ACG 2021 Principles of Financial Accounting - (3) BA 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) BA 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 control of business activities.

ACG 3074 Managerial Accounting for Non-Business Majors - (3) BA ACC
Does not count toward 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) BA ACC
PR: ACG 2021. 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) BA 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, stockholders’ equity, earnings per share computations, and investments.

ACG 3341 Cost Accounting and Control I - (3) BA ACC
PR: ACG 3301. A seven-unit course that 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 4123 Intermediate Financial Accounting III - (3) BA ACC
PR: ACG 3113 with a grade of “C” or better (not C-). Theory and practice underlying revenue recognition, income tax allocation, leases, post-retirement benefits, error analysis, statement of cash flows, full disclosure, and other current accounting topics.

ACG 4351 Cost Accounting and Control II - (3) BA ACC
PR: 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 (giving consideration to the influences of the international environment).

ACG 4632 Auditing I - (3) BA 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 technological tools are emphasized.

ACG 4642 Auditing II - (3) BA 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) BA ACC
PR: Consent of Director. S/U only. Specialized independent study determined by the student and instructor.

ACG 4911 Independent Research - (1-4) BA ACC
PR: Consent of Director. Individual student 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) BA ACC
The course content will depend on student demand and instructor’s interest.

ACG 5201 Advanced Financial Accounting IV - (3) BA ACC
PR: ACG 4123 Accounting for business combinations, preparation of consolidated financial statements, home office/branch relationships, foreign operations and transactions, partnerships, consolidated financial statements, and managerial accounting.

ACG 5202 Government/Not-For-Profit Accounting - (3) BA ACC
PR: ACG 4123. CR: ACG 4632. Application of financial and managerial accounting, and auditing, principles and theory to both governmental and not-for-profit entities.

ACG 5675 Internally Generated Income - (3) BA 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.

ACG 5935 Selected Topics in Accounting - (1-4) BA ACC
PR: CI. To allow advanced undergraduate students and graduate students to research and study contemporary and emerging topics in the field. Rpt. To 6 hours.

ADE 3384 Working With the Adult Learner - (3) ED EDV
An investigation of the needs of the adult learner. Identification of principles of adult learning, psychological, sociological, and social characteristics of adult learners, and corresponding implications are explored.

ADV 3000 Introduction to Advertising - (3) AS COM
PR: MUSC 2100 and MUSC 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 Copywriting - (3) AS COM
PR: ADV 3000 and ECO 1000. Study of laboratory experience in preparation of advertising copy for newspapers, magazines, radio, television, direct mail, outdoor displays, specialty items, and interactive electronic media.

ADV 3103 Radio-Television Advertising - (3) AS COM
PR: ADV 3000. 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 3500 Advertising Design - (3) AS COM
PR: ADV 3300 (for advertising sequence majors) or VCS 3001 (for other Mass Comm majors). Application of graphic design principles to various areas of advertising. Combining visual and verbal elements effectively.

ADV 3501 Advertising Research - (3) AS COM
PR: ADV 3000. 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 3710 Retail Advertising Planning and Execution - (3) AS COM
PR: ADV 3000 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 4600 Advertising Management - (3) AS COM
PR: ADV 3000, ADV 3101, ADV 3300. Application of analytical planning concepts to advertising 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 4800 Advertising Campaigns - (3) AS COM
PR: ADV 3101, ADV 3300, ADV 3501, ECO 1000, and MAR 3023. Advanced advertising course requiring planning and production of complete general advertising campaigns, including research, production methods, budgeting, and media schedules.

ADV 4910 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.

AF 2000 Introduction to the Black Experience [In Africa and Its Diaspora] - 6A AF(3) AS AFA

AF 4313 Black English - MV (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, economic competition, and cultural relations.

AF 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 changes occurring within and on the African American community.
AFR 2000 Enhanced Physical Fitness Training - (0) US AFR
Required of all students in AFR 2000-, 3000-, and 4000-level classes. It meets once 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 once per 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) US AFR
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 the national defense concept.

AFR 2140 The Evolution of USAF Aerospace Power Part II - (1) US AFR

AFA 4900 Directed Readings - (1-3) AS AFA
HP AF
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 (officer). 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.

AFA 4910 Individual Research - (1-3) AS AFA
HP AF
CR: AFR 2000, AFR 2001. A study of the Armed Forces as an integral element of society, with an emphasis on American civil-military relations and context in which U.S. defense policy is formulated and implemented. Special themes include: societal attitudes toward the military and the role of the professional military leader-manager in a democratic society.

AFA 4911 National Security Affairs & Preparation for Active Duty Part I - (3) US AFR
CR: AFR 2000, AFR 2001. A study of the Armed Forces in contemporary American society. Concentration is on the requisites for maintaining adequate national security forces; political, economic, and social constraints on the national defense structure; the impact of technological and international developments on strategic preparedness; the variables involved in the formulation and implementation of national security policy; and military justice and its relationship to civilian law.

AFA 4920 National Security Affairs & Preparation for Active Duty Part II - (3) US AFR

AFA 4930 African Diaspora: Blacks in the Construction of the Americas - (3) AS AFA
CR: AFR 2000, AFR 2001. An outline survey of pre-colonial African history including a study of the environment, and the political economic roles they have played in the development of the Western world with a focus on the Americas. The course takes an interdisciplinary approach. The course is not restricted to majors and is not repeatable for credit.

AFA 4931 Selected Topics in Africana Studies - (3) AS AFA
PR: Junior or Senior standing. Explore the socio-historical, philosophical and political dynamics of African cultures through study of African oral literature and the reading of African literary texts of various genres.

AMH 3130 African History since 1850 - (3) AS HTY
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 (officer). 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.
AMS 3001 American Culture 1880-1915 - 6A HP (3) 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 20s and 30s - (4) AS AMS
Selected interdisciplinary materials are used to examine the relationships among regionalism, nationalism and internationalism during the twenties and thirties. Emphasis is placed on the measure of cultural nationalism attained by the United States during the period.

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 3370 Southern Women: Myth and Reality - 6A HP (3) AS AMS
This course will identify the myths surrounding Southern Women, discern their sources and purposes, and contrast them with history.

AMS 3601 Material Culture and American Society - SS HP (3) AS AMS
By means of slides, lectures and student projects, examines construction of meaning among artifacts and American cultural attitudes from 17th century to present. Topics include: architecture, furniture, gravestones, toys, and the material subcultures of women, African-Americans and communal societies.

AMS 3742 Racism in American Society - SS HP (3) AS AMS
An introduction into the causes and effects of racism in American history, literature, art, the media, and folklore. Related concepts of ethnocentrism and class conflict will also be studied.

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 American culture of major films, studios, directors, stars, theaters, and controversies from the perspectives of genres and styles, critical methodologies and theories. Variable topics such as: series on a region, director, performer, subject, or period of time.

AMS 4804 Major Ideas in America - M W (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 sociocultural implications of American painting, Technology in Twentieth Century America, American Environmental Problems, Popular Culture in America, American Military Experience, and Labor in America.

AMS 4933 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 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 1149 Fantastic Archaeology: Mysteries of the Human Past - (3) AS ANT
Not for major credit. Mysteries of the human past, including the Lost Continent of Atlantis, Ancient Astronauts, the "Myth" of the Manhattan Project, and the Shroud of Turin will be discussed in detail. The practice of archaeology and how we know about the past will also be presented, and skills in critical thinking will be emphasized.

ANT 2000 Introduction to Anthropology - SS AF (3) AS ANT
The cross-cultural study of the human species in biological and social perspective. Surveys the four major branches of anthropology: physical anthropology (human biology), archaeology (the analysis of the prehistoric and historic remains of human cultures), and the biological (the analysis of biological language in its cultural context), and cultural anthropology (the cross-cultural study of peoples living in the world today, they be they in tribal, peasant, democratic, or industrial societies).

ANT 2410 Cultural Anthropology - SS AF (3) AS ANT
PR: ANT 2000 or DPR. Discussion of major methods and orientations to the cross-cultural study of the world’s peoples. Representative case studies are used to demonstrate variations in human adaptations and to encourage an appreciation of diverse values and lifestyles.

ANT 2511 Biological Anthropology - NS (3) AS ANT
PR: ANT 2000 or DPR. Non-human primates, the fossil record and the biology of races are surveyed in order to understand the human animal as a product of biosocial phenomena. Anatomy, genetics, culture and evolution are emphasized.

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 discern the anthropologist’s cross-cultural view of the human species as adapting through biosocial means to life on this planet.

ANT 3101 Archaeology - SS AF (3) AS ANT
PR: ANT 2000 or DPR. Cross-cultural study of humankind from its beginnings up to and including the historic period through the discovery, recovery, description, and analysis of the remains of past cultures and societies.

ANT 3102 Anthropological Linguistics - SS AF (3) AS ANT
PR: ANT 2000 or DPR. 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 3134 Theories of Culture - (3) AS ANT
PR: DPR. Senior standing with major in anthropology or equivalent. 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. Prehistoric and historic Europe, and the Aegean, Europe and Africa, from the first Palaeolithic inhabitants to the fall of Roman civilization. The course will focus on ancient material culture while emphasizing social and economic concerns such as the emergence of modern human cultures, 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, DPR. Culture history and culture process over 10,000 years from the time of the first people in Florida (Paleo- lithic) through the Middle and Late Woodland Periods. Safety Harbor 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 beginings through Protolithic development is described and analyzed. Cultures such as the 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, Mochica, Wari, Chimú are included. Emphasis is placed on environmental and the relationship between cultural ecology and the growth of civilization.

ANT 4172 Historical Archaeology - 6A(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 classwork.

ANT 4180 Laboratory Methods in Archaeology - (2-4) AS ANT PR: ANT 3101, 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, masonry, 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, 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. This course focuses on the application of scientific methods of analysis to archaeological materials including bone, stone, pottery, and metal. Methods include remote sensing, optical and SEM microscopy, elemental and isotopic analyses. Laboratory sections provide hands-on experience with a variety of archaeological materials and analytical methods.

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

ANT 4241 Magic and Religion - 6A MW(3) AS ANT PR: ANT 2410 or DPR. Cross-cultural study of the social and cultural aspects of religion. Religious activities in traditional and modern societies will be discussed. Ritual behavior, religious practitioners and symbols of belief will be considered in light of their impact on the social, political or economic aspects of peoples’ lives.

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 procedures through intensive analysis of selected case studies as well as guided field projects.

ANT 4302 Gender in Cross-Cultural Perspective - M W(3) AS ANT PR: ANT 2410 or DPR. Focuses on various theories, models and beliefs about male-female behaviors and interactions in human cultures throughout history and in various societies in the world today.

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 exchange, the production and curation of artifacts and bone, stone, pottery, and metal. Special emphasis on the Inca, Chavin, Mochica, Wari, Chimú, Mixtec, Zapotec, Olmec, and Toltec cultures.

ANT 4316 Ethnic Diversity in the United States - M W(3) AS ANT PR: ANT 2410 or DPR. Special concerns include ethnic diversity in American society, historical and contemporary diversity in values, experiences, and lifeways, and the theoretical and methodological implications of cross-cultural research. Emphasis on cultural diversity and the relationship between cultural ecology and the growth of civilization.

ANT 4323 Mexico and Central America - (3) AS ANT PR: ANT 2410 or DPR. Focuses on the history, contemporary values and intercultural 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. 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 4350 Visual Anthropology - (3) AS ANT PR: ANT 2410 or 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 goals of “visual literacy” and the relationship between culture and the uses of visual techniques and the evidence they provide to the social scientist.

ANT 4401 Exploring Cross-Cultural Diversity - M W(3) AS ANT PR: ANT 3101 or DPR. For non-Anthropology majors only. This course will introduce students to anthropological perspectives which are useful in understanding the implications of cultural diversity related to changing demographic patterns with respect to increasing globalization.

ANT 4432 The Individual and Culture - 6A 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 lifeways, and the relationship between cultural ecology and the growth of civilization.

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. A detailed study of the health and illness in cross-cultural perspective. The 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. The stages in the development and execution of ethnological research are discussed and practiced. Literature search, hypothesis formation, selection of data collection techniques, elicitation of information, data analysis, and report preparation are stressed. Research design models from the cross-cultural literature are studied and supervised research in the local community is designed and carried out.

ANT 4520 Forensic Anthropology - (3) AS ANT PR: ANT 2511 or DPR. A detailed overview of forensic anthropology, skeletal techniques of determining sex, age, population affiliation, aspects of osteological individuality and identification, methods of osteological analysis. Open to majors/minors only.

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 hominid lineage. Biosocial patterns and cultures of the past are also covered.

ANT 4587 Human Variation - (3) AS ANT PR: ANT 2511 or DPR. The measurement and analysis of variation in human populations; the relationship between biological and cultural variations of human races. Historical, anatomical, morphological, and physiological patterns are surveyed geographically. Cultural influences on racial biology are explored.

ANT 4620 Language and Culture - 6A(3) AS ANT PR: ANT 3610 or DPR. An overview of the relationship 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 and the 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. An overview of the role of language and other modes of communication in the social settings of speech
com�unities. 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, DPR. Offered as all or part of a summer (or other semester) field program. 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 - (3) AS ANT
PR: DPR. Topics to be chosen by students and instructor permitting newly developing subspeciality 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 student with an opportunity to extend, discuss and develop his/her own research and to explore in-depth topics in several areas of anthropology.

ANT 4935 Rethinking Anthropology - 6A (3) AS ANT
PR: Senior standing with major in anthropology. Through discussions, individual student approach and design, selected papers, students reread and reevaluate anthropology as a discipline and the integration of its branches and specialty fields. Students develop and articulate their current images of anthropology.

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 a research project in anthropology.

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

ARA 2201 Modern Arabic IV - (4) AS WLE
PR: ARA 2200 or the equivalent. Continuation of ARA 2200. 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 2001 Introduction to Architecture - HP FA (3) AR ARC
An introduction to the analysis and interpretation of the architecture and urban design of various cultures.

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

ARC 4724 The City - 6A (4) NW (3) AR 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) AR ARC
Variable topics will be offered for pre-professional studies for students in the Liberal Studies Major/ALA Degree Program and electives for other undergraduates.

ARC 5175 Computer Technology - (3) AR ARC
PR: CC. Introduction to the application of computer technology in current architectural practice. The exploration of available software, programs, and hardware services. Technical principles of data processing, information handling, specification writing, feasibility analysis, cost estimating, economic performance and life cycle cost analysis, project management (network programming and analysis), computer aided design and drafting.

ARC 5216 The Building Arts - (3) AR 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 in the process, and in the various academic courses that prepare the architect for practice.

ARC 5256 Design Theory II - (3) AR 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 major 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 5361 Core Design I - (9) AR 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) AR ARC
PR: ARA 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) AR ARC
PR: ARA 5362, ARA 5467, ARA 5587, ARA 5731. CO: ARA 5689. Study of the various phases of the building delivery and design process, and 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. Study 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 5467 Materials and Methods of Construction - (4) AR ARC
PR: ARA 5470, CC. Overview of properties of primary materials and construction systems which comprise building structure and enclosure. Emphasis on interface and connection of elements and assemblies, relative to climate, assembly processes, costs, codes, and craftsmanship. Lab sessions include field trips to manufacturing facilities, construction sites, and preparation of drawings and models of assemblies.

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

ARC 5587 Structures I - (3) AR ARC
PR: Calculus, Physics, and ARA 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, deflection, and load. Design of reinforced concrete structural elements, as they apply to wood and steel construction. Stress analysis, beam and column behavior.

ARC 5588 Structures II - (3) AR ARC
PR: ARA 5587, CC. Introduction to the concepts and theories of structural analysis and design of reinforced concrete systems

ARC 5689 Environmental Technology - (4) AR ARC

ARC 5731 Architectural History I - (3) AR 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) AR 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. The emphasis will be on the built environment in both the public and private sector.

ARC 5789 Modern Architecture History - (3) AR ARC
PR: CC. CI. Exploration of the philosophic, economic, aesthetic, social, historical and moral imperatives used by modern architects and historians as they 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) AR ARC
PR: CC. Summer study abroad. Location and description varies from year to year.

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

ARE 3044 Experiential Basis of Artistic Mind - (3) VP 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) VP 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 furthermore enable the student to understand stages of young people, three to eighteen.

ARE 4037 Senior Capstone in Art Education - (2) VP ART

ARE 4112 Education Through Crafts - (3) VP ART
An in-depth study of arts and craft media for children. Emphasis will be placed on innovative use of new materials and curriculum in school restructuring.

ARE 4313 Art For the Child and You - (2) VP ART
Art and the intellectual, creative, emotional, and aesthetic growth of children.

ARE 4440 Art Teaching Strategies II - (3) VP ART
Media and the learning process will be explored through photographic arts, cinematography and video systems. The teaching strategies and media criticism for application at elementary and secondary levels.

ARE 4443 Crafts Workshop in Art Education - (3) VP 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) VP ART
PR: ARE 3044. Community arts as infrastructure through identification, exploration and experimentation of/with unique community spaces, populations and new environments for and learning in the arts.

ARE 4929 Directed Study: Art Education - (1-3) VP ART
PR: Senior standing. Directed study contract required. Designed to extend teaching competencies in the field of art education.

ARE 4940 Internship: Art Education - (1-12) VP ART
CR: ARE 4333, 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 I - HP FA (3) VP ART
PR: DPR. A survey of World Art to AD 1300. Students are introduced to the problems of analyzing and interpreting the art of various cultures without making the Western perspective a privileged one. Open to non-majors.

ARH 2051 History of Visual Arts II - HP FA (3) VP ART
PR: DPR. A survey of World Art since 1300. Students are introduced to the 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 (4) VP ART
An expanded introductory treatment of basic concepts. For non-art majors.

ARH 3475C Contemporary Issues in Art - HP FA MW(4) VP 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) VP 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) VP 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) VP 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 4200 Medieval Art - (4) VP ART
PR: DPR. A comprehensive study of early Christian, Byzantine and Medieval painting, sculpture, architecture and manuscript illumination.

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

ARH 4318 Venetian Art - (4) VP 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. The importance of Venetian art to the history of art and art criticism.

ARH 4340 Baroque and Rococo Art - (4) VP 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 4350 Nineteenth Century Art - (4) VP ART
PR: DPR. 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) VP ART
PR: DPR. 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 - M W(4) VP ART
PR: DPR. The course explores art in which political themes are introduced to problems of analyzing and interpreting the art of major political leaders. 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) VP 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 4547 Buddhist Art - (4) VP 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 4554 Japanese Prints - (4) VP ART
PR: DPR. This course examines one important aspect of Asian artistic production. “Japanese Prints” concentrates on the period
from 1615 to the present and distinguishes schools, styles, artists, subjects, patronage patterns, and technical matters. The role of prints within society and on Western art is examined throughout.

