM (3) AS MTH
PR: C (2.0) or better in MAT 1033, or 440 or better SAT Math score, or 19 or better ACT Math Score, or 72 or better Elementary Algebra CPT score. No credit for Mathematics majors. Basic philosophy of statistical thinking. Acquisition of data. Techniques for organizing and presenting statistical data. Sample mean, variance and standard deviation. Statistical decisions—estimation and hypothesis testing. Design of experiments, linear association and prediction. Statistical software: MINITAB.

### STA 2023 Introductory Statistics I 6A QM CAQR (4) AS MTH
PR: C (2.0) or better in High School Algebra or Elementary Algebra CPT score of 72 or better. Descriptive and Inferential Statistics: Principles of Probability Theory, Discrete and Continuous Probability Distributions: Binomial Probability Distribution, Poisson Probability Distribution, Uniform Probability Distribution, Normal Dist and more.

### STA 2122 Social Science Statistics 6A QM CAQR (3) AS ISSS
Students are taught the fundamental vocabulary and symbols of statistics as well as commonly used statistical procedures in social sciences. Students conduct analyses, interpret results and make conclusions about research questions.

### STA 3024 Introductory Statistics II 6A (3) AS MTH
PR: STA 2023 or CC. Factorials, ANCOV; multiple curvilinear regression; response surfaces; Latin squares, Split Plots, incomplete designs; distribution free methods.

### STA 4321 Essentials of Statistics 6A (3) AS MTH

### STA 4442 Introduction to Probability 6A (3) AS MTH
PR: MAC 2313. Introduction to probability theory using calculus. Basic ideas of probability and random variables, discrete probability functions, continuous probability densities, joint distributions, transformations of random variables, moments and generating functions of random variables, limit theorems.

### STA 5166 Statistical Methods I (3) AS MTH
PR: STA 4321 or CI. Statistical analysis of data by means of statistic package programs. Regression, ANOVA, discriminant analysis, and analysis of categorical data. Emphasis is on inter-relation between statistical theory, numerical methods, and analysis of real life data.

### STA 5228 Sampling Techniques (3) AS MTH

### STA 5326 Mathematical Statistics I (3) AS MTH
PR: STA 5446. Sample distribution theory, point & interval estimation, optimality theory, statistical decision theory, and hypothesis testing.

### STA 5446 Probability Theory I (3) AS MTH
PR: STA 4442 and MAA 4212 or CI. Axioms of probability, random variables in Euclidean spaces, moments and moment generating functions, modes of convergence, limit theory for sums of independent random variables.

### STA 5526 Non-Parametric Statistics (3) AS MTH
PR: STA 5326 or CC. Theory and methods of non-parametric statistics, order statistics, tolerance regions, and their applications.

### SUR 2101C Engineering Land Surveying (3) EN EGX
Principles of land surveying for engineering practice. Traverses, levels, boundary surveys, route surveys, coordinate geometry, and mapping.

### SYA 3110 Classical Theory (3) AS SOC
PR: SYG 2000 or CI. The analysis of the philosophical foundations, central principles, and historical development of Sociological theory. Required for Sociology majors and minors.

### SYA 3120 Contemporary Theory (3) AS SOC
PR: SYA 3110 and SYG 2000 or CI. An examination of recent trends in sociological theory. Emphasis is on theories examining symbolic interactions, lived experience, popular culture, and social structures.

### SYA 3300 Research Methods (3) AS SOC
PR: STA 2122 or equivalent. Introduction to the scientific method and its application to social science research. Research design, sampling techniques, and critical evaluation of social research. Required for Sociology majors.

### SYA 3310 Qualitative Inquiry 6A LW (4) AS SOC
PR: SYG 2000 or CI. DPR. Exploration of human relationships and behaviors, organizations, and the larger culture through research techniques such as interviews, participant observation, life histories, and narratives.
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<th>Course Code</th>
<th>Course Title</th>
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<td>SYG 2000</td>
<td>Introduction to Sociology SS CASB (3) AS SOC</td>
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<td>SYG 4800</td>
<td>Gender and Society CPST (3) AS SOC</td>
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<td>SYG 4410</td>
<td>Urban Sociology CPST (3) AS SOC</td>
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<td>SYG 4411</td>
<td>Urban Life CPST (3) AS SOC</td>
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<td>SYG 3700</td>
<td>Racial and Ethnic Relations SS HP CASB (3) AS SOC</td>
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<td>Sociological Research Experience (1-3) AS SOC</td>
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<td>Topics in Sociology CPST (3) AS SOC</td>
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<td>SYO 4300</td>
<td>Political Sociology SS HP CASB (3) AS SOC</td>
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This course introduces undergraduate students to the discipline of sociology. During the semester, we will analyze sociological theories, core concepts, and issues through readings, lectures, discussions, films, and hands-on research assignments.

SYG 2010 Contemporary Social Problems SS CASB (3) AS SOC
This course introduces students to a sociological understanding of "contemporary social problems." Drawing on such concepts as culture, deviance and social institutions, we will analyze varying definitions, causes and solutions to these problems.

SYG 3011 Social Problems Through Film SS HP CASB (3) AS SOC
PR: SYG 2000 or SYG 2010. Examines, through films, how sociologists define and study social problems, and investigates the role of the popular media in the construction of social problems. Explores the solutions aimed at social problems in a comparative, international perspective.