ARH 5451 Cultural and Intellectual History of Modern Art - (4) VP
PR: DPR. This course will consider the history of printmaking and other forms of experimental art making in the modern era. It will focus on the development of new techniques and materials, and how the visual and historical import of these innovations are assessed. It will also explore the ways in which art historians have used these techniques to analyze the form and content of individual works of art, and to various modes of historical explanation.

ARH 5795 Methods of Art History - (4) VP
PR: Four courses in Art History at the 4000 level, DPR. This course focuses on the conceptual and technical skills involved in the creation of experimental computer art. The course focuses on the intellectual and practical tasks of preparing an exhibition. The course will include art handling, registration and condition reporting, preparation of works of art for transit, environmental concerns addressed by technological and curatorial concerns, and strategies for managing collections. 

ARH 5710 History of Photography - (4) VP
PR: DPR. This course will concentrate on the development of photography from its inception to the present day with an emphasis on the intellectual and practical tasks of preparing an exhibition. The course will include art handling, registration and condition reporting, preparation of works of art for transit, environmental concerns addressed by technological and curatorial concerns, and strategies for managing collections. 

ARH 5421 History of Painting - (4) VP
PR: DPR. Four courses in Art History at the 4000 level, DPR. This course will concentrate on printmaking and bronzing techniques and methods. The course will include art handling, registration and condition reporting, preparation of works of art for transit, environmental concerns addressed by technological and curatorial concerns, and strategies for managing collections.

ART 2201C Fabrications I - FA (3) VP
PR: Four courses in Art History at the 4000 level, DPR. This course will introduce students to the history of printmaking and other forms of experimental art making in the modern era. It will focus on the development of new techniques and materials, and how the visual and historical import of these innovations are assessed. It will also explore the ways in which art historians have used these techniques to analyze the form and content of individual works of art, and to various modes of historical explanation.

ART 2221C Beginning Electronic Media - (3) VP
PR: An introduction to the use of computer art. The course is repeatable for up to 9 hours.

ART 2930 Selected Topics In Art - (2-4) VP
PR: ART 2701C and ART 3704C. 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 3001C Beginning Drawing - (3) VP
PR: Projects in painting with emphasis on the exploration of methods and media and the development of individual concepts.

ART 2701C Beginning Sculpture - (3) VP
PR: 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) VP
PR: Projects in sculpture with emphasis on historical and conceptual topics. The course is intended for majors. It is repeatable for credit up to 9 hours.

ART 3465 Digital Printmaking - (4) VP
PR: ART 2301C. This course introduces students to the history of printmaking and other forms of experimental art making in the modern era. It will focus on the development of new techniques and materials, and how the visual and historical import of these innovations are assessed. It will also explore the ways in which art historians have used these techniques to analyze the form and content of individual works of art, and to various modes of historical explanation.

ART 3530C Intermediate Painting - (3) VP
PR: ART 2701C and ART 3704C. Continued studies and projects in sculpture with an emphasis on the nature of multiples, molds and bronzing techniques and methods. The course will include art handling, registration and condition reporting, preparation of works of art for transit, environmental concerns addressed by technological and curatorial concerns, and strategies for managing collections.

ART 3704C Intermediate Sculpture - (3) VP
PR: ART 2701C and ART 3704C. Continued studies and projects in sculpture with an emphasis on the nature of multiples, molds and bronzing techniques and methods. The course will include art handling, registration and condition reporting, preparation of works of art for transit, environmental concerns addressed by technological and curatorial concerns, and strategies for managing collections.

ART 3758C Site, Installation, and Performance - (3) VP
PR: ART 2701C and ART 3704C. Continued studies and projects in sculpture with an emphasis on the nature of multiples, molds and bronzing techniques and methods. The course will include art handling, registration and condition reporting, preparation of works of art for transit, environmental concerns addressed by technological and curatorial concerns, and strategies for managing collections.
ART 4955 Senior Projects - (2-4) VP ART
PR: DPR, CI. Senior year student. Completion of all art preparation course work. Open University offerings under this number may not be counted for degree credit for art majors. Repeatable.

ART 4955X Senior Projects - (2-4) VP ART
PR: Senior year student. Completion of all art preparation course work. Open University offerings under this number may not be counted for degree credit for art majors. Repeatable.

ART 4970C Senior Thesis - (2) VP 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 4974 Graphic Design: Professional Practicum - (3) VP ART
PR: Restricted to majors. Students fine-tune their portfolios, create self-promotional print and digital projects and develop their resumes. Includes field trips to studios, agencies, corporate graphic departments and advertising firms.

ART 5125C Ceramics - (4) VP ART
PR: ART 2750C, DPR. Advanced problems in the various ceramic techniques, including throwing and glaze calculation. Repeatable.

ART 5340C Drawing - (4) VP ART

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

ART 5470 Intaglio - (4) VP ART
PR: ART 4402C, CI, DPR. Investigations into more complex intaglio processes including photoengraving and color printing procedures. Emphasis on personal conceptual development in graphic media. Repeatable.

ART 5530C Painting - (4) VP ART
PR: ART 3530C, DPR. Advanced problems in the various painting techniques. Emphasis on individual creative expression. Repeatable.

ART 5530C Sculpture - (4) VP ART

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

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

ASH 3404 Modern China - SS HP AF (4) 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.

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 2006 Stellar Astronomy and Cosmology - NS(4) AASAT
An introduction to Astrophysics and the structure of the universe. No Physics background assumed. Topics covered include properties of light, stellar coordinates, timekeeping, eclipses, formation and dynamics of the solar system, properties of the sun and planets, space exploration of planets and the moon, life on other worlds. This course is complementary to but independent of AST 2006.

AST 2005 Astronomy of the Solar System - NS(4) AASAT
Introduction to the Astronomy of the Solar System. No Physics background assumed. Topics covered include properties of light, stellar coordinates, timekeeping, eclipses, formation and dynamics of the solar system, properties of the sun and planets, space exploration of planets and the moon, life on other worlds. This course is complementary to but independent of AST 2006.

AST 2005 Astronomy of the Solar System - NS(4) AASAT
Introduction to the Astronomy of the Solar System. No Physics background assumed. Topics covered include properties of light, stellar coordinates, timekeeping, eclipses, formation and dynamics of the solar system, properties of the sun and planets, space exploration of planets and the moon, life on other worlds. This course is complementary to but independent of AST 2006.

ART 4974 Graphic Design: Professional Practicum - (3) VP ART
PR: Restricted to majors. Students fine-tune their portfolios, create self-promotional print and digital projects and develop their resumes. Includes field trips to studios, agencies, corporate graphic departments and advertising firms.
BME 5742 Pharmaceutical Engineering - (2) EN ECH
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 observations.

BME 5740 Theory and Design of Bioprocesses - (3) EN ECH
PR: Junior or Senior Standing or CI. Seminar designed to assist the layman, with no scientific background, in comprehending contemporary developments in engineering and pharmaceutical engineering. 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, evolution, and the scale of the universe.

BME 3033 Contemporary Thinking in Astronomy - NS(3) AS AS
PR: Students with CI. Selected topics in 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, evolution, and the scale of the universe.

AST 3044 Archeoastronomy - (3) AS AS
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.

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

AST 5506 Introduction to Celestial Mechanics - (3) AS AS
PR: MAC 2311 or MAC 2323 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.

BCH 5105 Biochemistry Laboratory Rotations - (1-3) 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 course in biochemistry for graduate students in chemistry, biology, and other appropriate fields and for particularly well-qualified undergraduates. Lec.

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

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 the previous course.

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.

BCH 3023 Introductory Biochemistry - (3) AS CHM
PR: Either CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410. Introduction to the chemistry and intermediary metabolism of biologically important substances, Lec.-lab.

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 course in biochemistry for graduate students in chemistry, biology, and other appropriate fields and for particularly well-qualified undergraduates. Lec.

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

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 the previous course.

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.

BCH 3023 Introductory Biochemistry - (3) AS CHM
PR: Either CHM 2211, CHM 2211L and CHM 3400 or CHM 4410. Introduction to the chemistry and intermediary metabolism of biologically important substances, Lec.-lab.

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 course in biochemistry for graduate students in chemistry, biology, and other appropriate fields and for particularly well-qualified undergraduates. Lec.

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

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 the previous course.

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.
BSC 2025 Food: Personal and Global Perspectives - (3) AS BIO
May be taken by biology majors for free elective credit. The application of basic biological principles to human nutritional problems; how human activities impact the environment. May be taken by majors for free elective credit only.

BSC 2030 Save The Planet: Environmental Sciences - (3) AS BIO
Credit will be given for BSC 2030 or BSC 2050, but not both. An introduction to environmental sciences using mass communications and independent study. Emphasis will be placed on understanding basic principles of ecology relevant to problem-solving at the ecosystem level or the earth's environment. May be taken by majors for free elective credit.

BSC 2035 Sex and Today's World - (3) AS BIO
The application of basic biological principles to female and male sex behavior and reproduction. Current social problems are treated from a biological perspective. May be taken by majors for free elective credit.

BSC 2050 Environment - (3) AS BIO
Credit will be given for BSC 2030 or BSC 2050, but not both. The application of basic scientific principles to global environmental problems; how human activities impact the environment. May be taken by majors for free elective credit only.

BSC 2094 Anatomy & Physiology 2 - (3) AS BIO
PR: BSC 2093. This course is the second half of a two-semester series introducing the structure and function of the human body's major organ systems. Cellular and cardiac physiology, nervous, endocrine, skeletal, and muscular systems will be covered. May be taken by Department majors for free elective credit only.

BSC 2093 Human Anatomy and Physiology 1 - (3) AS BIO
PR: BSC 2030, BSC 2010L and BSC 2111, BSC 2111L. This course is the first half of a two-semester series introducing the structure and function of the human body's major organ systems. The following body systems will be covered: circulatory, lymphatic, immune, respiratory, digestive, urinary, and reproductive. May be taken by Department majors for free elective credit only.

BSC 2932 Selected Topics in Biology - (1-4) AS BIO
PR: BSC 2010, BSC 2010L and BSC 2111, BSC 2111L. 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.

BSC 4057 Environmental Issues - M/W (3) AS BIO
Not for major's credit. Study of biological, economic, ethical, legal, political and social issues relating to current environmental problems.

BSC 4313 Advanced Marine Biology - (4) AS BIO
PR: BSC 2363C A detailed analysis of marine environment in the Tampa Bay area. Field and laboratory work will provide direct experience with the system.

BSC 4402L Biological Research Methods - (3) AS BIO
PR: BSC 4931 or BSC 4932. Enrollment is limited to Biology Department Honors students. S/U only. A course to prepare Biology Honors student to work on their Honors theses.

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: CI. S/U only. Individual investigation with faculty supervision. Written contract by Department is necessary prior to registration.

BSC 4931 Honors Seminar I - (2) AS BIO
Enrollment limited to Biology Department Honors students. A course linked to the Biology Department Seminar in which students read publications related to the seminars, discuss the presentations and write critiques.

BSC 4932 Honors Seminar II - (3) AS BIO
Enrollment is limited to Biology Department Honors students. A reading and discussion course involving areas of general interest in biology.

BSC 4933 Selected Topics in Biology - (1-3) AS BIO
BSC 4937 Seminar in Marine Biology - (2) AS BIO
PR: BSC 3263 and ONE of the following: PCB 3023 or PCB 3043 or PCB 3063. Course focuses on developing the student's understanding of contemporary research in the field of Marine Biology. Background information presented and assigned readings will vary according to instructor.

BSC 4970 Biology Honors Thesis - (1-3) AS BIO
PR: BSC 4402L and either BSC 4931 or BSC 4932. Enrollment is limited to Biology Department Honors students. S/U only. A thesis based on independent research carried out by the student.

BSC 5931 Selected Topics in Biology - (1-3) AS BIO
PR: CI.

BTE 4641 Special Teaching Methods: Business Education - (4) ED EDV
PR: Successful completion of BE competencies. Methods, techniques, and materials for skill development.

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

BTE 4936 Senior Seminar in Business and Office Education - (2) ED EDV
PR: Senior standing; CR: BTE 4940. Synthesis of teacher candidate's courses in complete college program.

BTE 4940 Internship: Business Education - (1-12) ED EDV
CR: BTE 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.

BTE 5488 Field-Based Seminar in Business Education - (3) ED EDV
S/U only. Supervised field experience and orientation to broad field business education. Specifically designed to be preparatory for the Internship.

BTE 5711 Curriculum Construction: Business Education - (3) ED EDV
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) BA GBA
This course covers the nature of legal and societal institutions and environments, and major aspects of public, private, UCC and related business law.

BUL 3321 Law and Business II - (3) BA 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 5322 Law and the Accountant - (3) BA GBA
PR: BUL 3320 or CI. A comprehensive study of commercial law as it affects the practice of accounting.

CAP 5400 Digital Image Processing - (3) EN ESB
PR: EEL 4851C or GS. Image formation, sources of image degradation, enhancement techniques, edge detection operators and thresholding, low-level processing algorithms for vision, image data compression.

CAP 5625 Introduction to Artificial Intelligence - (3) EN ESB
PR: EEL 4851C or GS. Basic concepts, tools, and techniques used to produce and find intelligent behavior. Organizing knowledge, exploiting constraints, searching spaces, understanding natural languages, and problem solving strategies.

CAP 5622 Expert And Intelligent Systems - (3) EN ESB
PR: EEL 4851C or GS. Basic concepts, techniques and tools for the design and implementation of expert and intelligent systems. Knowledge representation, inference methods, knowledge acquisition methods, and some advanced concepts. Tools to facilitate construction of expert and intelligent systems.

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 4034 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 3003 Crime and Justice in America - SS (4) AS CJP
May be taken by both majors and non-majors for credit. 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 the problems of criminal offenders and victims of crime. CCJ 3024 Critical Issues in the Criminal Justice System - SS (3) AS CJP
An introduction to the structure and operation of law enforcement, prosecution, the courts, and corrections. Also includes brief coverage of major controversies.
CCJ 3610 Theories of Criminal Behavior - (3) AS 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) AS 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) AS 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 4450 Criminal Justice Administration - (3) AS CJP
PR: Junior standing, CJIE 4114 or CJT 4101 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) AS 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) AS 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) AS 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 4910 Directed Research - (1-3) AS 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 CCJ courses must have been completed satisfactorily prior to enrollment; (c) Construction and testing of logic circuits, and programmable logic devices.
CCJ 4920 Internship For Criminal Justice Majors - (3) AS 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.
CDA 3101 Computer Organization for Information Technology - (3) US EN
PR: Any Physics course 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 aspects and the physical aspects.
CDA 3201 Computer Logic Design - (3) EN ESB
PR: CD: 3201. Design of combinational logic circuits, analysis and synthesis of sequential circuits, testing of logic circuits, and programmable logic devices.
CDA 3201L Computer Logic Design Lab - (1) EN ESB
PR: CD: 3201.
CDA 4100 Computer Organization and Architecture - (3) EN ESB
PR: EEL 4851C or GS. Development of models based on hardware support of operation system functions.
CDA 4203 Computer System Design - (3) EN ESB
PR: CD: 3201, CD: 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: CD: 3203. This lab introduces the student to the concept of system objects that are generated including building timing circuits, memory-based and communication circuits, and microcomputer-based designs.
CDA 4205 Computer Architecture - (3) ESB
PR: CD: 3201, CD: 3201L. Principles of the design of computer systems, processors, memories, and switches. Consideration of the register transfer representation of a computer. ALUs and their implementation, the control unit, Memory and I/O. Hardware support of operation system functions.
CDA 5405 Modeling Computer System Performance I - (3) EN ESB
CDA 5406 Modeling Computer System Performance II - (3) EN ESB
CEG 4011 Geotechnical Engineering I - (3) EN EGH
PR: CEG 3535, Fundamentals of soil mechanics, experimental concepts in soil mechanics with emphasis on soil properties, soil moisture, soil structure, and shearing strength.
CEG 4011L Geotechnical Laboratory - (1) EN EGH
CR: CEG 4011. Design, construction and testing of models verifying theoretical bases of Geotechnical Engineering. One hour lecture and two laboratory hours per week.
CEG 4012 Geotechnical Engineering II - (3) EN EGH
PR: CEG 4011. Design of retaining walls, earth slopes, foundations to control settlement, soil stabilization and foundations subjected
CENG 5933 Special Topics in Civil  and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering research and/or design projects. Written final reports are required.

CGN 4122 Professional and Ethical Issues in Engineering - MW(3) EN EGX
4.5. Professional and ethical responsibility of engineers. The legal and ethical responsibilities of engineers in the preparation of contracts and specification. The ethics of engineer-client agreements.

CGN 4933 Special Topics in Civil and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CGN 5933 Special Topics in Civil Engineering and Mechanics - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CENG 2060 SC Introduction to Computers and Programming in C - EN EGX
No credit for Engineering Majors. An overview of computer hardware and software and their role in society. Survey of the evolution of computer software and hardware technology with emphasis on current applications. Introduction to programming using the C programming language.

CENG 4126 Project Management - EN EGX
PR: CI. Individual and team projects. The basics of project management.

CGN 4914 Senior Project - (2-5) EN EGX
PR: CI. Problem-solving experience and training for seniors in research and/or design projects. Written final reports are required.

CGN 4911 Research in Civil Engineering and Environmental Engineering - (1-4) EN EGX
PR: CC.

CGN 4905 Independent Study - (1-5) EN EGX
PR: CC. S/U only. Specialized independent study determined by the students' needs and interests.

CGN 3911 Structural Engineering - EN EGX

CGN 4912 Independent Study - (1-5) EN EGX
PR: CC. S/U only. Specialized independent study determined by the students' needs and interests.

CGN 3901 Structural Analysis I - EN EGX
PR: CI. Analysis of one-dimensional structural systems. Calculation of stresses and displacements using the force method and the virtual work method. Applications to reinforced concrete design.

CGN 3906 Special Topics in Civil and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CGN 4901 Advanced Concrete Structures - EN EGX

CGN 3905 Independent Study - (1-5) EN EGX
PR: CC. S/U only. Specialized independent study determined by the students' needs and interests.

CGN 3904 Special Topics in Civil and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CGN 3902 Structural Engineering II - EN EGX

CGN 3903 Special Topics in Civil and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CGN 3901 Structural Analysis I - EN EGX
PR: CI. Analysis of one-dimensional structural systems. Calculation of stresses and displacements using the force method and the virtual work method. Applications to reinforced concrete design.

CGN 3906 Special Topics in Civil and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CGN 3905 Independent Study - (1-5) EN EGX
PR: CC. S/U only. Specialized independent study determined by the students' needs and interests.

CGN 3904 Special Topics in Civil and Environmental Engineering - EN EGX
PR: CI. New technical topics of interest to civil engineering students. Written final reports are required.

CGN 3902 Structural Engineering II - EN EGX
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2045L</td>
<td>General Chemistry II Laboratory - (1) AS CHM</td>
<td>1</td>
<td>Laboratory portion of General Chemistry II. Continuation of chemistry laboratory.</td>
</tr>
<tr>
<td>CHM 2211L</td>
<td>Organic Chemistry Laboratory II - (2) AS CHM</td>
<td>2</td>
<td>Continuation of organic chemistry laboratory.</td>
</tr>
<tr>
<td>CHM 2393</td>
<td>Selected Topics in Chemistry - (3) AS CHM</td>
<td>3</td>
<td>Topics of interest to students relating to chemistry and other sciences.</td>
</tr>
<tr>
<td>CHM 3400</td>
<td>Elementary Physical Chemistry I - (3) AS CHM</td>
<td>3</td>
<td>Introduction to thermodynamics. Properties of solutions with emphasis on biological applications.</td>
</tr>
<tr>
<td>CHM 4060</td>
<td>Use of the Chemical Literature - (1) AS CHM</td>
<td>1</td>
<td>Study in depth of the historical and philosophical aspects of chemistry laboratory.</td>
</tr>
<tr>
<td>CHM 4070</td>
<td>Historical Perspectives in Chemistry - 6 A MW(3) AS CHM</td>
<td>6</td>
<td>A study in depth of the historical and philosophical aspects of outstanding chemical discoveries and theories. Lect.-disc.</td>
</tr>
<tr>
<td>CHM 4130C</td>
<td>Methods of Chemical Investigation I - (4) AS CHM</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>CHM 4131C</td>
<td>Methods of Chemical Investigation II - (4) AS CHM</td>
<td>4</td>
<td>Continuation of CHM 4130C.</td>
</tr>
<tr>
<td>CHM 4300</td>
<td>Biomolecular Chemistry I - (3) AS CHM</td>
<td>3</td>
<td>Thermodynamics, the states of matter, solutions. Lect.</td>
</tr>
<tr>
<td>CHM 4410</td>
<td>Physical Chemistry I - (3) AS CHM</td>
<td>3</td>
<td>An introduction to the principles and applications of modern chemistry including the properties of matter, structural views of matter and reactions, quantitative relations in chemical reactions, technological aspects and societal impact.</td>
</tr>
<tr>
<td>CHM 4905</td>
<td>Directed Study - (1-5) AS WLE</td>
<td>1-5</td>
<td>Continuation of available in the regularly scheduled curriculum at departmental discretion.</td>
</tr>
</tbody>
</table>

**Course Codes**

- **CHM**: General Chemistry
- **CHI**: Chinese
- **CGS**: Computer Science
- **PHY**: Physics

**Course Descriptions**

- **CHM 2045L**: General Chemistry II Laboratory. (1 AS CHM) Lab portion of General Chemistry II. Continuation of chemistry laboratory.
- **CHM 2211L**: Organic Chemistry Laboratory II. (2 AS CHM) Continuation of organic chemistry laboratory.
- **CHM 2393**: Selected Topics in Chemistry. (3 AS CHM) Topics of interest to students relating to chemistry and other sciences.
- **CHM 3400**: Elementary Physical Chemistry I. (3 AS CHM) Introduction to thermodynamics. Properties of solutions with emphasis on biological applications.
- **CHM 4060**: Use of the Chemical Literature. (1 AS CHM) Study in depth of the historical and philosophical aspects of chemistry laboratory.
- **CHM 4070**: Historical Perspectives in Chemistry. (6 AS WLE) A study in depth of the historical and philosophical aspects of outstanding chemical discoveries and theories. Lect.-disc.
- **CHM 4130C**: Methods of Chemical Investigation I. (4 AS CHM) 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.
- **CHM 4131C**: Methods of Chemical Investigation II. (4 AS CHM) Continuation of CHM 4130C.
- **CHM 4300**: Biomolecular Chemistry I. (3 AS CHM) Thermodynamics, the states of matter, solutions. Lect.
- **CHM 4410**: Physical Chemistry I. (3 AS CHM)
CIS 4361 Information Technology Security Management - (3) US
PR: CHM 3120C, and MAC 2282 or MAC 2312, and PHY 2054 or PHY 2049. Introduction to quantum mechanics and molecular spectroscopy. Lec.

CIS 4312 Physical Chemistry III - (3) AS CHM

CHM 4611 Advanced Inorganic Chemistry - (3) AS CHM
PR: CHM 4410 or CI. An advanced descriptive and theoretical treatment of inorganic compounds. Lec.

CHM 4905 Independent Study - (1-3) AS CHM
PR: CI. SU 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. SU only.

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. Lec. Semester II.

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

CHM 5432 Polymer Chemistry - (3) AS CHM
PR: Either CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410 or graduate student. Fundamentals of polymer synthesis, structure, properties, and characterization.

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

CHM 5831 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 4300 Fundamentals of Clinical Chemistry - (3) CHM
PR: BCH 3023. Theoretical and practical aspects of the analysis of various body fluids, with emphasis on the medical significance. Clinical chemistry majors must take CHS 4301 concurrently. Lec.

CHS 4301L Clinical Laboratory - (2) AS CHM
PR: CHS 3023 or CI. CHM 3120C. CHS 4300 must be taken concurrently. Laboratory experience in some of the most important clinical determinations. CHS 4300 must be taken concurrently. Lec., Lab.

CIS 4250 Ethical Issues And Professional Conduct - 6A MW(3) EN ESB
PR: Senior standing in the Department of Computer Science and Engineering. An introduction to ethical issues arising in the computer sciences, through written analysis and oral presentations of technical situations which involve ethical conflicts.

CIS 4233 Ethical Issues for Information Technology - (3) US EIT
human values and laws as applied to the "gray area" of technological phenomena. The goal is to develop an understanding of what technology introduces to our culture and how we, as individuals, envision the future of society.

CIS 4361 Information Technology Security Management - (3) US 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 system development security, cryptography, disaster recovery planning, legal and ethical issues, and physical security.

CIS 4412 Information Technology Resource Management - (3) US EIT
PR: Junior standing or above. An overview of the information resource management function, with emphasis on information systems management, is covered. Topics include planning, organizing and controlling user services, managing information system development process, and the fundamentals of EDP auditing.

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

CIS 4900 Independent Study In Computer Science - (1-5) ENSB
PR: EEL 4851G or CI. Only. Specialized independent study determined by the needs and interests of the student.

CIS 4910 Computer Science Project - (2) ENSB
PR: EEL 4851C. Projects intended to develop individual interests and abilities in computer science and software developments aspects of well defined proposal.

CIS 4930 Special Topics in Computer Science I - (1-4) EN ESB
PR: EEL 4851C or CDA 3201 and CI.

CIS 4935 Senior Project in Information Technology - (3) US EIT
PR: Senior Standing in Information Technology. Graduates of the IT program must complete a major project dealing with a sub-domain of IT. Projects are supervised by a faculty member, or an approved industrial mentor. Projects range from design to programming, to implementations associated with IT.

CJC 4010 American Correctional Systems - (3) AS CJP
PR: Junior standing, CJC 3024 or CJC 3361. Analysis of the different treatment philosophies and techniques currently in use in the field, with special attention to experimental and demonstration programs.

CJC 4516 Alternatives to Incarceration - (3) AS CJP
PR: Junior standing, CJC 3024 or CJC 3610 or CI. This course explores a variety of alternatives to imprisoning the offender, including probation, parole, diversion, and other community-based intervention and treatment approaches.

CJC 4310 Correctional Administration - (3) AS CJP
PR: Junior standing, CJC 3024 or CI. The course provides students with an introduction to issues in correctional administration in both institutional and community corrections.

CJC 4410 Intervention Techniques and Strategies - (3) AS CJP
PR: Junior standing, CJC 3024 or CJC 3610 or CI. Introduces the student to theories and methods underlying treatment modalities currently employed in corrections.

CJE 4010 Juvenile Justice System - (3) AS CJP
PR: Junior standing, CJC 3024 or CJC 3610 or CI. Provides coverage of the juvenile and family courts, their clientele, and the complex of human services agencies and facilities that contribute to efforts at juvenile correctional intervention.

CJE 4044 Police and Juvenile Delinquency - (3) AS CJP
PR: Junior standing, CJC 3024 or CI. Focuses on the unique aspects of law enforcement interaction with juveniles and their families. Issues which emerge when working with multi-cultural populations will be discussed. Police efforts at early detection, intervention, and diversion. Interaction with status offenders and children in need of assistance will be a topical concern.

CJE 4114 American Law Enforcement Systems - (3) AS CJP
PR: Junior standing, CJC 3024 or CJC 3610 or CI. Provides a comprehensive examination of the American law enforcement system at the federal, state, and local levels and an assessment of career opportunities within the community.

CJE 4144 Private Security Systems - (3) AS CJP
PR: Junior standing plus CJE 4114, CJC 3024, CCJ 3610, CCJ 3621 or CI. Examines some of the principal methods and techniques currently used to reduce or prevent losses due to theft and casualty.

CJJ 4210 Developmental Aspects of Juvenile Delinquency - (3) AS CJP
PR: CCJ 3610 and CJE 4010 or CI. Provides the student with a developmental/life course perspective of the processes, events, and factors which occur during childhood and adolescence and cause juvenile delinquency. This course focuses on the conditions which are critical in shaping the delinquent's behavior during their formative years.

CJJ 4211 Juvenile Substance Abuse - (3) AS CJP
PR: Junior standing, CJE 4010 or CI. Focuses on juvenile correctional responses to drug use, crime, and the use of secure facilities. How the system attempts to handle status offenders
and children in need of supervision will be covered. Diversion,
detention, probation, and community-based non-secure facilities
will be discussed.

CJL 3110 Substantive Criminal Law - (3) AS CJP
PR: Junior standing. CCJ 3024 or CCJ 3610 or Cl. Examines the
historical development of the American criminal law system, the
substantive elements of the crime, and court procedures.

CJL 4074 Correctional Law - (3) AS CJP
This course provides students with an introduction to legal issues in
areas of corrections, with an emphasis on civil and criminal
liability for correctional staff and administrators and on convicts' 
rights.

CJL 4115 Environmental Law and Crime - (3) AS CJP
PR: Junior standing, CCJ 3024 or Cl. The course provides
students with an introduction to laws in the area of environmental
crime and environmental law.

CJL 4110 Criminal Rights and Procedures - (3) AS CJP
PR: Junior standing, CCJ 3024 or Cl. Emphasizes the
Constitutional issues and rules that are applied and enforced by
the courts while processing criminal cases.

CLA 3123 Roman Civilization - (3) AS WLE
PR: Junior standing, CCJ 3024 or Cl. Study of Ancient Roman
Civilization with emphasis on social customs, political institutions,
and daily life.

CLA 3120 Substantive Criminal Law - (3) AS CJP
Study of the legal systems and substantive criminal law in
American society.

CLA 2041 Wordpower from Latin and Greek - (3) AS WLE
Major emphasis on study of the Latin and Greek stem (bases),
prefixes, and suffixes as a means of building English vocabulary.
Examination of the Greek and Latin-based terminology, its adoption
into English and current usage.

CLA 3104 Greek Civilization - (3) AS WLE
Study of Greek Civilization from its beginning to the Roman
period, with emphasis on social customs, political institutions,
and daily life.

CLA 4131 Greek Civilization - HP (3) AS WLE
Study of Ancient Greek civilization with emphasis on social
customs, political institutions, and daily life.

CLA 4930 Selected Topics - (1-4) AS WLE
Course content depends on student demand and instructor’s
interest and may range over the whole field of ancient languages,
literatures and civilizations. Offerings on a semi-regular basis
include Tongues of the Bible and the Bible as History.

CLP 3011 Psychology of Adjustment - (3) AS WLE
Genetic, organic, and learned factors involved in the processes
of personal adjustment; applications of mental health principles
to everyday living.

CLP 4414 Behavior Modification - (3) AS WLE
PR: PSY 3213 with a grade of C or better or Cl. Introduction to
behavior analysis and application of learning principles,
biochemical measurement, research designs, and interventions in
treatment settings.

CLP 4433 Psychological Tests and Measurement - (3) AS WLE
PR: PSY 3213 with a grade of C or better or Cl. A consideration of
the instruments for intellectual and personality assessment
including their applications, development, and potential abuses.

CLT 3040 Clinical and Juridical Terminology - (3) AS WLE
A course in the Greek and Latin word elements used in science
and technology.

CLT 3101 Greek Literature in Translation - 6A MW(3)AS WLE
Reading and discussion of major works in Greek literature.
Special emphasis on the Iliad, the dramatists Aeschylus,
Sophocles, and Aristophanes. Special attention is given to
the social and political background of the works. All readings are
in English.

CLT 3102 Roman Literature in Translation - 6A MW(3)AS WLE
Reading and discussion of major works in Roman literature.
Special emphasis is placed on the Aeneid, comedy and satire.
Some attention is given to the political background of the works.
All readings are in English.

CLT 3370 Classical Mythology - HP (3) AS WLE
Study of Greek and Roman myths embodied in classical literature
and of their impact on Western civilization. All readings are in
English.

COM 2000 Introduction to Communication - SS(3)AS SPE
Introduces students to the roles, contexts, and issues in contemporary
human communication. Required of Communication majors.

COM 3014 Communication, Gender and Identity - (3) AS SPE
Examines the communicative origins and implications of gender
roles.

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
hearing.

COM 3120 Introduction to Communication Theory in Organizations - (3) AS SPE
PR: majors, COM 2000 or Cl. A survey of communication concepts which impact
upon organizational effectiveness.

COM 3122 Interview Communication - (3) AS SPE
PR: Junior/Senior standing or 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 4030 Health Communication - (3) AS SPE
PR: GS. Application of communication theory and research to
the health context including provider-patient communication,
health information campaigns, and health beliefs and behavior.

COM 4022 Health Communication - (3) AS WLE
Study of health communication, with special attention to the scientific
aspects of criminal investigation and the management of major
cases.

CLP 3011 Psychology of Adjustment - (3) AS WLE
Stresses the development of subroutines, relative I-O and data base
applications as used in a comprehensive data processing environment.

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

COP 3514 Program Design - (3) EN ESB
PR: COP 2510 or comparable introductory programming course and COP 3513. This extends students' program 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) US 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 4020 Programming Languages - (3) EN ESB
PR: EEL 4851C. An introduction to programming languages, survey of language types and design of translators and interpreters.

COP 4513 Symbolic Computations in Mathematics - (3) AS MTH
PR: MAS 3105 and MAP 2302. Students will write programs to solve problems in various areas of mathematics including calculus and algebra with symbolic programming systems such as Maple, Mathematica, or Macsyma.

COP 4600 Operating Systems - (3) EN ESB
PR: EEL 4851C. Introduction to systems programming. Design of operating systems. Concurrent processing, synchronization, and storage management policies.

COP 4610 Operating Systems for Information Technology - (3) US 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) US EIT
PR: EEL 4854 or CI. Implementation and evaluation of models discussed in the lecture part of the course. Students implement and test algorithms in a lab environment.

COP 4810 Technology Seminar - (1) US 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. Special topics with a wide variety of IT experience will give seminars to senior IT students.

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 4210 Automata Theory and Formal Languages - (3) EN ESB
PR: COT 3100, EEL 4851C. 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, EEL 4851C. Design and analysis of algorithms applicable to various classes of computer algorithms frequently used in practice.

CPH 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 AFAFA
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 4390 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 Literature and Description - (6) AS ENG
An introductory narrative and descriptive techniques in prose. By making the student sensitive to language usage, it is designed to bridge the gap between expository writing and imaginative writing.

CRW 3111 Form and Technique of Fiction - (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.

CRW 3112 Fiction I - (3) AS ENG
PR: CRW 2100 or CRW 3111. An introductory fiction writing course, 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 - (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 complete through the sonnet to such various forms as the rondeau, 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 4231 Creative Writing - (3) AS ENG
PR: CRW 3112, CRW 3231. CRW 3231. 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 - (3) 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 in serious works. May be taken twice for credit with different topics.

CWR 4103 Water Resources Engineering I - (3) EN EGX
PR: CWR 4202. A study of the engineering principles involved in sustaining and managing the quantity and quality of water available for human activities with particular emphasis on surface water and ground water hydrology.

CWR 4320 Hydraulics - (3) EN EGX
PR: EGN 3353. Fundamental and applied aspects of pipe flow, free surface flow, and unsteady flow for hydraulic systems.

CWR 4541 Water Resources Engineering II - (3) EN EGX
PR: EGN 3353, CWR 4202. The course is intended to be a technical elective for students specializing in water resources or environmental engineering. Material in the course covers surface water hydrology including both soil vadosce zone processes and the ground water flow.

CWR 4810 Hydraulic Design - (2) EN EGX
Design of hydraulic systems, including drainage, water supply and flood control.

CWR 4812 Capstone Water Resources/Environmental Design - (3) EN EGX
PR: CWR 4103, ENV 4001. A capstone water resources design experience for seniors in Civil and Environmental Engineering. A design oriented course which design both industrial and domestic water treatment, and water transport systems and hydraulic systems, including drainage, water supply, and flood control.

DAA 2100 Fundamentals Of Modern Dance - (2) VP DAN
A studio class for students with a serious interest in concert modern dance. Emphasis on correct alignment, development of strength, rhythm and dynamic activity as well as spatial and locomotor patterns that underlie the work in more advanced contemporary dance. May be repeated.
DAA 2105 Modern Dance I - (2) VP DAN
PR: Admission by placement audition. A studio class for students with a serious interest in concert modern dance. Further emphasis on correct alignment, development of strength, rhythmic and dynamic activity as well as spatial and locomotor patterns that underlie the work in more advanced contemporary dance. May be repeated.

DAA 2200 Fundamentals Of Ballet - (2) VP DAN
A studio class for students with a serious interest in Ballet. Emphasis on correct alignment of the body and a progressive development of positions and barre exercises as well as the application of combinations in center work using classical Ballet vocabulary (French terms). May be repeated.

DAA 2205 Ballet I - (2) VP DAN
PR: Admission by placement audition. A studio class for students with a serious interest in Ballet. Further emphasis on correct alignment of the body and a progressive development of positions and barre exercises as well as the application of combinations in center work using classical Ballet vocabulary (French terms). May be repeated.

DAA 2500 Fundamentals Of Jazz Dance - (2) VP DAN
A basic movement course in Jazz Dance involving dance vocabulary, alignment, styles and simple rhythm movement patterns. May be repeated.

DAA 2504 Jazz Dance - (2) VP 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 on a strong rhythmic base. May be repeated.

DAA 2570 Jazz Theatre Dance - (3) VP 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.

DAA 2760 Tai Chi - (2) VP DAN
This course is an introduction to the study of Tai Chi focusing on the philosophy and postures of this martial art. May be repeated.

DAA 2761 Introduction to Yoga - (2) VP DAN
This course is designed to provide students with an understanding of basic Yoga philosophy and practice which includes postures, meditation and breath techniques. May be repeated.