SYG 3235 Latina Lives 6A AF LW WRIN (3) AS SOC
PR: SYG 2000 or SYG 2010. An exploration of the experiences of Latinas in the U.S by examining the sociological themes of migration, work, family, oppression, activism, identity construction, spirituality, and sexuality through short stories, poetry, and scholarly research.

SYO 3120 Sociology of Families SS HP CASB (3) AS SOC
With a goal to understand American families in the present, this course will examine variations in family types by social class, race, ethnicity, and historical era. Exploration of current controversies about how families should be organized and about what they should do for their members as well as social policies related to families.

SYO 3200 Sociology of Religion SS HP CASB (3) AS SOC
PR: SYG 2000 or CI. An examination of the meanings of religion lived in experiences in the contemporary United States. Includes the construction and maintenance of religious meanings and communities, the impact of those meanings and communities on daily lives, use and impact of religious discourse in daily lives, social movements motivated by religious beliefs.

SYO 3460 Sociology of the Media SS HP CASB (3) AS SOC
PR: SYG 2000 or SYG 2010. Imparts a familiarity with and working knowledge of the main theories, research, and findings in the sociology of the media. Fosters critical thinking abilities by applying this sociological knowledge to the deconstruction of media images.

SYO 3500 Social Organization SS HP CASB (3) AS SOC
PR: SYG 2000 or CI. Social organization in the broadest sense, including institutions and associations, as well as variations in role and status.

SYO 3530 Social Inequalities in a Global Society SS HP CASB (3) AS SOC
Introduction to the major concepts and theories used to explain inequality. The topics of race, gender, and sexual orientation will be treated in relation to class, rather than as a parallel dimension of stratification.

SYO 4250 Sociology of Education SS HP CASB (3) AS SOC
PR: SYG 2000 Application of sociological theory to the social institution of education. Primary attention directed toward the social organization of educational systems.

SYO 4300 Political Sociology SS HP CASB (3) AS SOC
PR: SYG 2000 or CI. An examination of the social factors that affect government, politics, and political behavior.

SYO 4370 Occupations and Professions SS HP CASB (3) AS SOC
PR: SYG 2000 or CI. A comparative analysis of professions, particularly medicine, law, teaching, allied health
professions, engineering. Focus on the process of professionalizing service occupations like police work, business management, public administration and social work.

**SYO 4400 Medical Sociology** (3) AS SOC
PR: SYG 2000 or CI. The study of disease and the sick person including the analysis of health practices, beliefs, and practitioners, the hospital as an organization, the cost, financing, and politics of health care.

**SYO 4430 Disability and Society** MW WRIN (3) AS SOC
PR: SYG 2000 or CI. Examination of the applicability of sociological concepts to the experience of disability, and of disability as a means to a better understanding of the nature of social experience.

**SYO 5365 Industrial Sociology** (3) AS SOC

**SYP 3000 Social Psychology** SS CASB (3) AS SOC
Course explores social forces shaping individual perceptions/behaviors/personality/identity. Addresses our participation in society, how people influence each other, how we act based on beliefs and why & this is important.

**SYP 3004 Constructing Social Problems** (3) AS SOC
Examination of how activists, media, politicians, and scientists construct public images of social problems; analysis of the process of forming social policy and how public images of social problems shape the characteristics of social service agencies.

**SYP 3060 Sociology of Sexualities** (3) AS SOC
Explores the interactions, among and between people, and people and institutions that form the boundaries through which sexualities are understood in the United States. Addresses interactions with and within medical and religious institutions, racial/ethnic cultures, families and popular culture.

**SYP 3562 Family Violence** (3) AS SOC
An exploration of the complexity of the causes and consequences of physical and emotional violence among family members. Topics include the meanings and behaviors of violence, the process of help-seeking, and social interventions for offenders and victims. Open to nonmajors.

**SYP 4012 Emotions in Society** (3) AS SOC
PR: SYG 2000 or SYG 2010. Examines the theories, concepts, and larger social contexts of emotions, and investigates sociological research on feelings such as anger and fear; pride and shame; love, friendship and sympathy; sadness and depression; grief and loss.

**SYP 4111 Identity and Community** (3) AS SOC
This course is a sociological examination of the meanings of identity in the post-modern era. Topics will include the characteristics of identity at the levels of individuals, institutions, culture, and the processes of identity construction and change.

**SYP 4420 Consumer Culture** 6A MW LW WRIN (3) AS SOC
PR: SYG 2000 or CI. The exploration of how Americans' purchasing behavior connects to larger historical shifts in our economy, including disenchantment, alienation, inequality, and the rise of the credit card society.

**SYP 4510 Sociological Aspects of Deviance** (3) AS SOC
The examination of the social construction of deviance; how deviance is defined, implications of deviance designations. Applications of theories of deviance to questions such as motivations of deviants and implications of criminal justice processing of deviants.

**SYP 4530 Sociology of Juvenile Delinquency** (3) AS SOC
Sociological issues in defining delinquency; the nature of adolescence and delinquency; sociological theories of the causes of delinquency; types and consequences of social control applied to delinquents.

**SYP 4550 Drugs and Society** (3) AS SOC
PR: SYG 2000 or SYG 2010. Explores the social construction of substance use in the United States. Examines individual users and the popular perspectives on the causes of substance use and abuse such as the medical, psychoanalytic, and sociological models.

**SYP 4640 Leisure in Society** (3) AS SOC
Sociological examination of leisure in the United States and other countries. Topics include changing leisure time patterns, relationships between leisure and work, personality, family, community, subcultures, religion, and social class.