DAA 3108 Modern Dance II - (3) VP 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) VP 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) VP 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 center 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) VP DAN

DAA 3294 Ballet Variations - (1) VP 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 3394 World Dance Topics - (1) VP 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 3614 Choreography I - (2) VP DAN
PR: DAA 3615, CR: DAA 2105 or above or CI, 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. May be repeated.

DAA 3615 Choreography II - (2) VP DAN
PR: DAA 3614. Preparation of studies in rhythm, dynamics, form and motivation.

DAA 3624 Dance Improvisation - (2) VP DAN
For majors and non-majors. Exploring various methods of spontaneously creating dance movement in individual and group situations. Structured and unstructured approaches will be explored. May be repeated.

DAA 3654 Repertory - (1) VP DAN
PR: Admission by audition. The development and performance of solo and/or group dance repertory.

DAA 3666 Performance - (1) VP DAN
PR: Admission by audition. Open to all university students proficient in dance techniques and concurrently enrolled in Technique. Involves rehearsal and performance of works presented by the department. May be repeated.

DAA 4111 Modern Dance IV - (3-4) VP DAN
PR: Admission by placement audition. Intense work on the growth of personal improvisational dance styles. Equal emphasis will be given to training the body in the development of technical excellence. May be repeated.

DAA 4211 Ballet IV - (3-4) VP DAN
PR: Admission by placement audition or CI. Perfecting the execution of barre work. Intensification of centre work. More stress on aesthetic quality of movement and phrasing. Students expected to be proficient in pointe work. Outside projects, concerts, and performances are required. May be repeated.

DAA 4616 Choreography III - (2) VP DAN
PR: DAA 3615. CR: DAA 3109 or above. Work directed toward duets and group dances. The students will submit choreographic ideas for instructor’s approval, then proceed with rehearsals. Lec-lab., reading. Rehearsal hours to be arranged.

DAA 4617 Choreography IV - (2) VP DAN
PR: DAA 4616. The student will prepare studies based on free form, minimal art, and chance methods. Lec-lab., reading.

DAA 4694 Senior Choreography Project - (1) VP DAN
PR: Dance majors with senior standing. The creation of an original group work and solo within the senior’s major concentration-ballet or modern. To be performed and presented with the concurrence of a faculty advisor.

DAA 4920 Dance Studies - (1-4) VP DAN
PR: CI and CC. Dance Major status. Individual study to extended competency in technical and performance aspects of Dance through participation in special workshops.

DAE 3351 Ethnic/Folk Dance - (2) VP 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) VP 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.

DAE 4310 Dance Pedagogy: Pre-School to Elementary - (3) VP 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.

DAE 4340 Dance Education: Secondary Curriculum - (3) VP 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.

DAE 4397 Special Studies Dance Education - (3) VP DAN
PR: CI and CC. Students with serious interest in Dance. 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) VP DAN
CR: DAE 4940. This course represents a synthesis of the information and concepts learned in the previous Dance Education courses and is required concurrently with the internship.
DEP 4940 Internship in Dance Education - (1-12) VP DAN  
CR: DEP 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) VP 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 3584 Practicum in Dance Production - (1-2) VP 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 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. 

DAN 4585 Developmental Psychology - (3) AS PSY  
For PSY 3213 with a grade of C or better. Survey of methods, empirical findings, and theoretical interpretations in the study of human development. 

DAN 4939 Psychology of Music & Dance 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  
A practicum in mounting dance concerts with shop work and backstage participation. Intended for students working in costume, set preparation, light presentation, stage management and production crew. Dance majors must have at least 2 credits for graduation accumulated in two different semesters. 40 hour lab required. 

DAN 414 Music For Dance - (2) VP DAN  
PR: Designed for majors and non-majors. Development of musical skills in movement studies. Continued study of the interrelationship of music and dance through movement experiences, observation, and writing. 

DAN 3615 Music For Dance II - (2) VP DAN  

DAN 3714 Dance Kinesiology - (3) VP 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 Though the 19th Century - 6A XLW (3) VP DAN  
Designed for majors and non-majors, this course will present a comprehensive view of the evolution of dance as an art form from its origins through the 19th Century. It is designed to develop awareness and insight through lecture, discussion, video, observation and writing. 

DAN 4135 20th Century Dance - XMW (3) VP 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 devoted to the development of awareness and insight through lecture, discussion, video, observation and writing. Students will be required to attend at least two dance performances. 

DAN 4181 Dance Senior Seminar - (2) VP 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) VP 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 4906 Directed Study - (1-5) VP DAN  
PR: CI, CC. Independent studies in the various areas of Dance. Must receive approval prior to registration. May be repeated by majors. 

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

DEC 4133 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 programs. 

DEP 2004 The Life Cycle - (3) AS GEY  
An examination of individuals and the physical, cognitive, personality, and social changes which occur throughout the entire life span.
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) ED EDE
S/U only. Specialized independent study determined by the student's needs and interests.

EDE 4906 Directed Study: Elementary Education - (1-4) ED EDE
PR: Admission to the Elementary Education. CR: EDE 4933. S/U only. Directed study 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. S/U only. Students spend six hours per week in a supervised in-school experience and attend weekly seminars.

EDE 4942 Childhood Education Internship Level II - (6) ED EDE
PR: EDE 4941, RED 4310, EDG 4620, EDF 3122, LAE 4314, EDE 4301. 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 Education and Field Experience - (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 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 3604 Social Foundations of Education - M W (3) ED EDF
PR: Upper level standing. Social, economic and political context within which schools function and the values which provide direction for our schools.

EDF 4411 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 4431 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 EQ
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 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 FIA. 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 4600 Introduction to Creative Drama - (3) VP EDC
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.

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 2500 Literature in Early Childhood Education - 64 LW (3) ED EDU
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 art 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 4300 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 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 young 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 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 ESL and bilingual education.

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) ED EDU
PR: Senior standing. To extend knowledge in teaching field.

EEC 4936 Senior Seminar in Early Childhood Education - (2) 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 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 integrating knowledge 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.

EED 4011 Introduction to Behavior Disorders - (3) ED EDS
PR: EEX 4011, 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.

EED 4920 Directed Study: Behavior Disorders - (1-3) ED EDS
PR: Senior standing, DPR. To extend competency in teaching field. EED 4941 Internship: Early Childhood - (10-12) 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.

EED 4946 Field Experience I - (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 integrating knowledge of development for program planning for both typical and atypical children.

EED 4947 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. 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.

EED 4948 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.

EEL 2161 Electrical Engineering Computer Methods - (3) EN 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) EN EGE

EEL 3302 Electronics I - (3) EN EGE
PR: EGN 3373. A course in the physical principles of electronic devices with emphasis on semi-conductor devices. Includes the analysis and design of amplifiers and switching circuits.

EEL 3410 Fields and Waves I - (3) EN EGE
PR: MAP 2302, PHY 2049, PHY 2049L. A basic introduction to electromagnetic field theory, including static and dynamic electromagnetic fields.

EEL 4030 Electrical Systems Environments - (3) EN EGE
PR: MAP 2302 and PHY 2049. Dynamics, vibration, thermodynamics, and control; electronic and electromechanical systems and their environments.
EEL 4102 Linear Systems Analysis - (3) EN EGE
PR: EEL 3100. 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 4705 Electronics II - (3) EN EGE
PR: EEL 3502. Provides further study in electronic circuits. Includes feedback and frequency response techniques in amplifier design.

EEL 451C Semiconductor Devices - (3) EN EGE
PR: EEL 3302. An introduction to the fundamentals of semiconductor materials and semiconductor device operation.

EEL 4420 RF & Microwave Measurements - (2-3) EN ESB
PR: EEL 4161L or CI. This course introduces students to the theory and design 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 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 4471 Electromagnetics - M W(3) EN EGE
PR: MAP 2302, PHY 2049, PHY 2049L and EE majors or CI. Electromagnetic field theory, including static and dynamic electromagnetic fields; applications; environmental effects (effects of radiation, magnetic fields).

EEL 4512 Communication Systems - (3) EN EGE
PR: EEL 4102. 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 3301L, EEL 3302L, EEL 3410. 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 4567 Linear Control Systems - (3) EN EGE
PR: EEL 3100. Introduction to analysis and design of linear feedback control systems. Covers block diagram, flow charts, Bode, Nyquist, and root locus techniques.

EEL 4705 Logic Design - (3) EN EGE
PR: EGN 3373, CR: EEL 4705L for CS & E students CP: COP 2002. 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 4748 Microprocessor-Based System Design and Application - (3) EN ESB
PR: CDA 3201, CDA 3201L. Study of techniques for design of microprocessor-based systems used in various applications. Includes a project on development of an experimental application system.

EEL 4756 Signal and Image Processing - (3) EN ESB
PR: EGN 4450, EEL 4851C. Sampling and quantization of signals and images; frequency-domain representations, transforms; filtering, convolution, and correlation; low-level image analysis algorithms; color images; fast methods and parallelism.

EEL 4781C Distributed Processing and Computer Networks - (3) EN ESB
PR: EEL 4851C. Design and analysis of distributed processing systems. Covers communication hardware and software, network operating systems, and reliability enhancement techniques.

EEL 4782L Computer Information Networks for Information Technology - (3) US 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 4782L Information Networks Laboratory for Information Technology - (1) US EIT
CR: COP 4610 or CI. The lab section of this course will allow students to apply hardware and software concepts discussed in the lecture portion of the class. Special isolated networking labs provide both software and hardware tools for student experimentation.

EEL 4851C Data Structures - (3) EN ESB
PR: CDA 3103, COP 3514. Fundamentals of data organization for purposes of program efficiency, clarity and simplicity will be addressed.

EEL 4852C Data Base Systems - (3) EN ESB
PR: EEL 4851C. Fundamentals of data base management systems. CODASYL, network, hierarchical, and relational data base systems are analyzed, and typical applications are presented.

EEL 4854 Data Structures and Algorithms for Information Technology - (3) US EIT
PR: COP 3515 or CI. Representing data for manipulation by the computer is studied. Design and analysis of well-known data structures and algorithms to manipulate them, are studied. Program efficiency, clarity and speed are considered in various data structures and algorithms.

EEL 4905 Independent Study - (1-5) EN EGE
PR: CI. S/U only. Specialized independent study determined by the students' needs and interests.

EEL 4906 Professional Issues and Engineering Design - M W(2) EN EGE
PR: EEL 4102; CR: EEL 4305, EEL 4512, 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 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 5316L Wireless Circuits and Systems Design Laboratory - (2) EN EGE
PR: EEL 4936. 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 subsystem levels. Not available on an S/U basis.

EEL 5344C Digital CMOS/VLSI Design - (3) EN 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.

EEL 5356 Integrated Circuit Technology - (3) EN EGE
PR: EEL 4351 or GS. Physics and Chemistry of integrated circuits. Principles and techniques of integrated circuit design. Physical and geometrical schemes, failure and yield analysis. A laboratory is integral to the course.

EEL 5357 Analog CMOS/VLSI Design - (3) EN EGE

EEL 5382 Physical Basis Of Microelectronics - (3) EN EGE
PR: EEL 4471 or GS. Modern mechatronics with emphasis on electronic properties in atoms, molecules, and crystals; quantum statistics; energy band theory; crystal structures; defect chemistry; semiconductor properties.
EEL 5935 Special Electrical Engineering Topics I - (1-3) EN EGE
PR: EEL 4851C. An introduction to the evolution of computer systems, and examine professional issues and trends that impact the future of the field.

EEX 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, graphics software and packages.

EEX 5935 Special Electrical Engineering Topics I - (1-3) EN EGE
PR: EEL 4851C. An introduction to the evolution of computer systems, and examine professional issues and trends that impact the future of the field.

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 5900 Directed Study: Exceptional Student Education - (1-3) ED EDS
PR: Senior standing. DPR. To extend competency in teaching techniques for exceptional students.

EEX 4906 Clinical Teaching in Special Education - (3) ED EDS
PR: EEX 4011, DPR. CR: EEX 4846. Effective teaching principles, instructional management procedures, and specialized teaching techniques for exceptional students.

EEX 4956 Internship: Exceptional Student Education - (1-10) 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 4011; Sem II: EEX 4064; Sem III: EEX 4221 and EEX 4946. 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.

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.

EGL 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.

EGL 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.

EGL 5325 Theory and Development of Creativity - (3) ED EDS
Exploration of the concept of creativity, its factors, measurement, and application to education. Opportunities are given to work with children in a laboratory setting and to prepare materials to be used with small groups of children.

EGN 2031 History of Technology - HP (3) EN EGB
Covers the evolution of technology and its influence on society from pre-historic man to the modern day. Topics include: seven technological ages of man, methods of producing power, materials, transportation, communication and calculation, and technology and society.

EGN 2080 Light and the Arts: A Quantitative Approach - FA (3) EN EGB

EGN 2581 Circuit Elements and Physics - (2) EN EGB
Remedial work on the mathematical and physical concepts that are necessary for EGN 3373. Differentiation and integration, complex numbers, phasors, vectors, the physical laws for resistors, capacitors, and inductors.

EGN 2802 History of Electrotechnology - HP (3) EN EGB
Highlights of the history of electrotechnology and its relation to the development of civilization. The contributions of Volta, Faraday, Marconi, Bell, etc. in the context of the development of western civilization. The impact of
EGN 3330 Engineering Mechanics I - (4) EN EGB

EGN 3331 Mechanics of Materials III - (3) EN EGB

EGN 3332 Dynamics - (3) EN EGB

EGN 3333 Thermodynamics - (3) EN EGB

EGN 3335 Basic Fluid Mechanics - (3) EN EGB

EGN 3336 Fluid Mechanics - (3) EN EGB

EGN 3337 Introduction to Electrical Systems I - (3) EN EGB

EGN 3338 Thermodynamics, Fluids, and Heat Transfer - (4) EN EGB

EGN 3339 Materials Engineering I - (3) EN EGB

EGN 3340 Technology and Society - (3) MW (3) EGB

EGN 3365 Materials Engineering I - (3) EN EGB

EGN 3370 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 3371 System Dynamics - (3) EN EGB
Dynamic analysis of electrical, mechanical, hydraulic and thermal systems; Laplace transforms; numerical method; use of computers in dynamic systems.

EGN 3372 Engineering Analysis - (3) EN EGB

EGN 3373 Electromechanical Systems - (3) EN EGB

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

EGN 3375 Electromechanical Systems - (3) EN EGB

EGN 3376 Applied Engineering Concepts for Information Technology - (3) US EIT
PR: Any PHY course. A lecture and problem solving course which deals with engineering subjects related to computers and information technology including static stability and strength, electrical characteristics, thermodynamics and heat transfer, and signal propagation.

EGN 3377 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.
EIN 4333 Production Control - (3) EN EGS
PR: ESI 4312C. Planning and control of production systems. Includes: forecasting and inventory control models, scheduling and sequencing, MRP, CPM/PERT, and resource requirements.

EIN 4364C Facilities Design I - (3) EN EGS
PR: EIN 4311, EIN 4411, EIN 4333. Design and modification of industrial production and material handling facilities. Basic analysis techniques, use of computer programs, automated warehouse housing.

EIN 4365 Facilities Design II - M W (3) EN EGS
PR: EIN 4364; CR: ESI 4523. CAD/CIM, complete design of a plant facility. Course to use systems and software geared toward plant design and operation. A team of students is to be responsible for the complete project. Options: CAD/CIM.

EIN 4411 Manufacturing Processes - (3) EN EGS
PR: EGS 1113. The study of basic manufacturing processes and precision assembly. CAD/CAM intro., NC programming.

EIN 4601C Automation and Robotics - (3) EN EGS
PR: EIN 4411. Introduction to the practices and concepts of automation as applied to material handling, inventory storage, material transfer, industrial processes and quality control.

EIN 4933 Special Topics in Industrial Engineering - (1-6) EN EGS
Special topics related to economic analysis, optimization, human factors, manufacturing and automation aspect of industrial systems. Repeatable up to 5 credit hours.

EIN 5245 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 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.

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.

EIV 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.

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

ELD 4011 Introduction to Specific Learning Disabilities - (3) ED EDS
PR: EEX 4011 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 4011. S/U only. DPR. Supervised field experiences in assessment, behavior management and clinical teaching with classes for children who have specific learning disabilities.

ELR 3301L EE Circuits Laboratory - (1) EN EGE
PR: EGN 3373. Basic circuit theory applications: computer-aided design tools, electrical measurement techniques.

ELR 3302L EE Circuits Laboratory - (1) EN EGE
PR: EGR 3301L and EEL 3302, CR: EEL 4305. Design, build and test active electronic networks; computer-aided design tools; computer data acquisition strategies.

ELR 4310L Wireless Circuits & Systems Design Laboratory - (2) EN EGE
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.

EMR 424 Undergraduate Supervised Practicum in SLD - (1-6) ED EDS
PR: EEX 4201. S/U only. DPR. Supervised field experiences in assessment, behavior management and clinical teaching with classes for children who have specific learning disabilities.
<table>
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**EMR 4905 Independent Study: Mental Retardation**

S/U. May be repeated when subject vary. DPR. Specialized independent study determined by the student's needs and interests.

**EMR 4909 Directed Study: Mental Retardation**

PR: Senior standing. DPR. Offered only as a scheduled class. To extend competency in teaching field.

**EMR 4941 Undergraduate Supervised Practicum in Mental Retardation**

PR: EEX 4011. S/U only. DPR. Supervised field experiences in assessment, behavior management, and clinical teaching with children who have mental retardation.

**ENC 1101 Composition I**

PR: ENC 1101 and ENC 1102 must be taken in numerical sequence. Instruction and practice in the skills of writing and reading.

**ENC 1102 Composition II**

PR: ENC 1101. Instruction and practice in the skills of writing and reading.

**ENC 1121 Composition I: Honors**

PR: ENC 1121. Reserved for students in University Honors. Honors Section of ENC 1101.

**ENC 1122 Composition II: Honors**

PR: ENC 1121 and ENC 1122. A course teaching the techniques for writing effective prose, excluding fiction, in which student essays are extensively critiqued, edited, and discussed in individual sessions with the instructor.

**ENC 4260 Advanced Technical Writing**

PR: ENC 2210, or ENC 3310, or CI. 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**

PR: ENC 3310 or CI. Instruction and practice in writing effective, lucid, and compelling prose, with special emphasis on style, content, logical argumentation, and critical thinking.

**ENC 4531 Selected Topics in Professional and Technical Writing**

PR: ENC 3213, ENC 2210, or ENC 3310 or CI. 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, and writing for the social sciences. May be taken twice for credit with different topics.

**ENG 4013 Literary Criticism**

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.

**ENG 4060 History of the English Language**

The evolution of language from Anglo-Saxon through Middle English to Modern English. Development of the English lexicon. Changes in the pronunciation, syntactic, and semantic systems; discussion of the forms which influenced them.

**ENG 4096 Individual Research**

PR: CC. Directed study in special projects.

**ENG 4097 Directed Readings**

PR: CC. Readings in special topics.

**ENG 4935 Honors Seminar I**

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**

PR: Admission to English Honors Program. CR: ENG 4935. Variable topics. Students will be expected to participate in class
ENV 4970 Honors Thesis - (3) AS ENG
PR: ENG 4935, ENG 4936. For students writing honors theses.

ENL 3323 Shakespeare from an Historical Perspective - HP (3) AS ENG
Examines the plays of Shakespeare from <i>Paradise Lost</i> to <i>Othello</i> as manifestations of the social, political, and intellectual forces of the time. Lectures will be available on audio tapes. Not will be counted toward the English major.

ENL 4352C Environmental Unit Operations and Processes - (3) AS ENG
PR: CWR 4103, ENV 4001, ENV 4417. A capstone environmental engineering research project. Requires undergraduate preparation in environmental engineering, or environmental engineering majors. Laboratory evaluation of unit processes normally used in engineering 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 4981 Capstone Environmental Engineering Design - M W (3) EN EGX
PR: ENV 4910, ENV 4901, ENV 4417. A capstone environmental engineering 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 application of critical concerns.

ENV 5103 Air Pollution Control - (3) EN EGX
PR: ENG 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 5105 Air Resource Management - (3) EN EGX
PR: CI. Air pollution source impacts on ambient air quality, modeling, regulatory approaches, source strategic controls and surveillance.

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. Introduction to hazardous waste management and remediation. RCRA regulatory concepts, regulations, aspects of hazardous waste management 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. (PR: undergraduate preparation in environmental engineering or an environmental science program)

ENV 5345 Solid Waste Control - (3) EN EGX
PR: CI. 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. (PR: undergraduate preparation in environmental engineering, or graduate standing in environmental engineering or an environmental science program)

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 processes 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.

ENV 5005 Introduction to Entomology - (3) AS BIO
PR: BSC 2010, BSC 2010L, BSC 211, BSC 211L. An introduction to general aspects of insect morphology, development, and classification. The identification of local forms will be emphasized. Lec.-lab.
EVR 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 backdrop for the central theme of Roman political, legal and cultural development, including much of the near East and Europe.

EVR 3413 Roman Empire - (4) AS HTY
A study of Imperial Rome 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.

EUV 3461 German History to 1870 - (4) AS HTY
A political, social, and cultural approach to the history of the German states from 1500 through 1870, with emphasis on the Protestant Reformation, the rise of Brandenburg-Prussian, and the unification under Bismark.

EUV 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.

EUH 3502 British History 1688 to Present - (4) AS HTY
A study of the major themes of British history since the Glorious Revolution including social, political, and economic developments leading to the creation of the modern demographic welfare state.

EUH 3574 History of Imperial Russia, 1689-1917 - (4) AS HTY
A survey of political, social, and cultural developments in the Russian Empire from Peter the Great to Nicholas II. Topics include the expansion and modernization of the Empire, the culture of the Imperial court, peasant rebellions, social and legal reforms, the role of the West, and the collapse of the Romanov dynasty.

EUH 3576 History of the Soviet Union, 1917-1991 - (4) AS HTY
A study of Soviet society under communism from the Revolution to the collapse of the USSR. Topics include the origins and development of revolutionary socialism, the Bolshevik seizure of power, Stalinism and the Great Terror, popular dissent and resistance, the treatment and experience of ethnic minorities, Gorbachev and the dissolution of the Soviet Union.

EUS 3000 Europe -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.

EUS 3022 Russia -SS HP 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.

EVR 2001 Introduction to Environmental Science - NS (3) AS ESP
CR: EVR 2001L. An introductory lecture course linking the human and physical/biological world. The course will develop an understanding of population and resource interactions.

EVR 2001L Environmental Science Lab - (1) AS ESP
CR: EVR 2001. A laboratory course linking the human and physical/biological world. The lab will develop an understanding of population and resource interactions and complement the lecture course. Field trips.

EVR 2861 Introduction to Environmental Policy - (3) AS ESP
An introduction to environmental policy using class lectures, student projects, and independent readings. Emphasis will be placed on understanding basic policy mechanisms and major policy actions relating to environmental issues at the local, national and international level.

EVR 4027 Wetland Environments - MW (3) AS ESP
PR: PCB 3043 or CI. 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 4091 Directed Readings - (1-6) AS ESP
To provide advance students with interdisciplinary research experience in areas of specific interest.

EVR 4905 Independent Study - (1-6) 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) 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) ED EDV
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) ED EDV
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 characteristics.

EVT 4165 Curriculum Construction: Industrial-Technical Education - (4) ED EDV
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) ED EDV
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) ED EDV
Techniques for assessing student’s mastery of skills in industrial/technical education. Focuses on specific competencies including developing and administering performance tests, monitoring student process, and others. Open to majors and non-majors.

EVT 4562 Vocational Education for Special Needs Students - (4) ED EDV
Focuses on modifying the vocational education curriculum, laboratory, shop, student outcomes, learning activities, tests, research, etc. to accommodate the unique learning needs of minority, handicapped, disadvantaged, non-traditional and other special needs students.

EVT 4561 Equity in Schools and the Workplace - MA Oven(3) ED EDV
Issues related to gender equity in schools and the workplace. Includes legal, ethical, psychological, sociological, and economic factors; males and females in traditional and non-traditional occupations.

EVT 4905 Independent Study: Industrial-Technical Education - (1-4) ED EDV
PR: CI. S/U only. Specialized independent study determined by the student’s need and interests.

EVT 4909 Directed Study: Industrial-Technical Education - (1-3) ED EDV
PR: CI. To extend competency in teaching field.

EVT 4936 Senior Seminar in Industrial-Technical Education - (2) ED EDV
PR: Senior standing; CR: EVT 4940. Synthesis of teacher candidate’s courses in complete college program.

EVT 4940 Internship: Industrial-Technical Education - (1-12) ED EDV
CR: EVT 4936. S/U only. One full semester of internship in a public or private school. In special programs where the internship experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9-12 semester hours.
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EVT 4946 Supervised Field Experience: Industrial-Technical Education - (1-6) ED EDV
PR: CI. S/U only. Planned supervised functions in the area of specialization and coordinated with selected schools, government, industry, social agencies, businesses and industries.

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.

EVT 5664 School Community Development - (3) ED EDV
Identifying, assessing, and analyzing, individual, institutional and community needs for the purpose of cooperative planning, community involvement, and public support.

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 4204 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 4523 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.

EXP 4620 Psychology of Language - (3) AS PSY
PR: PSY 3213 with a grade of C or better or CI. Historical survey of relations between psychology and linguistics leading to the emergence of psycholinguistics as a field of study. Current status of theory and research in the field.

FIL 2001 Film: The Language Of Vision - 6A FA (4) VP 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 301C Beginning Film - (3) VP ART
Intermediate problems in film with emphasis on the exploration of materials and media and the development of individual concepts.

FIL 3510 World Cinema - FA (4) VP 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 4202C Advanced Film - (3) VP ART
PR: FIL 3510C. More advanced projects in filmmaking to further develop works both technically and conceptually.

FIL 4404 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 520C Cinematography - (4) VP ART
PR: PSY 4920C. Advanced studio work using black and white, color and sound as technical and aesthetic factors in visual, artistic productions.

FIN 2104 Personal Finance - (3) BA 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 2106 Introduction to Investments - (3) BA 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. Emphasizes the operations of the security markets and the risks and returns of alternative investment media. Designed for non-business administration students.

FIN 2935 Selected Topics in Finance - (1-6) BA 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) BA FIN
PR: ECO 2013. Examination of structure and operations of our 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) BA FIN
PR: ACG 2071 or CI 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 measurement of the asset-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) BA FIN
PR: ECO 2013 and FIN 3403 or CI. 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) BA 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) BA FIN
PR: FIN 4303. 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) BA FIN
PR: FIN 4303 and FIN 3233. 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) BA FIN
PR: FIN 4303. An examination of short-term financial management; i.e., 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) BA FIN
PR: FIN 4504. 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) BA 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) BA 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) BA 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 upon the valuation process.

FIN 4514 Advanced Investment Analysis and Management - (3) BA 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 4505 Independent Study - (1-3) BA FIN
PR: CI, CC, S/U only. Specialized independent study determined by the student's needs and interests.

FIN 4515 Independent Research - (1-3) BA FIN
PR: CI. The research project will be mutually determined by the student and instructor.

FIN 5434 Advanced Real Estate Finance - (3) BA 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. Emphasizes the operations of the real estate market, the risks and returns of alternative investment media. Designed for non-business administration students.

FLE 4290 Technology in the Foreign and Second Language Classroom - (3) ED EDI
This course prepares pre-service and in-service teachers to integrate 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 classroom. The emphasis is on
teaching communicatively and on integrating culture in the K-6
classroom.

FLE 4315 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 4316 Language Principles and Acquisition - (1-3) ED EDX
PR: FLE 4316. 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 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.

FLE 4365 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 theoretical and practical foundation
for ESOL competencies and strategies.

FLE 4370 Practicum in Foreign Language Teaching in the
Secondary School - (3) ED EDX
PR: 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 - (2) ED
EDX
PR: Senior standing. Required concurrently with internship.
Synthesis of teacher candidate’s courses in complete college
program.

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.

FOL 3100 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 in
professional translation.

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.

FOL 5906 Directed Study - (1-3) AS WLE
CR: FOL 4011 or equivalent.

FRE 1120 Beginning French I - (4) AS WLE
CR: FRE 1120L. The first course in the study of elementary
French. Emphasis on the development of basic skills in
comprehension, speaking and reading.

FRE 1120L Beginning French I Laboratory - (1) AS WLE
CR: FRE 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.

FRE 1121 Beginning French II - (4) AS WLE
PR: FRE 1120 or equivalent. CR: FRE 1121L. A continuation of
FRE 1120.

FRE 1121L Beginning French II Laboratory - (1) AS WLE
CR: FRE 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.

FRE 1170 Overseas Study-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 review of the basic structure of
French.

FRE 2201 French IV - (3) AS WLE
PR: FRE 2200 or equivalent. Readings in French on the
intermediate level.

FRE 2200 Conversation II - (3) AS WLE
PR: FLE 2241 or equivalent. Conversation practice with
emphasis on current idiomatic usage.

FRE 2201 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 3230 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: FLE 2200 and/or FLE 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 discussions on the cultural history of France.

FRE 3502 The Francophone World - (3) AS WLE
An undergraduate 3 credit course, which offers an overview of
the main French speaking cultures 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 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: FLE 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.

FRE 4930 Selected Topics - (1-3) AS WLE
Study of an author, movement or theme.

FRE 5425 Advanced Written Expression - (3) AS WLE
PR: FLE 4421, or equivalent. Course is designed to give advanced
training in free composition in French.

FRE 5566 Contemporary France - (3) AS WLE
PR: FLE 3500 or equivalent or graduate standing. An advanced
course in French civilization and culture including a study of
recent social, artistic and political trends as well as various
current intellectual movements. Text and discussions in French.

FRT 3001 Great French Love Stories in Translation - MW (3) AS
WLE
An overview of the evolution of the concept of romantic and
passionate love in French literature throughout the centuries and
its impact on western literature and thought.

FRT 3140 French Literary Masterpieces in English Translation -
CA MW (3) AS WLE
A survey of the major literary works of France, tracing not only
literary but intellectual and cultural history from the Middle Ages
to the present.
FRW 4100 The French Novel - MW (3) AS WLE
PR: FRE 3230, FRE 3420 or CI. Study of the most representative novels from the 17th - 20th centuries in France, examining literary movements, ideas, and techniques. Course taught in French.

FRW 5314 Classical Drama - (3) AS WLE
PR: FRE 4101. Cornelle, Moliere, and Racine.

FRW 5415 Literature of the Middle Age - (3) AS WLE
PR: FRE 4100 or FRE 4101. Major genres, including epics, Arthurian romances, drama and lyric poetry. Reading in modern French translation.

FRW 5430 Literature of the Renaissance - (3) AS WLE
PR: FRE 4100 or FRE 4101. A study of Renaissance French humanism including Rabelais, Montaigne, and Pleide poets.

FRW 5445 18th Century Literature - (3) AS WLE
PR: FRE 4100. The classical tradition and the new currents of thought in the Age of Enlightenment.

FRW 5528 Pre-Romanticism - (3) AS WLE

FRW 5535 Romanticism and Early Realism - (3) AS WLE
PR: FRE 4101. A study of the romantic and early realistic movements with emphasis on Lamartine, Vigny, Musset, Hugo, and Balzac.

FRW 5556 Naturalism and Realism - (3) AS WLE
PR: FRE 4100 or FRE 4101. A detailed study of realism and naturalism with emphasis on Flaubert, Zola, les Goncourt, and Balzac.

FRW 5594 Selected Topics - (1-3) AS WLE
PR: Upper-level or graduate standing. Study of an author, movement or theme.

FSS 3220 Introduction to Food Production Management - (3) US HRM
Food preparation, standards and techniques in commercial food production and service. Factors affecting 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 - SS HP AF (4) AS GPY
Comparative and analytical analysis of representative regions of the world with emphasis on cultural, political, economic, environmental, and physical diversity.

GEO 3194 Regional Geography - (4) AS GPY
Variable title course to systematically study and compare special regions identified by the instructor.

GEO 3300 Geography of Middle America - (4) AS GPY
GEO 3405 Geography of Latin America - 6A (4) AS GPY
GEO 3500 Geography of Europe - 6A (4) AS GPY
GEO 3554 Geography of Russia-Eurasia - (4) AS GPY
GEO 3600 Geography of Africa - (4) AS GPY
GEO 3703 Geography of Asia - (4) AS GPY
GEO 2350 Doing Business Around the World - SS(3) BA 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.

GEO 2935 Selected Topics in Business - (1-6) BA GBA
Topics to be selected by department chair.

GEO 4850 Strategic Management and Decision Making - M-W(3) BA GBA
PR: Senior standing and FIN 3403, MAN 3025, MAR 3025. The course is intended to provide a unifying, integrating, and coordinating opportunity to tie together concepts, principles, and skills learned separately in other, more specialized courses in Business Administration.

GEO 4905 Independent Study - (1-3) BA GBA
PR: CI. S/U only. Specialized independent study determined by the student's needs and interests.

GEO 4915 Independent Research - (1-4) BA GBA
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and the instructor.

GEO 4935 Selected Topics in Business Administration - (1-4) BA GBA
The content and organization of this course will vary according to the current interests of the faculty and needs of students.

GEO 1930 Geography of Current Events - SS(4) AS GPY
Application of basic geographic principles of the analysis of contemporary events in various parts of the world.

GEO 2041C Map Interpretation - (4) AS GPY
Analysis and synthesis of various types of maps and map projections.

GEO 2371 Introduction to Earth Systems Science - NS(3) AS GPY
For non-majors only. The application of basic earth system science analysis to environmental problems. Review of impact of human activities on the surface of the earth at local and global scales.

GEO 2333 Introduction to Physical Geography - NS(3) AS GPY
CR: GEO 3013L. Principles of physical geography; maps, earth-sun relationships; meteorological, hydrological, pedological, aeolian, and glacial processes; and resultant landforms.

GEO 231L Introduction to Physical Geography Lab - (1) AS GPY
Laboratory portion of introduction to physical geography (GEO 3013).

GEO 3164C Quantitative Methods - (4) AS GPY
PR: 12 credit hours in Geography or CI. Statistical analysis in geographic research.

GEO 3180 Digital Thematic Mapping - (4) AS GPY
An introduction to the concepts underlying modern, computer-based mapping and to the collection and storage of digital spatial data.

GEO 3402 Human Geography - (4) AS GPY
Systematic treatment of human activities on earth; population, settlement, agriculture, industry, trade, transportation, and political aspects are among those considered.

GEO 3602 Urban Geography - (4) AS GPY
PR: GEO 3402 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: GEO 3141C and GEO 3164C, or CI. Selected topics in various geographic techniques and methodologies and their application.

GEO 4131C Remote Sensing of the Environment - (4) AS GPY
PR: GEO 3140C and GEO 3164C, or CI. Analysis of satellite images and aerial photographs for studies of the environment.

GEO 4151C Geographic Information Systems - (4) AS GPY
PR: GEO 3140C 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.

GEO 4201C Advanced Physical Geography - (4) AS GPY
PR: GEO 3013 or CI. Intensive study of a topic selected from physical geography.

GEO 4210 Process Geomorphology - (4) AS GPY
PR: GEO 3013 or GLY 2010 or CI. Origin, evolution, and distribution of the landforms of North America.

GEO 4244 Tropical Meteorology - NS(4) AS GPY
PR: GEO 3013, 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, circulation, and climate change and Florida climatology, surface energy exchange, land use change and its impact on tropical climates.

GEO 4265 Soil Genesis and Classification - (3) AS GPY
PR: GEO 3013 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 4300 Biogeography - (4) AS GPY
PR: GEO 3013 and GEO 3164, 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: GEO 3164 or CI. 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 3402 or CI. The interrelationships of culture and nature, from ancient times to the present.

GEO 4470 Political Geography - M W(4) AS GPY
PR: GEO 3402 or CI. The geographic factors underlying political decisions and influencing their outcome; the geographic consequences of these decisions; geopolitics.

GEO 4502 Economic Geography - (4) AS GPY
PR: GEO 3402 or CI. The spatial organization of economic production, and exchange systems.

GEO 4604 Advanced Urban Geography - M W(4) AS GPY
PR: GEO 3402, GEO 3602, or CI. Intensive examination of issues such as economic restructuring and inner-city decline, gentrification, deindustrialization, transportation, and policy-making.

GEO 4700 Transportation Geography - (4) AS GPY
PR: GEO 3402 and GEO 3164 or CI. General concepts related to the movement of goods and people, with particular emphasis on spatial principles and urban transportation problems and planning.

GEO 4900 Directed Reading - (1-4) AS GPY
PR: 20 hours in geography and CI prior to registration.

GEO 4910 Individual Research - (1-4) AS GPY
PR: 20 hours in geography and CI prior to registration.

GEO 4933 Geography Colloquium - (1) AS GPY
Senior Standing in geography Weekly topical lectures by faculty and outside speakers. Students will develop a plan for their professional or graduate careers.

GEO 5134C Advanced Remote Sensing - (3) AS GPY
PR: GS in Geography or CI. GEO 4124C. Study of digital image processing techniques. Topics include filtering techniques, geometric and radiometric normalization, and classification algorithms with emphasis on developing.

GEO 5157 Advanced Geographic Information Systems - (3) AS GPY
PR: GS in Geography or CI. Spatial problem solving utilizing GIS mapping and statistical methods. The course is designed to give students hands-on experience in using computerized techniques for geographic analysis.

GEO 5177 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.