**SYP 4650 Sport in Society** (3) AS SOC
An examination of the broad issues concerning sport in both a historical and contemporary perspective. Sport will be viewed in relation to social institutions, economic considerations, mass media, and the sport group as a micro-social system.

**SYP 4763 Sociology of Childhood and Youth** (3) AS SOC
PR: SYG 2000 or SYG 2010. Examines a variety of issues including: child-rearing; invention of adolescence; child abuse; children's schooling; juvenile delinquency; dating; children in the movies; children as consumers; youth culture and rebellion; transition into adulthood.

**TAX 4001 Concepts of Federal Income Taxation** (3) BU ACC
PR: ACG 3103 with a grade of C or better, not C-. Major concepts used in taxation of income by federal government including enactment of tax laws, basic tax research, preparation of basic tax returns and exploration of tax policy issues.

**TAX 5015 Federal Taxation of Business Entities** (3) BU ACC
PR: TAX 4001 with a grade of C or better, not C-. Tax issues encountered by small businesses. Includes tax planning, capital formation and preservation, tax compliance and tax alternatives.

**THE 2005 Issues in Theatre** FA (3) TA TAR
Focuses on the variety and range of contemporary performance using lecture, discussion, theatre attendance, and experiential learning. Encourages critical thinking and reflection about theatre in contemporary society. Restricted to non-theatre majors.

**THE 2020 Introduction to Theatre** (3) TA TAR
An introduction to the art of theatre as part of the larger context of the nature of art itself. The approach will be both chronological and multi-cultural. Required of all theatre majors.

**THE 2252 Great Performances on Film** FA CAFA HHCP (3) TA TAR
This class traces the evolution of acting styles as evidenced through 100 years of cinema, and explores how movies and actors have mirrored or influenced cultural, political, and social change.

**THE 2305 Script Analysis** (3) TA TAR
PR: Sophomore standing, THE 2020. This course teaches
THE 4401 American Drama 6A MW LW WRIN HHCP (3) TA TAR
PR: Sophomore standing, THE 2020. The study of theatrical production in its cultural context, including theatre architecture, scenography, acting and directing from Greek antiquity to the Elizabethan era. Normally fifteen plays will be read.

THE 3111 Theatre History II MW CPST HHCP (3) TA TAR
PR: Sophomore standing, THE 2020. A study of theatrical production in its cultural context including theatre architecture, scenography, acting and directing from Shakespeare to the contemporary stage. Normally fifteen plays will be read.

THE 4174 New British Theatre and Drama 6A MW LW (3) TA TAR
PR: THE 2305 and Junior Standing. A study of contemporary theatrical practice and key dramatic texts in the British Isles. This course is restricted to majors.

THE 4180 Theatre Origins 6A MW LW (3) TA TAR
PR: THE 3110 or THE 3111 and one of the following: THE 4320, THE 4330, THE 4360, THE 4401, THE 4434, THE 4435, THE 4442, THE 4480. Open to senior non-majors with CI. An analysis of the development of theatre out of myth, ritual, and liturgy. Emphasis placed on what attempts to understand the resulting phenomena (e.g. Aristotle’s Poetics) can teach us about the nature of our art. Either THE 4180 or THE 4562 is required of all theatre majors.

THE 4264 History Of Costume (3) TA TAR
PR: Sophomore standing. Open to upper level non-majors with CI. A survey of clothing and dress from Ancient Egypt to the 20th Century with an emphasis on cultural and social influences. (A requirement in the design track/costume.)

THE 4266 Architecture And Decor (3) TA TAR
PR: Sophomore standing. Open to upper level non-majors with CI. A survey of architecture and furniture from ancient Egypt to the 20th Century. (A requirement in the design track/scenic.)

THE 4320 Theatre of Myth and Ritual/Northern European (950-1600) & Oriental (400-1200) 6A MW LW (3) TA TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. An investigation into the interrelationship of myth, ritual, and theatre. Considers northern European liturgical and secular plays as compared with Hindu, Chinese, and Japanese drama.

THE 4330 Shakespeare for The Theatre 6A MW LW WRIN HHCP (3) TA TAR
Study of select Shakespeare plays through current and past performance. Examination of texts, filmed rehearsals, scholarly sources, and commercial movies. Performance required in face to face sections.

THE 4360 The 19th Century Theatre Revolution 6A MW LW (3) TA TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. Survey of the European art theatre revolution against the romantic realism of the commercial stage and its effect on subsequent theatre activity.

THE 4401 American Drama 6A MW LW WRIN HHCP (3) TA TAR
THE 4401 examines seminal American plays and high quality film adaptions derived from them. Each play is examined as a script for performance and as an object in an aesthetic, social and historic context.

THE 4434 Caribbean Theatre 6A MW LW CPST (3) TA TAR
PR: THE 2305 and THE 3110 or THE 3111. A study of plays and popular theatrical forms of the Caribbean including carnival and calypso. The student will investigate the social and political forces that shape the culture of the Caribbean.

THE 4435 Theatre of Pluralism 6A MW LW (3) TA TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. The practice of theatre as it reflects cultural heritage, gender, race and sexual orientation. Study of contemporary scripts, critical and artistic statements.

THE 4442 Comedy of The Classic And Neo-Classic Stage 6A LW (3) TA TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. A study of comedic function in scripts from Greek and Roman, Restoration and French Neoclassic of the late 17th century and other plays from the late 18th and late 19th centuries which reflect similar characteristics.