GEO 5263 Advances in Soils - (3) AS GPY
PR: GEO 4372 or CI. Examination of how earth systems influence soil formation and variation. Details analysis of soils climesquences, biosequences, toposequences, lithosequences, chronosequences, and anthrosequences.

GEO 5288 Hydrological Systems - (3) AS GPY
PR: GEO 4372 or CI. A systematic approach to hydrology using the drainage basin as the fundamental unit of analysis is used to explore form and process, while modeling streamflows.

GEO 5347 Advances in Natural Hazards - (3) AS GPY
PR: GEO 4372 or CI. Analysis of natural hazards integrating principles of physical, social, economic, political, and technical forces that affect the occurrence and impact of various events.

GEO 5475 Advanced Political Geography - (3) AS GPY
PR: GEO 4470 or CI. Advanced investigation of geopolitical issues including: the human construction of territoriality, ethnic relations, the making of nations and states, the geopolitics of localities, and environmental policy making.

GEO 5545 Advanced Economic Geography - (3) AS GPY
PR: GEO 4502 or CI. An intensive examination of selected issues in economic geography including: regional development and decline; spatial labor market trends; business locational analysis; and comparative economic policy.

GEO 5605 Contemporary Urban Issues - (3) AS GPY
PR: GEO 3602; GEO 4604; or CI. Advanced survey of urban issues such as: industrial restructuring and urban development, inner-city ethnic relations, the geopolitics of urban governance, and urban culture.

GEO 5704 Advanced Transportation Geography - (3) AS GPY
PR: GEO 4114; GEO 4700; or CI. Review of transportation issues and analysis, focusing on modeling and planning for flows of goods and people. Provides a hands-on approach to use of GIS for such analysis.

GER 1120 Beginning German I - (4) AS WLE
CR: GER 1120L. Development of basic skills in listening and reading comprehension, speaking and writing of German.

GER 1120L Beginning German I Laboratory - (1) AS WLE
CR: GER 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.

GER 1121 Beginning German II - (4) AS WLE
PR: GER 1120 or equivalent. CR: GER 1121L. Continued development of basic skills in listening and reading comprehension, speaking and writing German.

GER 1121L Beginning German II Laboratory - (1) AS WLE
CR: GER 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.

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.

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 3102 German Literature in English - (3) AS WLE
PR: GER 2201. Development of basic conversational skills.

GER 3420 Composition I - (3) AS WLE
A fundamental course for students who have completed GER 2200 or GER 2201.

GER 3440 German for Business and International Trade - (3) AS WLE
PR: GER 2200, or CI. An introduction to the German language in ordinary business transactions.

GER 3500 German Civilization - (3) AS WLE
PR: GER 2200 or GER 2201. Readings in German on the cultural history of Germany.

GER 4410 Conversation II - (3) AS WLE
Free conversation based on the current German idiom.

GER 4421 Composition II - (3) AS WLE
Practical training in modern German usage and differences of style.

GER 5605 Goethe - (3) AS WLE
Selected novels, poems: Werther, Wahlverwandtschaften, Wilhelm, Meister, Westostlicher, Divan.

GER 5845 History of the German Language - (3) AS WLE
A diachronic approach to the study of the German language. The course traces the history and development of the language from Indo-European through Germanic, Old, Middle, and New High German.

GET 3100 German Literature in English Translation - M W(3) AS WLE
Analysis and interpretation of selected major works of German literature, to be read in English, with regard to their content and relevance to our thoughts and actions.

GEW 4100 Survey of German Literature I - (4) AS WLE
Old High German and Middle High German literature in modern German translation; the literature of Humanism and Baroque, the classical period.

GEW 4101 Survey of German Literature II - (4) AS WLE
The romantic period, 19th and 20th centuries.

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 5431 20th Century German Literature - (3) AS WLE
A study of major styles in German literature from 1900 to WW II with emphasis on Hauptmann, Schnitzler, Hofmannsthal, George Rilke, Kaser, Heym, Trakl, Thomas Mann, Hesse, Kafka, Bein, Brecht.
community and institutional settings are discussed. Of the elderly. Current approaches to counseling the elderly in intervention.

Major issues and aspects of conventional and planned housing for older adults and to careers in the field of aging services. Consideration is also given to the post-baby boom era of the late 21st century.

Content includes theoretical and practical issues, as well as exposure to opportunities for service and employment.

Consideration is also given to the post-baby boom era of the late 21st century. Consideration is also given to the post-baby boom era of the late 21st century.

A full-time assignment to an agency or organization, under the supervision of a faculty member. A full-time assignment to an agency or organization, under the supervision of a faculty member.

Emphasis is on applied aspects of economic planning, pensions, insurance, social security and other support systems. Emphasis is on applied aspects of economic planning, pensions, insurance, social security and other support systems.

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLY 2010L</td>
<td>Dynamic Earth Laboratory - (1) AS GLY</td>
<td>1</td>
<td>GLY 2010 or concurrent registration. Required for Geology majors; open to non-majors. Laboratory study of earth materials, landforms, geologic structures, topographic and geologic maps. Lec-lab-field trips.</td>
</tr>
<tr>
<td>GLY 2015L</td>
<td>Essentials of Geology Laboratory - (1) AS GLY</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>GLY 2030</td>
<td>Hazards of the Earth’s Surface: Environmental Geology -NS(3) AS GLY</td>
<td>3</td>
<td>May substitute for GLY 10 for geology majors. A first course in geology emphasizing environmental aspects of the earth’s crust, such as earthquakes, depletion of the earth’s resources, water-supply problems, and geologic aspects of land use and planning.</td>
</tr>
<tr>
<td>GLY 2100</td>
<td>History of the Earth and Life - (3) AS GLY</td>
<td>3</td>
<td>PR: GLYL 2010 for 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. Extinction of the dinosaurs (e.g., asteroid impact) and evolution (e.g., fossils). Not available as S/U for geology majors; S/U available for others.</td>
</tr>
<tr>
<td>GLY 2100L</td>
<td>Earth History Laboratory - (1) AS GLY</td>
<td>1</td>
<td>Laboratory study of the history of the earth. Required for Geology majors; open to non-majors.</td>
</tr>
<tr>
<td>GLY 2930</td>
<td>Selected Topics in Geology - (1-3) AS GLY</td>
<td>1-3</td>
<td>Does not count toward the geology major. Topical courses in geology of general interest.</td>
</tr>
<tr>
<td>GLY 3420C</td>
<td>The Solid Earth: Plate Tectonics and Earth Structure - (4) AS GLY</td>
<td>4</td>
<td>PR: 4 hrs. introductory geology including GLY 210L; MAC 2312 or equivalent. Plate tectonics theory and its implications: the formation of structural features on outcrop and regional scales. Field and geophysical tools for structural analysis. Required field trip. Lec-Lab.</td>
</tr>
<tr>
<td>GLY 3610C</td>
<td>Introduction to Invertebrate Paleontology - (4) AS GLY</td>
<td>4</td>
<td>PR: GLY 2100; BSC 2012 or equivalent. Lectures cover concepts and applications of paleontology, including biostatigraphy, taphonomy, paleoecology, and micro- and macroevolutionary patterns and processes. Labs survey the invertebrate phyla comprising the bulk of the fossil record.</td>
</tr>
<tr>
<td>GLY 3720C</td>
<td>The Fluid Earth - (4) AS GLY</td>
<td>4</td>
<td>PR: GLY 2015L; MAC 2312 and MAC 2312 or equivalent; CHM 2045 and CHM 2045 or equivalent; PHY 2046 and PHY 2046L. Physical, chemical and biological processes affecting fluids of the lithosphere, oceans and atmosphere. Water as a geologic medium and global entity. Systems approach. Not available as S/U for geology majors.</td>
</tr>
<tr>
<td>GLY 3850</td>
<td>Geology For Engineers - (3) AS GLY</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>GLY 4045</td>
<td>Moons, Planets, and Meteors: An Introduction to Planetary Science -XMW (3) AS GLY</td>
<td>3</td>
<td>PR: Junior standing. Study of the origin of the solar system, 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, planet impacts. Space science as a tool in the study of the Earth. Field trips, lectures, Internet exercises.</td>
</tr>
<tr>
<td>GLY 4053</td>
<td>Theories and Arguments about the Earth - MW (3) AS GLY</td>
<td>3</td>
<td>PR: 2000 level geology course. History of thinking about the Earth: context - geologic controversies; emphasis - geologic reasoning.</td>
</tr>
<tr>
<td>GLY 4104C</td>
<td>Sedimentary Record 3: Paleontology and Earth Evolution - (4) AS GLY</td>
<td>4</td>
<td>PR: GLY 2015L, GLY 3522C, 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.</td>
</tr>
<tr>
<td>GLY 4145</td>
<td>Computational Geology - (3) AS GLY</td>
<td>3</td>
<td>PR: One semester of calculus and physics. Geologic problems are approached in a mathematical framework. The intersection of geology and math. Calculations and error analysis. Not available as S/U for geology majors; S/U available for others.</td>
</tr>
<tr>
<td>GLY 4554C</td>
<td>Sedimentary Record 2: The Earth’s Surface - (4) AS GLY</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>GLY 4646</td>
<td>Teaching Experience - (1-3) AS GLY</td>
<td>1-3</td>
<td>PR: Junior standing, declared geology major and at least 12 credit hours of geology course, or CI. This Practical and Applied Geology course is linked to a geology lab in which you will be assisting to teach students. In the class we will look at teaching styles, techniques, and testing techniques.</td>
</tr>
<tr>
<td>GLY 4734</td>
<td>Beaches and Coastal Environments - M W (3) AS GLY</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>GLY 4780</td>
<td>Geological Field Studies - (1-3) AS GLY</td>
<td>1-3</td>
<td>PR: 1 course geology. Lectures and field trip to study modern geologic systems and/or geologic origins of specific regions. Mapping and field study techniques introduced. Topic/destination of trip varies. Trip requires camping and vigorous physical activity. Lec. Field trip.</td>
</tr>
<tr>
<td>GLY 4860</td>
<td>Geology and Development of Modern Africa - M W (3) AS GLY</td>
<td>3</td>
<td>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, rifting and hominid evolution, and mining and politics.</td>
</tr>
<tr>
<td>GLY 4905</td>
<td>Independent Study - (1-3) AS GLY</td>
<td>1-3</td>
<td>PR: CI. S/U only. Specialized independent study determined by the student’s needs and interests.</td>
</tr>
<tr>
<td>GLY 4915</td>
<td>Undergraduate Research - (1-3) AS GLY</td>
<td>1-3</td>
<td>PR: Senior or advanced junior standing and permission of department prior to registration. S/U only. Individual experimental investigation on a topic of mutual interest.</td>
</tr>
<tr>
<td>GLY 4920</td>
<td>Geology Colloquium - (1) AS GLY</td>
<td>1</td>
<td>PR: Senior standing in Geology. S/U only. Weekly topical lectures by faculty, graduate students and invited speakers.</td>
</tr>
<tr>
<td>GLY 4921</td>
<td>Geocommunications - (3) AS GLY</td>
<td>3</td>
<td>PR: Twelve (12) or more hours upper level geology courses. Preparation and presentation of oral papers in history sciences.</td>
</tr>
</tbody>
</table>
Course is open to anyone majoring in geology, geography, anthropological 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 consent of the instructor. Students will complete a research project under supervision of a faculty member, and present results in a senior thesis and a public presentation.

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 give students experience in teaching geology. 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 field 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 a 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: STA 2023 or equivalent or CI. Application of statistical methods to geological problems. Emphasis on sampling plans, nature of geological distributions, and application of analyses of variance to solving geological problems. Lec.-field trip.

GLY 5865 Statistical Models in Geology - (3) AS GLY
PR: STA 2023 or equivalent or CI. Application of statistical methods to geological problems. Emphasis on sampling plans, nature of geological distributions, and application of analyses of variance to solving geological problems. Lec.-field trip.

GLY 5932 Selected Topics in Geology - (1-4) AS GLY
PR: Senior or advanced junior standing. Each topic is a course under the direction of a faculty member. All areas of geology included.

GRA 2206C Typography - (3) VP ART
Restricted to majors. This foundational course explores the structure of letter forms and lettering. This course provides information about the importance of type in the context of graphic design and application for printed and electronic media.

GRA 3104 Computer Graphics - (3) VP ART
Restricted to majors. This course is the continuation of Graphic Design I. The coursework emphasizes the utilization of electronic media for visual problem solving. Students will increase their skill with web-based design and photo-editing software.

GRA 3110 Graphic Design I - (3) VP ART
Restricted to majors. This course explores the application of formal design principles to visual problem solving through typography, layout, and web design. Students will apply conventional and electronic tools and techniques to the graphic design process.

GRA 3735 Multimedia Systems I - (3) VP ART
Restricted to majors. This course introduces multimedia systems and focuses on their use as tools in digital multimedia. Content covers all key hardware, navigation, and operating components.

GRA 4930C Graphic Design: Senior Studio - (3) VP ART
Restricted to majors. Advanced problems in graphic design, advertising, and multimedia visual communication systems will be discussed and assigned as projects. Focus is upon efficient and effective use of technology in the design production process.

GRA 4955C Senior Project: Portfolio - (3) VP ART
Restricted to majors. This course covers the organization and presentation of a design/advertising/graphic portfolio and appropriate related materials. Emphasis is upon portfolio preparation, professional production, and professional skills.

GRE 1120 Beginning Classical Greek I - (4) AS WLE
An introductory course in classical Greek grammar with appropriate readings.

GRE 1121 Beginning Classical Greek II - (4) AS WLE
PR: GRE 1120 or equivalent. An introductory course in classical Greek grammar with appropriate readings.

GRE 2040 New Testament Greek I - (4) AS REL

GRE 2041 New Testament Greek II - (4) AS REL

GRE 2200 Intermediate Classical Greek - (4) AS WLE
CR: 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. 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 2200 Modern Greek III - (4) AS WLE
PR: GRK 1121 or the equivalent. For language students who intend to attain basic proficiency.

GRK 2201 Modern Greek IV - (4) AS WLE
PR: GRK 2200 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 Advanced Modern Greek not available in the regularly scheduled curriculum at departmental discretion.

GRK 4930 Selected 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 4905 Directed Reading - (1-4) AS WLE
Departmental approval required.

GRW 5905 Directed Reading - (1-4) AS WLE
Departmental approval required.

GRW 5934 Selected Topics - (4) AS WLE
Available to majors and non-majors. Study of an author, movement or theme.

HBR 1120 Modern Hebrew I - (4) AS WLE
CR: HBR 1120L. An intensive study of basic skills; pronunciation, listening comprehension, speaking and some composition.

HBR 1120L Modern Hebrew I Laboratory - (1-4) AS WLE
CR: HBR 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.

HBR 1121 Modern Hebrew II - (4) AS WLE
PR: HBR 1120 or its equivalent; CR: HBR 1121L. A continuation of HBR 1120. An intensive study of basic skills; pronunciation, listening comprehension, speaking and some composition. More sophisticated oral/aural skills are attained. Basic reading skills are acquired.

HBR 1121L Modern Hebrew II Laboratory - (1-4) AS WLE
CR: HBR 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.
HBR 2200 Modern Hebrew III - (4) AS WLE
PR: HBR 1121 or the equivalent. For language students who intend to attain basic proficiency.

HBR 2201 Modern Hebrew IV - (4) AS WLE
PR: HBR 2200 or the equivalent. Continuation of HBR 2200. Practice of reading, speaking and listening skills for language students who intend to attain basic proficiency.

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

HEB 1120 Basic Hebrew I - (4) AS REL
Designed to give students a working knowledge of Classical (Biblical) Hebrew and to introduce them to the Biblical literature in the original language.

HEB 1121 Basic Hebrew II - (4) AS REL
Designed to give students a working knowledge of Classical (Biblical) Hebrew and to introduce them to the Biblical literature in the original language.

HFT 3424 Cost Control in Hospitality Operations - (3) US HRM
An overview of the hospitality industry, including all of its related fields: restaurant; lodging; meetings, conventions and expositions. Also featured are the applications of the general marketing, human resources, leadership, and management.

HFT 3425 Restaurant and Catering Management - (3) US HRM
PR: HFT 3424, FSS 2200 Management of food and beverages as they relate to planning, production, supervision and cost control in restaurants and catering food services, with emphasis on technique of food preparation, menu merchandising, food safety, bar services and wine list.

HFT 3423 Hospitality Information Systems - (3) US HRM
PR: ISM 3011, HFT 3000 The 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 3000, 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 3000 Introduction to Hospitality and Tourism - (3) US HRM
An overview of the hospitality industry, including all of its related fields: restaurant; lodging; meetings, conventions and expositions. Also featured are the applications of the general marketing, human resources, leadership, and management.

HFT 3503 Hotel 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 3000 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 4221 Human Resources Management - (3) US HRM
PR: HFT 3000, 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 4523 Lodging Management - (3) US HRM
PR: HFT 3000, MAN 3025 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 3000 Engineering aspects of hospitality establishments, preventive maintenance procedures, energy conservation, waste management, pollution control, life safety systems, and facilities design and layout, air conditioning lighting, sound control.

HFT 4474 Management Accounting and Finance in Hospitality - (3) US HRM
PR: FIN 3403, HFT 3000, HFT 3424 Financial functions in hospitality, interpret hospitality financial statements, capital investment decisions making, financial instruments and concepts. Analytical modeling for hospitality operations, including ratio analysis and capital budgeting tools.

HFT 4930 Special Topics in Hospitality - (1-3) US HRM
PR: HFT 3000 Topics to be selected by instructor and department chairperson for pertinent Hospitality Management issues.

HFT 4945 Advanced Internship - (3) US HRM
PR: HFT 3000 Coordinated hospitality training combines practical experience with didactic academic analysis. Principles, theory and standard practices applied to occupational situations.

HIS 2931 Special Topics - (2-4) AS HTY
This course emphasizes selected historical problem or issue. A variety of instructional approaches will be taken, and topics may vary.

HIS 3308 War and Society - M/W (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 - M/W (3) AS HTY
This course provides an introduction to the disciplines of history by examining a specific historical issue and its relation to at least one of the following dimensions: gender, race and ethnicity, international perspectives, environmental perspectives. Does not count for History major or minor credit.

HIS 4104 Theory of History - (4) AS HTY
Required of all history majors. Recommended to be taken during the senior year. 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 4930 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: CI. Required of all history majors. Advanced topics in the various fields of history. Emphasis on discussion of assigned readings and on research and writing of a major paper.

HIS 5201 Personal Wellness: A Lifetime Commitment - (3) ED EDJ
An examination of the bases for adopting a positive health lifestyle with a major emphasis on diet, weight management, physical fitness, stress management, and substance-abuse management.

HIS 4722 Health and Physical Education for the Child - (2) ED EDE
This course helps elementary majors understand the health, psychomotor, growth and developmental needs of children so that the may best plan and conduct safe and healthy learning experiences. They also learn the role of the classroom teacher in the total school health program by providing health services, healthy environments and health instruction.

HIS 4911 Wellness Internship - (12) ED EDP
Open to Wellness Leadership Physical Education Majors only. S/U only. Supervised performance in adult fitness and/or wellness programs. Full semester on-site.

HSA 4120 Introduction to Public Health - (3) PH CFH
A survey of policies and programs in public/community health with emphasis on specific needs and problems of Florida.

HSC 2100 Contemporary Health Science - SS (3) PH CFH
A comprehensive approach to health concerns and problems in contemporary society, including methods of assessing individual health needs.

HSC 2400 First Aid - (2) ED EDP
Meets the American Red Cross certification requirements in standard and advanced first aid.

HSC 2581 Sex, Health, and Decision-Making - SS (3) PH CFH
This course will provide the student with an overview of the issues involving sexual behaviors, decision-making processes and health outcomes. The course will offer a public health perspective of the consequences of risk-taking activities as well as a psychosocial and cultural view of antecedent behaviors.
HUM 2933 Selected Topics in Public Health - (1-6) PH PHC
Overview of major public health and health related issues of interest to undergraduates. Course explores a variety of health topics that are related to improving the health and health behaviours of individuals, groups and communities. Specific topics may vary each semester. Not open to prerequisites. Majors and non-majors may be repeated for up to 6 credits.

HSC 3301 Health, Safety, Nutrition and Motor Skills for the Young Child - (3) ED EDP
Provide students with the knowledge to teach developmentally appropriate motor activities; to provide continuous health services; and to maintain a healthy learning environment; and sequence appropriate health instruction for Pre-K through 3rd grade students.

HSC 4541 Human Structure and Function - (3) PH CFH
PR: Fundamentals of Biology/Lab or CI. Major concepts of the structure and function of the human body systems and methods of diagnosis and treatment will be taught.

HSC 4554 Survey of Human Diseases - (3) PH CFH
PR: Fundamentals of Biology or CI. An overview of the nature, causes and mechanisms of diseases of the major body systems.

HUM 1020 The Arts - FA (3) AS HUM
An analysis of the major periods and art, representing artists of divergent periods, cultures, genders, and races. Especially recommended for students who later take 4000-level Humanities courses.

HUM 2211 Studies in Culture: The Classical Through Medieval Periods - HP (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, cosmopolitan cultures, the relationship of the individual to society, and the bases for moral values.

HUM 2243 Studies in Culture: The Renaissance Through the Twentieth Century - HP (3) AS HUM
A historical survey of the visual arts, literature, music and thought of Europe from the Renaissance through the Twentieth century. Issues to be examined may include the relationship between the science and the arts and the consequences of the growing contacts among world civilizations and the impact of technological change.

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 3251 Studies in Culture: The Twentieth Century - HP (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 3271 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 3273 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 3395 Themes in Humanities - (3) AS HUM
PR: HUM 2211 or HUM 2243 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.

HUM 3930 Selected Topics in Humanities - (1-4) AS HUM
Courses offered under this number will always be interdisciplinary, treating modern ideas and 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 4402 Humanities in India - (4) AS HUM
PR: Sophomore standing or CI. Examples from the arts and letters of India and the relationship of these arts to the Hindu and Buddhist philosophy-religions.

HUM 4404 Humanities in China - (4) AS HUM
PR: Sophomore standing or CI. Examples from the arts and letters of China; their relationship to Taoism, Confucianism and other Chinese philosophies; Western influences on twentieth century Chinese arts and letters.

HUM 4406 Humanities in Japan - (4) AS HUM
PR: Sophomore standing or CI. Examples from the arts and letters of Japan, their relationship to Zen Buddhism and other Japanese philosophy-religions; Western influences on twentieth century Japanese arts and letters.

HUM 4433 Ancient Greek Culture - (4) AS HUM
PR: Sophomore standing 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 4437 Italian Renaissance Culture - (4) AS HUM
PR: Sophomore standing or CI. 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: Sophomore standing or CI. A study of the Northern Renaissance, 1400-1580, as exemplified in Germany, France, the Netherlands, England. The course includes painting, architecture, literature and music, with special study of Durer, Van Eyck, El Greco, and Bosch.

HUM 4440 Arts and Letters in the 17th and 18th Centuries - (4) AS HUM
PR: Sophomore standing or CI. 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, Voltaiire, Bach, and Mozart.

HUM 4442 Arts and Letters of the Romantic Period - (4) AS HUM
PR: Sophomore standing or CI. Continent masterworks of fiction, painting, and music in the context of European cultural history from the French Revolution to the Revolutions of 1848.

HUM 4444 Nineteenth Century European Arts and Letters - (4) AS HUM
PR: Sophomore standing or CI. A study of continental literary, musical, and artistic masterworks from the Revolutions of 1848 until the outbreak of World War I.

HUM 4445 Twentieth Century Arts and Letters I - (4) AS HUM
PR: Sophomore standing or CI. 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.

HUM 4446 Twentieth Century Arts and Letters II - (4) AS HUM
PR: Sophomore standing or CI. 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.

HUM 4452 Nineteenth Century American Culture - (4) AS HUM
PR: Sophomore standing 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.

HUM 4464 Latin American Culture Since 1492 - (4) AS HUM
PR: Sophomore standing or CI. An analysis of selected Latin American works of art in their cultural context, with emphasis on major art forms selected from the colonial through contemporary periods.

HUM 4908 Selected Study - (1-4) AS HUM
PR: CI. Specialized individual study determined by the student's needs and interests.

HUM 4909 BIS Humanities, Independent Study - (15) AS BIS
SU only.

HUM 4930 Selected Topics in Humanities - (1-4) AS HUM
PR: Sophomore standing or CI. 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; course may be repeated for credit with change of content.

HUM 4931 Seminar in Humanities - 6A (4) AS HUM
PR: Humanities major or CI; Senior standing. Discussion of interdisciplinary humanities. Includes essay.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDH 4938</td>
<td>Major Issues in the Humanities - MW (3) AS HUM</td>
<td>3</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>IDH 4940</td>
<td>International Perspectives in Humanities - (1-2) AS 144444</td>
<td>3</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>IDH 2201</td>
<td>Nutrition - (3) NU NUR</td>
<td>3</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 relationship to health, nutrition habits.</td>
</tr>
<tr>
<td>HUN 4444</td>
<td>Clinical Nutrition - (3) NU NUR</td>
<td>3</td>
<td>PR: HUN 2201 or equivalent. Focuses on the role nutrition has in causing and preventing disease processes.</td>
</tr>
<tr>
<td>IDH 2009</td>
<td>Discovery: People, Processes and Problems - (3-4) HC HON</td>
<td>3</td>
<td>PR: Admission to Honors College. An appreciation of the research process in multiple disciplines culminating in the production of a collaboratively developed research proposal.</td>
</tr>
<tr>
<td>IDH 2010</td>
<td>Acquisition of Knowledge - (3) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDH 2930</td>
<td>Selected Topics - (1-4) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 3115</td>
<td>Values and Choices - (1-3) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 3350</td>
<td>Natural Sciences Honors - (3) HC HON</td>
<td>3</td>
<td>PR: IDH 2010. An exploration of current knowledge concerning fundamental principles in the Sciences, their potential for application and attendant ethical and philosophical questions.</td>
</tr>
<tr>
<td>IDS 3600</td>
<td>Seminar in Applied Ethics - (3) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 4000</td>
<td>Honors Program Seminar: Major Works/Majors Issues - (4) HC HON</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 4200</td>
<td>Geographical Perspectives Honors - (3) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 4910</td>
<td>Undergraduate Research - (1-4) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 4930</td>
<td>Selected Topics - (1-4) HC HON</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 4938</td>
<td>Honors Program Project - (3) HC HON</td>
<td>3</td>
<td>Enrollment is limited to St. Petersburg Honors students who have completed at least one Honors Seminar. Senior Honors Program project consisting of an original creative work in literary, visual or performing arts, or in community-generated practice and originality. Either a project or an Honors Thesis will fulfill the requirements for graduation as St. Petersburg Campus Honors Program students.</td>
</tr>
<tr>
<td>IDS 4970</td>
<td>Honors Thesis - (3) HC HON</td>
<td>3</td>
<td>PR: Senior Honors Standing. The development and public presentation of a senior thesis under the direction of a mentor.</td>
</tr>
<tr>
<td>IDS 2664</td>
<td>Social Science Perspectives I - SS(3) AS IAS</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 2665</td>
<td>Social Science Perspectives II - SS(3) AS IAS</td>
<td>3</td>
<td>Approaches the study of human behavior and society using the lenses of various institutions. The course addresses issues of social stratification, economics, education, religion and social status. The course is not restricted to any major, has no lab section, and is not cross-listed.</td>
</tr>
<tr>
<td>IDS 2666</td>
<td>Historical Perspectives I - HP(3) AS IAS</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 2931</td>
<td>Selected Topics - HP(2-5) AS IAS</td>
<td>3</td>
<td>Selected topics in the liberal arts. A basic introduction to the substance and theory of contemporary topics in the arts and sciences.</td>
</tr>
<tr>
<td>IDS 2932</td>
<td>Selected Topics - HP(4) AS IAS</td>
<td>3</td>
<td>Selected topics in the liberal arts. A basic introduction to the substance and theory of contemporary topics in the arts and sciences.</td>
</tr>
<tr>
<td>IDS 2933</td>
<td>Selected Topics III - SS(3) AS IAS</td>
<td>3</td>
<td>Selected topics in the Liberal Arts. A basic introduction to the substance and theory of contemporary topics in the arts and sciences.</td>
</tr>
<tr>
<td>IDS 2934</td>
<td>Selected Topics IV - SS(3) AS IAS</td>
<td>3</td>
<td>Selected topics in the Liberal Arts. A basic introduction to the substance and theory of contemporary topics in the arts and sciences.</td>
</tr>
<tr>
<td>IDS 3115</td>
<td>Values and Choices - 6A MW(3) ED EDF</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 3186</td>
<td>Scientific and Ethical Dimensions of Human Disease - MW(3) AS IAS</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 3662</td>
<td>Arts Connections - FA(3) VP FAI</td>
<td>3</td>
<td>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 they play in shaping our perceptions of the world as well as reflecting the underlying values and paradigms that form our culture(s).</td>
</tr>
<tr>
<td>IDS 3663</td>
<td>Critical Issues Affecting the Arts - MW(3) VP FAI</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>IDS 3668</td>
<td>Images of Contemporary Urban Culture - 6A LW(3) AS IAS</td>
<td>3</td>
<td>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 culture 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.</td>
</tr>
</tbody>
</table>
IDS 3949 Cooperative Education - (0) US COE
60 hours of academic credit, acceptance in Cooperative Education Program. S/U only.

IDS 4910 Community Research - (1-4) AS CEL
PR: CEL Program approval. Repeatable up to 8 credit hours. To provide students with a community related research experience.

IDS 4942 Community Internship - (1-4) AS CEL
PR: CEL Program approval. Repeatable up to 8 credit hours. To provide students with a community internship experience.

IDS 4949 Cooperative Education, Alternating - (0) US COE
PR: 45+ semester hours completed, cumulative GPA 2.5+ and accepted in Cooperative Education Program. S/U only. Full-time (40 hrs/wk) paid, career-related work experience, on-site with an employer.

IDS 4955 International Community Research - (1-2) 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 4990 BIS Inter-Area Studies - (30) AS BIS
PR: ISS 4909, ISS 4939, ISC 4909, ISC 4939, HUM 4909, HUM 4939. S/U only.

INS 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 world system, major world regions and problems.

INR 2002 Introduction to International Relations - (3) AS INT
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 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 the development of international problems.

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 4025 Political Economy of the Southern Nations - SS AF (3) AS INT
A multidisciplinary study of the efforts of the nations in the South (Africa, Asia, Latin America and the Middle East) to improve their status through political and economic development.

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 multinational 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, 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 credits 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 5086 Issues in International Relations - (3) AS POL
Studies the major political and economic factors that influence the development of international relations. Also, an examination of the role of the major world powers, the U.N. and its agencies. The course analyzes the behavior of major foreign policy actors in the international arena, including nation states, non-governmental and international organizations.

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 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 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 4909 BIS Natural Sciences, Independent Study - (15) AS BIS
PR: 45+ semester hours completed, cumulative GPA 2.5+ and acceptance in Cooperative Education Program. S/U only. May not be counted toward major requirements in MIS.

ISM 3011 Information Systems in Organizations - (3) BA QMB
PR: CGS 2100 or equivalent; ACG 2071 or equivalent. May not be counted toward major requirements in MIS. 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 3013 Systems Analysis and Design - (3) BA QMB
PR: ISM 3011, CP: ISM 3232, with a grade of "C" or better (not C-). Study of the techniques and procedures used in assessing information requirements, analyzing information flows and processing activities, and designing computer-based business systems.
ISM 4322 Business Application Development - (3) BA QMB
PR: ISM 3011 with a grade of “C” or better (not C-). Presentation of business application development using a modern programming language. Topics include data structures, indexing, file processing, and user interfaces. Good program design techniques are emphasized. Business applications are developed.

ISM 3431 Management Science Production/Operations Management - (3) BA QMB
PR: MAC 2243. Fundamentals of production operations management (POM) and fundamentals of management science (MS). The application of MS models in the solution of POM problems.

ISM 3423 Advanced Systems Analysis and Design - (3) BA QMB
PR: ISM 3232, ISM 3113, ISM 4212, with grades 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) BA QMB
PR: ISM 3232 with a grade of “C” or better (not C-). Java will be used to introduce object oriented concepts. Programming assignment cover a variety of application features including graphical user interface, database connectivity, multithreading, and client-server computing using Java and Java Server Pages.

ISM 4212 Database Design and Administration - (3) BA QMB
PR: ISM 3113, ISM 3232, with grades of “C” or better (not C-). Principles of database design/management for mainframe, micro, and client/server environments; including data modeling, physical vs. logical representation and back-up and recovery management.

ISM 4213 Advanced Database Administration - (3) BA 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) BA QMB
PR: ISM 3113 with a grade of “C” or better (not C-). Fundamentals of data communication, including network architectures, communication protocols, transmission standards and media access control methods.

ISM 4233 Information System Interface Design - (3) BA QMB
PR: ISM 3232 with a grade of "C" or better (not C-). The fundamentals of human-computer interfaces are studied in order to develop effective human-computer interfaces. Various types of interfaces are examined. Students will develop human-computer interfaces via state-of-the-art development languages and systems.

ISM 4234 Object-Oriented Design and Development - (3) BA 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. The designs will be implemented by the use of the C++ or other OO programming languages.

ISM 4240 Distributed Operating Systems - (3) BA QMB
PR: ISM 3232 with a grade of “C” or better (not C-). Introduction to distributed operating systems fundamentals such as distributed system 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) BA QMB
PR: ISM 3113, ISM 4212, with grades 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) BA QMB
PR: ISM 3113, ISM 4212, ISM 4220, with grades of “C” or better (not C-). Current issues in information systems management focusing on organizational policies, procedures and strategies for managing information systems and the related resources.

ISM 4382 Global Information Systems - (3) BA 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) BA 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) BA QMB
PR: ISM 3011 with a grade of “C” or better (not C-), MIS major or CC. This course is designed to familiarize students with the opportunities and challenges associated with electronic commerce, to explore the underlying technologies used in implementing electronic commerce systems, and to develop the practical skills needed to design and develop effective Web pages.

ISM 4905 Independent Study - (1-6) BA QMB
S/U only. Independent study as directed by designated faculty.

ISM 4930 Selected Topics in MIS - (1-3) BA QMB
Selected topics in MIS.

ISM 4950 Independent Research - (1-6) BA 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
PR: CI plus senior standing or graduate status. Interdisciplinary studies with course content dependent on student demand and instructor’s interest.

ISS 1102 Self and Society - SS(3) AS ISS
CO: ISS 1103. Course introduces students to issues concerning the relationship between self (or individual) and society. Among the topics that may be addressed are the idea of human nature, how human nature is shaped by social and cultural factors, the moral obligations between individuals and society; and how our understanding of the self is shaped by gender and culture.

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 transmogrified; 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 through the lens of global systems.

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 4909 BIS Social Sciences, Independent Study - (15) AS BIS
S/U only.

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 - M W(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 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 comprehending, 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 1201 Beginning Italian II Laboratory - (1) AS WLE
CR: ITA 1121L. Concurrent enrollment with a lecture session is required, and, if dropped, then dropped simultaneously. A laboratory designed to offer additional practice using various elements specific to magazine and production preparation.

ITA 2200 Intermediate Italian I - (3) AS WLE
PR: ITA 1121 or equivalent. Readings in Italian on the elementary level. A review of the basic structure of spoken and written Italian.

ITA 2201 Intermediate Italian II - (4) AS WLE
To develop fluency and correctness in spoken Italian. Intensive study for conversational skill based particularly upon the current Italian idiom. Syntax is intensified and the vocabulary and idiomatic expressions are expanded.

ITA 2241 Italian Conversation II - (4) AS WLE
To assist students who have already made a start in speaking Italian, who have not had the advantages of travel or who have non-Italian speaking parents, to improve their skill in speaking Italian. Current events; literary discussions; free conversation; prepared speeches. Differences of media, syntactical signal.

ITA 3420 Composition - (3) AS WLE
A fundamentals composition course for students who have completed ITA 2200.

ITA 3470 Overseas Study - (1-6) AS WLE
Prior approval and early registration required. An intensive study-travel program.

ITW 4100 Survey of Italian Literature I - (4) AS WLE
A survey of Italian literature from the earliest monuments through the classicism of the 18th century.

ITW 4101 Survey of Italian Literature II - (4) AS WLE
A survey of Italian literature beginning with the Classicism of the 18th century and continuing to present.

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 3802. Basic instruction in news judgment, sources of news, newspapering, and newswriting techniques for various media. Typing ability is required.

JOU 3101 Advanced Reporting - (3) AS WLE
PR: JUO 2100 or RTV 3301 (RTV majors only). JUO 2400 (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 3305 Critical Writing: Editorials, Reviews, Columns - (3) AS COM
PR: JOU 3101 and JOU 4200. Interpretive and opinion writing for the mass media. Analysis and discussion of current events as a basis for creative 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 3340 Reporting Practicum - (1) AS COM
PR: JOU 3101 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 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 presentation of public documents and records.

JOU 4200 News Editing I - (3) AS COM

JOU 4206 Newspaper and News Publication Design - (3) AS COM
PR: JOU 4200. Theoretical and practical application of design principles for newspapers and news publications, including typography, graphics, graphics software and electronic picture editing.
LAH 3418 Teaching Literature and Writing in the Elementary Grades - 6A LW (3) ED EDT
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.

LAH 3446 Adolescent Literature for Middle and Secondary Students - 6A LW (3) ED EDT
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.