THE 4480 Drama-Special Topics (3) TA TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. A study of a significant playwright or grouping of playwrights, e.g. Moliere, Brecht, recent American dramatists.

THE 4562 Contemporary Performance Theory 6A MW LW CPST HHCP (3) TA TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. A study of a significant playwright or grouping of playwrights, e.g. Moliere, Brecht, recent American dramatists.

THE 4593 Honors Seminar (2) TA TAR
Enrollment limited to upper level majors who have been formally admitted to the department honors program. Not available S/U. Readings in the literature, history and theory of the stage in preparation for Theatre Honors Practicum. Past topics have included New German Theatre, Popular Theatre, New American Theatre, Jacobean Theatre.

THE 4594 Honors Practicum (3) TA TAR
PR: THE 4593. Honors Practicum grows out of the Honors Seminar and engages students in workshops or production with guest artists. Past artists have included the Free Theatre of Munich, the San Francisco Mime Troupe, playwrights Eric Overmeyer, Jeff Jones and Gary Hill.

THE 4595 Honors Thesis (1-3) TA TAR
PR: THE 4594. A practical or written thesis related to the seminar and practicum and approved by the departmental honors committee.

THE 4761 Methods of Teaching Theatre for Adolescents (3) TAEDD
Methods of effective drama and theatre instruction in middle school, junior and high schools, recreation centers, community, and professional theatres.

THE 4905 Directed Studies  (1-4) TA TAR
Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.

THE 4930 Selected Topics In Theatre (1-8) TA TAR
PR: CI. The content of the course will be governed by student demand and instructor interest. May be lecture or class discussion or studio format.
THE 5909 Directed Studies (1-6) TA TAR
PR: CI and CC. Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.

THE 5931 Selected Topics In Theatre (1-8) TA TAR
PR: CI. The content of the course will be governed by the student demand and instructor interest. May be lecture or class discussion or studio format.

TPA 2200 Introduction to Technical Theatre I (3) TA TAR
CR: TPA 2290L or CI. An introductory course in technical production including coursework in the areas of scenic construction, theatre production/organization, and sound. Required for Theatre majors. Requires sequential semester enrollment with TPA 2211 and TPA 2291L. Open to non-majors.

TPA 2211 Introduction to Technical Theatre II (3) TA TAR
CR: TPA 2291L or CI. An introductory course in technical production including stage lighting, costume construction, and sound. Required for Theatre majors. Requires sequential semester enrollment with TPA 2200 and TPA 2290L. Open to non-majors.

TPA 2248 Workshop In Stage Makeup (1) TA TAR
Beginning theory and practice in make-up for the stage. Open to non-majors. Theatre majors given preference. A studio course.

TPA 2290L Technical Theatre Lab I (1) TA TAR
CR: TPA 2200 or CI. A practical laboratory involving the pre-performance preparation of all technical aspects of a major production such as: painting, sewing, lighting, and sound. Students are assigned two areas of study per semester. Required of all Theatre majors. Open to non-majors.

TPA 2291L Technical Theatre Lab II (1) TA TAR
CR: TPA 2211 or CI. A practical laboratory involving the pre-performance preparation of all technical aspects of a major production such as: painting, sewing, lighting, and sound. Students are assigned two areas of study per semester. Required of all Theatre majors. Open to non-majors.

TPA 2292 Production Involvement I (1) TA TAR
PR: TPA 2200, TPA 2290L, TPA 2211, TPA 2291L or CI. The rehearsal, construction, and performance of major theatrical works. Assignments are made by a faculty committee following the students completion of a PI request form, available in the Theatre Office, and enrollment in this course.

TPA 3007 Introduction to Design I (3) TA TAR
PR: TPA 2200, TPA 2211, TPA 2290L, and TPA 2291L. Open to non-majors. This course will include lectures, demonstrations, individual student presentations, and studio activities. The course work will provide an introduction to the various aspects of design including: two and three dimensional design, basic presentation and visual communication skills, research, and project analysis/organization. Open to non-majors.

TPA 3008 Introduction to Design II (3) TA TAR
PR: TPA 3007. This course will include lectures, demonstrations, individual student presentations, and studio activities. The course work will provide an introduction to the various aspects of design including: two and three dimensional design, basic presentation and visual communication skills, research, and project analysis/organization. Open to non-majors.

TPA 3028 Drafting and CAD I (3) TA TAR
PR: TPA 2200, TPA 2211, TPA 2290L and TPA 2291L. The course will include lectures, demonstrations, individual student presentations, and studio activities. The course work will provide an opportunity to develop skills and techniques in the visual presentation of various design and technical draftings. Open to non-majors.

TPA 3221 Lighting: Theory And Practice (3) TA TAR
PR: TPA 3208 or CI. Intermediate lighting design course concerned with graphic presentations, color theory, design concepts, and practical experience with computer lighting systems. A requirement in the design track/lighting.

TPA 3231 Costume Construction (3) TA TAR
PR: TPA 3208 or CI. A practical course in the drafting of patterns for costuming the actor. Materials, skills, and techniques for construction of costumes and costume accessories will be treated. Included topics are millinery, footwear, jewelry, masks, armor, courtesy; both period and modern.

TPA 3251 Drafting and CAD II (3) TA TAR
PR: TPA 3208. Continuation of TPA 3208. The course will include lectures, demonstrations, field trip(s), individual student presentations, and studio activities. The course work will provide an opportunity to develop your skills and techniques in the visual presentation of various design and technical draftings. Open to non-majors.

TPA 3265 Sound For The Stage (3) TA TAR
PR: TPA 2200, TPA 2290L, TPA 2211, and TPA 2291L. Open to non-majors with CI. Basic study of audio components, fundamental properties of sound, multiple channel recording, editing, reproduction and reinforcement. Methods and techniques used in theatre to create sound effects.

TPA 3296 Design Practicum (2) TA TAR
PR: TPA 3008. This is a studio/laboratory course in the practical aspects of production. The course is intended to provide realized production experience to the advanced theatre design student in such areas as costume, lighting, and scenic design; stage properties design; technical direction; and theatrical production craft/skill areas. The student will be individually mentored by a faculty member through the process of developing and realizing a production design/craft/skill.

TPA 3601 Stage Management (2) TA TAR
PR: TPA 2200, TPA 2290L, TPA 2211, and TPA 2291L. Open to non-majors with CI. A practical course in the working organizational function of the stage manager in theatre, dance, opera, and other live performance situations.

TPA 3840 Puppetry Performance And Production (4) TA TAR
PR: TPA 2200, TPA 2290L, TPA 2211, and TPA 2291L. Open to non-majors with CI. The creation, building, rehearsal, and performance of plays for puppet theatre.

TPA 4011 Design Studio I (3) TA TAR
PR: TPA 3008 and TPA 3208 plus two of TPA 3231, TPA 3221, or TPA 3251. TPA 4011 will include studio design project activities in the areas of costume, lighting, and scenic design. The course work will stress the nature of collaborative work and the various stages and processes involved with the development of a design from the first meeting to the final paper/model design.
TPA 4012 Design Studio II (3) TA TAR
PR: TPA 4011. This course will include studio design project activities in the areas of costume, lighting, and scenic design. The course work will stress the nature of collaborative work and the various stages and processes involved with the development of a design from the first meeting to the final paper/model design. Evaluation of the project will emphasize the process followed in the development of the design including thumbnail/idea sketching, research, and production concept. The course will include seminar (production) discussions, lectures, demonstrations, individual and group work, and individual student presentations.

TPA 4013 Design Studio III (3) TA TAR
PR: TPA 4012. This course will include studio design project activities in an individual's selected primary and secondary areas of costume, lighting, and/or scenic design. The course work will stress the nature of collaborative work and the various stages and processes involved with the development of a design from the first meeting to the final paper/model design.

TPA 4077 Scene Painting (2) TA TAR
PR: TPA 3007. Open to upper level non-majors with CI. A practical course in the painting of stage scenery: media and application.

TPA 4273 Stage Properties: Techniques And Materials Studio (2) TA TAR
PR: TPA 3007. Open to upper level non-majors with CI. Demonstration of and experience with materials used in construction of stage properties. Modeling of prototypes and basic casting techniques. Organization of shop.

TPA 4293 Production Involvement II (1) TA TAR
PR: TPA 2292 or CI. The rehearsal, construction, and performance of major theatrical works. Assignments are made by a faculty committee following the student's completion of a PI request form, available in the Theatre Office, and enrollment in this course.

TPA 4298 Advanced Design Practicum (3) TA TAR
PR: TPA 4011. This is a studio/laboratory course in the practical aspects of production. The course is intended to provide realized production experience to the advanced theatre design student in such areas as costume, lighting, and scenic design; stage properties design; technical direction; and theatrical production craft/skill areas. The student will be individually mentored by a faculty member through the process of developing and realizing a production design/craft/skill.

TPP 2110 Voice-Body-Improvisation (3) TA TAR
Exploring the elements basic to acting skills, a participation course. Required of all theatre majors. Open to non-majors.

TPP 2190 Studio Theatre Performance I (1) TA TAR
PR: TPP 2110, THE 2020. A practical laboratory involving the rehearsal and performance of a major production. Activities may include acting, directing, stage management, and the activities of the performance production crews. Placement by audition. If cast in production student must accept role. Required of all Theatre majors. May be repeated. Open to non-majors with CI.

TPP 2500 Body Disciplines (3) TA TAR
PR: TPP 2110. A laboratory course in various disciplines or systems and understanding the body's motive powers, with focus on their use for the stage performer.

TPP 3121 Improvisation I (3) TA TAR
PR: TPP 2110. An intensive study in improvisation as an enhancement of the actor's skill. Exercises and theatre games as flexible forms which accommodate improvisation and physical invention are examined and used to develop group creativity.

TPP 3155 Scene Study I (3) TA TAR
PR: Audition and all core 2000 level courses. Identify and investigate the fundamental elements of acting as applied to scene exploration, rehearsal, and presentation.

TPP 3230 Laboratory Workshop In Performance (3) TA TAR
PR: Audition and TPP 2110. May be repeated twice for a total of 9 hours credit. Open to upper level non-majors by audition only. The content of the course will be governed by student demand and instructor interest.

TPP 3580 Special Skills In Movement (3) TA TAR
PR: TPP 2210 or CI. May be repeated for credit. Open to upper level non-majors with CI. Stage combat, circus and acrobatic techniques, and other special techniques of movement.

TPP 3790 Voice Preparation For The Actor (3) TA TAR
PR: TPP 2110. A concentrated laboratory on freeing the breathing function, developing body and oral resonance, and strengthening muscles used on the formation of speech sounds.

TPP 3920 Acting Studio I (8) TA TAR
PR: Audition, all lower level core theatre courses and junior standing. An intensive and comprehensive ensemble workshop that explores the basic principles of acting and the skills necessary for play, scene and character analysis. An emphasis is placed on the integration of body, voice, mind and emotions. This course will be team taught by the Performance faculty.

TPP 3921 Acting Studio II (8) TA TAR
PR: TPP 3920. A continuation of Acting Studio I with greater emphasis on addressing individual needs in order to explore emotionally complex characters and scenes in an intensive and systematic way. This course will be team taught by the Performance faculty.

TPP 4140 Styles Of Acting (3) TA TAR
PR: TPP 4180 and audition or CI. Examination of the actor’s craft and skills needed to fulfill the demands of classical theatre forms.

TPP 4180 Advanced Scene Study (3) TA TAR
PR: Audition and TPP 3155 or TPP 3921. An acting workshop focusing on application of character development and rehearsal techniques over a sustained period leading toward a project showing at semester’s end.

TPP 4193 Studio Theatre Performance II (1) TA TAR
PR: TPP 2190. A practical laboratory involving the rehearsal and performance of a major production. Activities may include acting, directing, stage management, and the activities of the performance production crews. Placement by audition. If cast in production student must accept role. Required of all Theatre majors. May be repeated. Open to non-majors with CI.

TPP 4221 Audition Workshop for Actors (3) TA TAR
PR: TPP 3155 or TPP 3921. Preparation for professional audition; discussion of professional objectives.
TSL 4310 Directing I (3) TA TAR
PR: TPP 3155 or TPP 3230. An elective sequence in directing. A workshop course in which the student first encounters the basic tasks of the director by preparing and directing one or two scenes and then progresses to more complex scene work in a variety of styles and finally proceeds to the short play or theatre pieces.

TSL 4311 Directing II (3) TA TAR
PR: TPP 4310 and CI. An elective sequence in directing. A workshop course in which the student first encounters the basic tasks of the director by preparing and directing one or two scenes and then progresses to more complex scene work in a variety of styles and finally proceeds to the short play or theatre pieces.

TTP 4600 Writing For The Theatre (3) TA TAR
PR: TPP 3110 or THE 3111. An elective sequence in writing, in which the student first encounters the problems unique to dramatic language and situation, then progresses to complexities of character, plot, and stage dynamics. Normally the aim would be to complete several performance-worthy self-contained scenes.

TTP 4920 Senior Workshop For Actors (3) TA TAR
PR: TPP 2500, TPP 3790, TPP 3155, or TPP 3921. A workshop in advanced vocal and movement techniques.

TTP 4923 Music Theatre Workshop (3) TA TAR
PR: TPP 2110 and audition. Open to non-majors by audition only. Exploration of Musical Theatre materials and performance techniques for the performer. Individual and ensemble work.

TSL 4080 ESOL 1 - Curriculum and Pedagogy of ESOL (3) ED EDX
This course is designed to prepare pre-professional (pre-service) teachers to provide linguistically and culturally appropriate instruction, learning opportunities and assessment for English Language Learners (ELLs) in grades K-12.

TSL 4081 ESOL 2 - Literacy Development in English Language Learners (3) ED EDX
PR: TSL 4080 or FLE 4317. This course is designed to provide students with a critical understanding of instructional delivery which caters to the linguistic and literacy needs of minority/heritage communities. Providing students with a sociocultural-critical theoretical framework.

TSL 4251 ESOL 3 - Applying Linguistics to ESOL Teaching and Testing (3) ED EDX
PR: TSL 4080 and TSL 4081. This course provides an overview of the components of language, linking them to methods and techniques of providing comprehensible instruction to English Language Learners (ELLs) and supports the development of professional literacy skills.

TSL 4324 ESOL Competencies and Strategies (1-3) ED EDX
Designed to enable participants to meet the special limitations and cultural educational needs of LEP students in content area classes. Designed to provide a theoretical and practical foundation for ESOL competencies and strategies.

TSL 4374 Methodology of Teaching English Overseas (3) AS WLE
PR: Upper-level standing. Designed to introduce and prepare the enrollee in the various facets of teaching English as a foreign language in the overseas setting. It will include aspects of teaching verbal skills and comprehension as well as writing. It involves a practicum at the English Language Institute on campus.

TSL 4941 ESOL Practicum (1) EP EDX
PR: BXE Majors only. FLE 4317 and FLE 4316. Students will apply knowledge and skills in the areas of ESOL methods, culture, curriculum, assessment, applied linguistics and second language acquisition to teaching English language learners. Restricted to education majors. Not repeatable.

TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners (3) ED EDX
This course is for undergraduate degree holding, preprofessional (preservice) teachers to learn about appropriate instruction, assessment and learning opportunities for Limited English Proficient (LEP) students in the content areas.

TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents (3) ED EDX
PR: FLE 5430. This course is designed to provide students with a critical understanding of instructional delivery which caters for the linguistic and literacy needs of minority/heritage communities.

TSL 5242 ESOL III-Language Principles, Acquisition & Assessment for English Language Learners (3) ED EDX
PR: FLE 5431. This course provides an overview of the components of language, linking them to methods and techniques of providing comprehensible instruction to LEP students.

TSL 5325 ESOL Strategies for Content Area Teachers (3) ED EDX
Course designed for public school teachers working with limited English Proficient (foreign) students in the classroom. The new ESOL requirements specify that this course be offered to content area teachers and to ESOL teachers.

TSL 5371 Methods of Teaching English As A Second Language (3) AS WLE
Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.

TSL 5372 ESOL Curriculum and Instruction (3) AS WLE
Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.

TSL 5440 Language Testing (3) AS WLE
PR: TSL 5371. Lecture course on testing English as a second/foreign language.

TSL 5525 Cross-Cultural Issues in ESL (3) AS WLE
PR: LIN 5700. Lecture course on cultural issues in Teaching English as a Second/Foreign language.

TSL 5940 ESOL Practicum (1-3) ED EDX
PR: FLE 5345 and FLE 5145. Must be taken in the semester prior to final internship. This course is restricted to Education majors and will not be repeatable for credit. A structured field experience with Limited English Proficient students.

TTE 4003 Transportation and Society (3) EN EGX
This course provides a multidisciplinary introduction to transportation and its impacts on society. It explores how transportation interacts with the economy, the environment and the social and political nature of society.

TTE 4004 Transportation Engineering I (3) EN EGX
PR: EGN 3321. Principles of surface transportation system development, design, and operations; administration,
VIC 3001 Introduction to Visual Communications (3) AS
URS 3002 Introduction to Urban Studies (3) AS
URP 4052 Urban and Regional Planning (4) AS GPY
TTE 5620 Air Transportation (3) EN EGX
TTE 5501 Transportation Planning and Economics (3) EN EGX
TTE 5205 Traffic Systems Engineering (3) EN EGX
TTE 4005 Transportation Engineering II (3) EN EGX

476 USF Course Descriptions

under the supervision of a professional practitioner. Periodic classroom where the student works for academic credit option majors. S/U only. Practical experience outside the visual media. Critical examination of visual communication in newspapers, magazines, application in the visual media. Examination of hypothesis formulation and testing, current issues.

TTE 5501 Transportation Planning and Economics (3) EN EGX
PR: College Algebra & CI. Fundamentals of urban transportation planning: trip generation, trip distribution, modal split, traffic assignment. Introduction to environmental impact analysis, evaluation an choice of transportation alternatives.

TTE 5620 Air Transportation (3) EN EGX
This is a course for graduate students in the College of Engineering who are interested in air transportation. It covers topics such as, airport management, air traffic flow management, air transport economics, and etc. No registration restrictions.

URP 4050 City Planning and Community Development (3) AS POL
An introduction to the development, role, and components of city planning, and the political and actual policies of government in attempting to regulate or control urbanization.

URP 4052 Urban and Regional Planning (4) AS GPY
PR: GEO 2400, GEO 3602. The geographic foundations of the modern city, metropolitan development, and the trend toward megalopolis. Examined are the political problems of conflicting jurisdictions at the local, county, state, national, and international levels.

URS 3002 Introduction to Urban Studies (3) AS ISS
An interdisciplinary introduction to the process of urbanization in the United States and the diverse communities it has created. Study of the Tampa Bay region is emphasized.

VIC 3001 Introduction to Visual Communications (3) AS COM
PR: MMC 2100 and MMC 3602. Survey of visual communication theory, techniques and contemporary application in the visual media. Critical examination of visual communication in newspapers, magazines, television, motion pictures and new media.

VIC 3943 Visual Communication Practicum (1) AS COM
PR: Senior standing and CI. For visual communications option majors. S/U only. Practical experience outside the classroom where the student works for academic credit under the supervision of a professional practitioner. Periodic written and oral reports to the faculty member coordinating the study.

WOH 3293 Islam in World History AF HP (4) AS HTY
This course examines the origins, spread, and development of Islam within the context of the main global historical processes and events of the past 1500 years.

WST 2250 Female Experience in America HP CAHU HHCP (3) AS WST
This course explores the lives and experiences of women and girls in America from 1870 to the present, examining how issues of gender, race, class, ethnicity, and sexuality shaped both their experiences and our historical understanding of their lives.

WST 2600 Human Sexual Behavior SS CASB (3) AS WST
The dynamics of human sexuality: biological, constitutional, cultural, and psychological aspects. The range of sexual behavior across groups. Sources of beliefs and attitudes about sex, including sex roles and especially human sexuality.

WST 3015 Introduction to Women’s Studies SS AF CASB (3) AS WST
This course introduces the interdisciplinary field of Women’s Studies through a critical examination of the way gender, race, class and sexuality are socially constructed and demonstrates how activism is inherent in Women’s Studies discourse.

WST 3210 European Feminist History: Pre-18th Century 6A HP (3) AS WST
Survey of European feminist history prior to the 18th century (focusing primarily on Western Europe). Examines women’s lives, roles, ideas, as well as origins of Western attitudes toward relation of power to gender, race and class. No prerequisites.

WST 3220 European Feminist History: Enlightenment to the Present HP (3) AS WST
A survey of European feminist history from the 18th century through the 20th century (focusing primarily on Western Europe). Examining women’s lives, roles and ideas, as well as the dominant attitudes toward women over this time period.

WST 3225 Women, Environment and Gender MW CANL (3) AS WST
PR: BSC 1005 or BSC 2010, any Introductory science course from biology, chemistry, physics, public health or WST 4320. Investigation of intersection of women’s studies, gender and environment with focus on women’s health. Exploration of hypothesis formulation and testing, current issues.

WST 3311 Issues in Feminism SS CASB (3) AS WST
Survey of major issues relevant to the female experience: marriage and the family, sexuality, work, creativity.

WST 3370 Women and Social Action SS (3) AS WST
Course focuses on ordinary women working collectively in diverse social settings to empower themselves and others to challenge gender stereotypes; to reduce harassment, poverty, violence and homelessness; to enhance health-care and family life and to confront barriers in education, the media and the criminal justice system.

WST 3412 Women in the Developing World (3) AS WST
Survey of status of women in Asia, Africa, Latin and Caribbean America, compared to that in USA, Canada,
WST 4930 Selected Topics (1-4) AS WST
Study in special areas such as Women and Work, Reproductive Law, Women and Health.

WST 4935 Seminar in Women’s Studies (3) AS WST
PR: Women’s Studies Major and 24 credit hours in Women’s Studies. Recognizing the interplay between personal connections and intellectual experience, this capstone course is designed to focus on topical areas related to women’s studies and facilitate linking student learning experience to future plans.

WST 5308 Feminist Spirituality (3) AS WST
Open to non-majors. Focuses on the many voices of contemporary feminist spirituality, emerging from women’s experiences in diverse religious, ethnic and cultural traditions, and representing a range of theoretical perspectives from biblical feminism to goddess worship and wicca.

WST 5934 Selected Topics (1-4) AS WST
PR: DPR. Study of current research methods and scholarship on women from a multidisciplinary perspective.

WST 5940 Internship in Women’s Studies (3-6) AS WST
PR: Majors only. All required courses in MA program, CC. Permit. Student placement in an approved intern setting for a minimum of 240 hours of supervised experience. S/U only.

YOR 1120 Yoruba I (4) AS WLE
This course is designed to familiarize students with modern orthography and to develop skills in reading, writing, speaking, and understanding spoken Yoruba. Pronunciation in Yoruba and achieving basic communicative competence in the language are among the skills to be attained in the course.

ZOO 2303 Vertebrate Zoology (3) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L. The origin, diversity, and adaptations of the vertebrates. Phylogenetic systematics (cladistics) will be used as the basis for determining evolutionary relationships of organisms. Monophyletic groupings provide a framework for examining behavior, physiology, and ecology in an explicit evolutionary context. Vertebrates common to Florida and the southeastern United States will be emphasized.

ZOO 2710C Anatomy of Chordates (4) AS BIN

ZOO 3205C Advanced Invertebrate Zoology (4) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L. CHM 2045, CHM 2046, plus completion of one of the following Biology core courses: PCB 3032 or PCB 3043 or PCB 3063 or PCB 3712. Phylogeny, taxonomy, development, physiology, macro-, microanatomy and natural history of marine/freshwater dwelling invertebrate phyla (including protists and excluding parasites and insects) covered in integrated manner. Extensive lab work/Some fieldwork.

ZOO 3713C Comparative Vertebrate Anatomy (4) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L & CHM 2045, CHM 2046 & MAC 1105 or higher-level MAC course, or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712. Anatomy of selected vertebrate types emphasizing evolutionary trends. Lecture and Laboratory.
ZOO 4233 Parasitology (4) AS BIN
PR: BSC 2011, BSC 2011L and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 and CHM 2211. Fundamentals of animal parasitology and parasitism, the biology of selected animal parasites, including those of major importance to man. Lecture and laboratory.

ZOO 4512 Sociobiology MW (3) AS BIN
This course is restricted to seniors. Not for major's credit. An analysis of Animal and human behavior such as sex, territoriality, and aggression in the context of evolution.

ZOO 4513 Animal Behavior (3) AS BIN
PR: PCB 3023 or PCB 3043 or PCB 3063 & CHM 2210 & MAC 1105 or higher-level MAC course or STA 2023. CP: CHM 2211. An introduction to comparative animal behavior, with analysis of types of animal behavior, their function and evolutionary origin. Lecture only.

ZOO 4694 Developmental Biology (4) AS BCM
PR: PCB 3023, BSC 2011, BSC 2011L, BSC 2010, BSC 2010L CHM 2045, and CHM 2046. This course will use a problem solving approach to provide fundamental knowledge of scientific concepts and principles involved in the mechanisms underlying patterns of embryonic development for majors/nonmajors.

ZOO 4753C Human Histology and Histopathology (4) AS BCM
PR: PCB 3023, PCB 3063 & CHM 2210 & MAC 1105 or higher-level MAC course or STA 2023. CP: CHM 2211. The study of cellular and tissue organization as the basis of function in the human body. Functional morphology in normal and diseased states will be emphasized using an organ system approach.

ZOO 5456 Ichthyology (3) AS BIN
PR: Senior or GS in Biology; ZOO 2701C, CI. PCB 4674 is suggested. Evolution, systematics, structure, behavior, physiology, and ecology of fishes.

ZOO 5456L Ichthyology Lab (1) AS BIN
CR/PR: ZOO 5456 Laboratory portion of Ichthyology relating to evolution, systematics, structure, behavior, physiology and ecology of fishes.

ZOO 5463C Herpetology (4) AS BIN
PR: CI. Major aspects of amphibian and reptilian biology emphasizing fossil history, evolutionary morphology, sensory physiology, life history and reproductive behavior. Lec.-lab. Field trip.

ZOO 5555C Marine Animal Ecology (4) AS BIN
PR: PCB 3043, senior standing, CI. Investigation of energy flow, biogeochemical cycles, and community structure in marine environments. Lec.-lab.