LAH 3130 Colonial Latin America - (4) AS HTY
A thematic study of the emergence of the Latin American states. The course is designed to emphasize the development of the Latin American political economy with emphasis on monoculture, plantation society, and colonial and postcolonial relationships.

LAE 4464 Adolescent Literature for Middle and Secondary Students - 6A LW (3) ED EDT
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.

LAH 3446 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 4590 Seminar in English Education - (2) ED EDT

LAE 4620 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 experienced is distributed over two or more semesters, student will be registered for credit which accumulates from 9 to 12 semester hours.

LAE 4542 Young Adult and World Literature for New Teachers - (3) ED EDI
PR: Teaching position w/either 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 4590 Seminar in English Education - (2) ED EDT

LAE 4620 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 experienced is distributed over two or more semesters, student will be registered for credit which accumulates from 9 to 12 semester hours.

LAE 4646 Adolescents Literature for Middle and Secondary Students - 6A LW (3) ED EDT
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 4800 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.

LAE 4416 Teaching Literature and Writing in the Elementary Grades - 6A LW (3) ED EDT
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Area of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT 4804</td>
<td>Literature as Cultural Study</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3103</td>
<td>Great Literature of the World</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3155</td>
<td>Modern Literature</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3144</td>
<td>Modern European Novel</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3103</td>
<td>Great Literature of the World - 6A MW L(3)</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIN 5700</td>
<td>Applied Linguistics</td>
<td>3</td>
<td>AS WLE</td>
</tr>
<tr>
<td>LIS 5268</td>
<td>Microcomputer Applications Library and Information Centers</td>
<td>3</td>
<td>AS LIS</td>
</tr>
<tr>
<td>LIS 5315</td>
<td>Instructional Graphics</td>
<td>3</td>
<td>AS LIS</td>
</tr>
<tr>
<td>LIS 4930</td>
<td>Selected Topics in Information Studies</td>
<td>3</td>
<td>AS LIS</td>
</tr>
<tr>
<td>LIS 5333</td>
<td>TV in Schools and Libraries</td>
<td>3</td>
<td>AS LIS</td>
</tr>
<tr>
<td>LIS 3404</td>
<td>Foundations of Library and Information Science</td>
<td>3</td>
<td>AS LIS</td>
</tr>
<tr>
<td>LIT 5073</td>
<td>Contemporary Literature</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIN 4930</td>
<td>Selected Topics</td>
<td>3</td>
<td>AS WLE</td>
</tr>
<tr>
<td>LIS 5361</td>
<td>World Wide Web Page Design and Management</td>
<td>3</td>
<td>AS LIS</td>
</tr>
<tr>
<td>LIT 5202</td>
<td>Modern Short Novel - HP</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3700</td>
<td>Survey of Poetry</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3037</td>
<td>Contemporary Literature</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3011</td>
<td>Literature of the Western World Through the Renaissance</td>
<td>6A</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3012</td>
<td>The Literature of the Western World Since the Renaissance</td>
<td>6A</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3013</td>
<td>Great Literature of the World</td>
<td>6A</td>
<td>MW L(3)</td>
</tr>
<tr>
<td>LIN 4930</td>
<td>Selected Topics</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIN 3361</td>
<td>World Wide Web Page Design and Management</td>
<td>3</td>
<td>AS WLE</td>
</tr>
<tr>
<td>LIT 3014</td>
<td>Modern European Novel</td>
<td>6A</td>
<td>HP (3)</td>
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<tr>
<td>LIT 3015</td>
<td>Modern Literature</td>
<td>6A</td>
<td>MW L(3)</td>
</tr>
<tr>
<td>LIN 3301</td>
<td>Cultural Studies and the Popular Arts</td>
<td>6A</td>
<td>MW L(3)</td>
</tr>
<tr>
<td>LIT 3374</td>
<td>The Bible as Literature - MW (5)</td>
<td>AS ENG</td>
<td></td>
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<tr>
<td>LIT 3363</td>
<td>The Image of Women in Literature</td>
<td>6A</td>
<td>MW L(3)</td>
</tr>
<tr>
<td>LIT 3340</td>
<td>Religious and Existential Themes</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 3451</td>
<td>Literature and the Occult</td>
<td>6A</td>
<td>MW L(3)</td>
</tr>
<tr>
<td>LIT 3456</td>
<td>British and American Literature by Women</td>
<td>6A</td>
<td>MW L(3)</td>
</tr>
<tr>
<td>LIT 4804</td>
<td>Literary Theory and Criticism</td>
<td>3</td>
<td>AS ENG</td>
</tr>
<tr>
<td>LIT 5073</td>
<td>Contemporary Literature</td>
<td>3</td>
<td>AS ENG</td>
</tr>
</tbody>
</table>

**Notes:**
- **PR:** PR, if any, is listed under the course title.
- **LIS:** LIS indicates the course is in the Library and Information Science program.
- **LIN:** LIN indicates the course is in the Linguistics program.
- **LIT:** LIT indicates the course is in the English program.
- **WLE:** WLE indicates the course is in the World Languages and Literatures program.
- **AS:** AS indicates the course is available for Academic Studies.
- **AS ENG:** AS ENG indicates the course is available for Academic Studies in English.
- **AS LIS:** AS LIS indicates the course is available for Academic Studies in Library and Information Science.
- **AS WLE:** AS WLE indicates the course is available for Academic Studies in World Languages and Literatures.
- **Semester:** The course is offered in the Fall and Spring Semesters.
- **Credit:** The number of credits for the course is specified.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1147</td>
<td>Precalculus Algebra and Trigonometry - 6A QM (4) AS MTH</td>
<td>MAC 1147. Concepts of the real number system, functions, right triangles, laws of sines and cosines, polar coordinates.</td>
<td>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.</td>
</tr>
<tr>
<td>LNW 4831</td>
<td>Livy - (4) AS WLE</td>
<td>PR: Basic knowledge of Latin. Readings in the arts and artistry of this Roman historian.</td>
<td></td>
</tr>
<tr>
<td>LNW 4634</td>
<td>Catullus - (4) AS WLE</td>
<td>PR: Basic knowledge of Latin. Readings in Catullus. Study of techniques and tradition in Roman lyric poetry.</td>
<td></td>
</tr>
<tr>
<td>LNW 4546</td>
<td>Horace - (4) AS WLE</td>
<td>PR: Basic knowledge of Latin. Readings in the epistles of Horace. Study of Ovid’s tradition.</td>
<td></td>
</tr>
<tr>
<td>LNW 4670</td>
<td>Ovid - (4) AS WLE</td>
<td>PR: LAT 1121 or equivalent. Readings in Ovid’s Metamorphoses. Study of Ovid’s technique, style, and artistry.</td>
<td></td>
</tr>
<tr>
<td>MAC 1140</td>
<td>Calculus I - 6A QM (4) AS MTH</td>
<td>MAC 1140 and MAC 1114. Introduction to computational complexity. Topics include sets, relations, functions, right triangles, laws of sines and cosines, polar coordinates.</td>
<td></td>
</tr>
<tr>
<td>MAC 2233</td>
<td>Business Calculus - 6A QM (4) AS MTH</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>MAC 2241</td>
<td>Selected Topics Calculus I - 6A QM (4) AS MTH</td>
<td>MAC 2241 are primarily for students from Biological Sciences, Social Sciences and Business.</td>
<td></td>
</tr>
<tr>
<td>MAC 2242</td>
<td>Life Sciences Calculus I - 6A QM (4) AS MTH</td>
<td>MAC 2242 are primarily for students from Biological Sciences, Social Sciences and Business.</td>
<td></td>
</tr>
</tbody>
</table>
MAD 5101 LISP: Programming With Algebraic Applications - (3) AS MTH
PR: MHF 5306 or MAD 6510 or MAS 5311 or CI. Programming in LISP, functional languages, foundations of Lambda Calculus and algebraic applications: theorem proving and game playing.

MAD 3201 Graph Theory - (3) AS MTH
PR: MAS 3105 or CI. Brief introduction to classical graph theory (4-color theorem, etc.), directed graphs, connected digraphs, combinations and generating matrices, Polya's Theorem, networks.

MAE 4310 Teaching Elementary School Mathematics I - (3) ED EDE
PR: Admission to College of Education and two level mathematics courses. Methods for teaching number ideas, computation skills, and mathematical reasoning.

MAE 4320 Teaching Mathematics in the Middle Grades - (3) ED EDO
PR: Admission to Mathematics Education program or DPR. Techniques and materials of instruction in middle grades mathematics topics. Students are expected to observe 15 hours in middle schools.

MAE 4326 Teaching Elementary School Mathematics II - (3) ED EDE
PR: MAE 4310. Provides for the development of knowledge and skill necessary to prepare students to assume roles as teachers of either an elementary and educational education classes. Required in the undergraduate programs in Elementary Education.

MAE 4330 Teaching Senior High School Mathematics - (3) ED EDO
PR: Admission to Mathematics Education program or DPR. Techniques and materials of instruction in mathematics. Students are expected to observe 20 hours in high schools.

MAE 4551 Reading the Language of Mathematics - (2) ED EDO
PR: Admission to Mathematics Education program or DPR. Consideration of issues related to the communication of mathematics, including reading and writing mathematics and solving verbal problems.

MAE 4652 Technology for Teaching Secondary School Mathematics I - (3) ED EDO
PR: Admission to Mathematics Education Program or DPR. This course prepares secondary mathematics education majors to write computer programs in both QBASIC and Logo 4.0 that are appropriate for secondary school mathematics classrooms. A variety of uses of computers in mathematics instruction will also be covered.

MAE 4936 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 - (2) ED EDO

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.

MAE 5877 Mathematical Analysis For Teachers - (3) AS MTH
PR: MAC 2313 and Bachelor’s degree or CI. No credit towards Mathematics major. Limits, continuity, derivatives, differentials.

MAN 3025 Principles of Management - (3) BA 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) BA 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) BA 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) BA 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) BA 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 experimental exercises and written application of results within a laboratory setting.

MAN 4129 Theory and Practice of Management Skills - (3) BA 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 4200 Organizational Development and Change - (3) BA MAN
PR: MAN 3240 or CI. A lab course where students experimentally apply behavioral science techniques in an “action-research” format. Emphasis is placed on the process of change so as to build a more effective organization.

MAN 4282 Organizational Assessment - (3) BA 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) BA 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) BA 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) BA 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 evaluation of various decision science methodologies to problems such as: optimal methods of processing, symbolic manipulators, calculator based laboratory systems and hand held geometric drawing tools.

MAN 4909 Directed Study: Mathematics Education - (1-3) ED EDO
PR: Senior Standing and CI. To extend competency in teaching field.

MAN 4936 Senior Seminar in Mathematics Education - (2) ED EDO
PR: Senior Standing; CR: MAN 3025. Synthesis of student’s courses in complete college program.

MAN 4940 Internship: Mathematics Education - (1-12) ED EDO
CR: MAN 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.

MAN 4936 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 4977 Mathematical Analysis For Teachers - (3) AS MTH
PR: MAC 2313 and Bachelor’s degree or CI. No credit towards Mathematics major. Limits, continuity, derivatives, differentials.

MAN 3025 Principles of Management - (3) BA 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) BA 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 4931 Independent Research - (1-4) BA 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 - (3) AS MTH
PR: MAC 2302 or MAC 2283. First and second order linear differential equations, higher order linear differential equations, applications.

MAP 5316 Ordinary Differential Equations I - (3) AS MTH
PR: MAP 2302 or MAP 4211. 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-Bendixon Theory, Lyapunov functions, eigenfunction expansions.

MAP 5407 Methods of Applied Mathematics - (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 5931 Selected Topics in Marketing - (1-4) BA MKT
Not available for credit to upper-level students who have been admitted to the College of Business. Topics to be selected by department chairperson.

MAR 3023 Basic Marketing - (3) BA 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) BA 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) BA 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) BA 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) BA 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) BA 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) BA 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) BA 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 the development and implementation of promotional programs is emphasized.

MAR 4403 Sales Management - (3) BA 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) BA MKT
PR: MAR 3023. A study of the marketing of goods and services to the industrial and institutional sectors. Includes characteristics of these markets and differentiation in sales, management, research and promotional practices, marketing policies and strategies.

MAR 4824 Buyer Behavior - (3) BA 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 4842 Marketing Management Problems - (3) BA MKT
PR: Senior Standing, MAR 3823, MAR 3613, MAR 4333. CP: MAR 3400. 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 4933 Selected Topics in Marketing - (1-3) BA MKT
Topics to be selected by instructor and department chairperson.

MAS 1100 Contractive Number Theory and Linear Algebra - (3) US DEA
PR: Acceptance in USF-Hillsborough County Mathematics and Statistics 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 4105 Linear Algebra - (4) AS MTH
PR: 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 4124 Numerical Linear Algebra - (6) AS MTH
PR: MAS 3105. This course will consider efficient and stable numerical methods for dealing with matrix computations such as the solution of systems, calculation eigenvalues and vectors, least squares, and so on.

MAS 4156 Vector Calculus - (6) 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, divergence and curl.

MAS 4214 Elementary Number Theory - (6) 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 - (6) AS MTH
PR: MAS 3105. An introduction to the basic algebraic structures; groups, rings, integral domains, and fields; homomorphisms and isomorphisms.

MAS 5107 Advanced Linear Algebra - (3) AS MTH

MAS 5215 Number Theory - (3) AS MTH
PR: MAS 3105 and either MAC 4301, or CI. Fundamental theorem of arithmetic, modular arithmetic, Chinese remainder theorem, Mersenne primes, perfect numbers, Euler-Fermat theorem, pseudoprimes, primitive roots, law of quadratic reciprocity, congruence and primitive root 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. Finite generated modules over a principal ideal domain, basic field theory, finite fields, Galois theory.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department</th>
<th>Notes</th>
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<tbody>
<tr>
<td>MET 4002</td>
<td>Climatology - (4) AS GPY</td>
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<tr>
<td>MCB 5600</td>
<td>Applied and Environmental Biology - (3) AS BIO</td>
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<tr>
<td>MCB 4934</td>
<td>Seminar in Microbiology - (1) AS BIO</td>
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<tr>
<td>MCB 4910</td>
<td>Microbiology Undergraduate Research - (1-4) AS BIO</td>
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<tr>
<td>MCB 4930</td>
<td>Selected Topics in Mathematics - (4) AS MTH</td>
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<tr>
<td>MCB 4970</td>
<td>Mathematics Senior Thesis - (3) AS MTH</td>
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<td>MCB 5932</td>
<td>Selected Topics - (1-4) AS MTH</td>
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<tr>
<td>MCB 4115</td>
<td>Determinative Bacteriology - (5) AS BIO</td>
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<tr>
<td>MCB 4404</td>
<td>Microbial Physiology and Genetics - (4) AS BIO</td>
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<td>MCB 4404L</td>
<td>Microbial Physiology and Genetics Laboratory - (1) AS BIO</td>
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<td>MCB 4502C</td>
<td>Virology - (3) AS BIO</td>
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<td>MCB 4901</td>
<td>Microbiology Undergraduate Research - (1-4) AS BIO</td>
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<tr>
<td>MCB 4934</td>
<td>Seminar in Microbiology - (1) AS BIO</td>
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<td>MCB 5206</td>
<td>Public Health and Pathogenic Microbiology - (3) AS BIO</td>
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<td>MCB 5600</td>
<td>Applied and Environmental Biology - (3) AS BIO</td>
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<tr>
<td>MCB 5815</td>
<td>Medical Mycology - (3) AS BIO</td>
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<tr>
<td>MET 4002</td>
<td>Climatology - (4) AS GPY</td>
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<tr>
<td>MHC 4403</td>
<td>The Early History of Mathematics - 6A MW(3) AS MTH</td>
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<tr>
<td>MHC 4406</td>
<td>The History of Modern Mathematics - (4) AS MTH</td>
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<tr>
<td>MHC 5306</td>
<td>Mathematical Logic and Foundations I - (3) AS MTH</td>
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<tr>
<td>MHC 5402</td>
<td>The Early History of Mathematics - (3) AS MTH</td>
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<tr>
<td>MHC 5405</td>
<td>History of Modern Mathematics - (3) AS MTH</td>
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<tr>
<td>MHS 3411</td>
<td>Multidisciplinary Behavioral Healthcare Services - (3) FM MHS</td>
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<tr>
<td>MHS 4002</td>
<td>Behavioral Health Systems Delivery - (3) FM MHS</td>
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<tr>
<td>MHS 4052</td>
<td>Human Relations Skills in Counseling - M(4) AS EDEDG</td>
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<tr>
<td>MHS 4407</td>
<td>Exemplary Practices in Behavioral Healthcare Treatment - (3) FM MHS</td>
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</tbody>
</table>
their efficacy has been empirically validated. Modules may begin with a historical perspective of the use of a specific population or a treatment strategy but will primarily focus on emerging methodologies.

MHS 4905 Independent Study: Guidance and Counseling Education (1-4) ED EGD
PR: DPR, S/U only. Specialized independent study determined by the student's needs and interests.

MHS 4906 Directed Study - (1-4) FM MHS
Directed study. Student must have a contract with an instructor.

MHS 4931 Selected Topics - (1-4) FM MHS
The course content will depend on student demand and instructor's interest. The course may be repeated for different topics up to 8 hours.

MLS 4031 Introduction to Medical Technology - (2) AS IAS
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, laboratory math, and computer applications.

MLS 4830 Clinical Urinalysis and Body Fluids - (2) AS IAS
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 IAS
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 4862 Clinical Hematology - (6) AS IAS
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on the body as related to the diagnosis of human disease, including blood coagulation and morphological and biochemical aspects of blood cells.

MLS 4863 Clinical Microbiology - (6) AS IAS
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 4866 Clinical Laboratory Management and Education - (1) AS IAS
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on concepts of laboratory management, including personnel staffing, reimbursements, quality assurance, and regulatory issues, and clinical education techniques, including writing, lecture presentation, and evaluation.

MMC 2100 Writing for the Mass Media - (3) AS COM
PR: Sophomore standing; 2.75 overall grade point average; grade of "C" in ENG 1101, ENG 1102, and stressing score on English Diagnostic Test. An introduction to the basic skills of writing for the mass media with practice in library research, persuasive writing, and informational writing.

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 4306 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 4420 Research Methods in Mass Communications - (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 4950 Directed Reading in Mass Communications - (1-3) 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 4965 Clinical Immunohematology - (6) AS IAS
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on blood and tissue typing, including blood group systems, transfusion associated diseases, HLA testing, and preparation of blood and blood components for transfusion therapy.

MLC 4031C Leadership and Problem Solving - (3) AS COM
PR: MMC 2100 and MMC 3602. An introduction to the techniques of writing scripts for electronic media. Emphasis is on documentary presentation.

MLC 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.

MLC 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.

MLC 4306 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.

MLC 4420 Research Methods in Mass Communications - (3) AS COM
PR: Junior standing and CI. Reading and directed study in special topics.

MLC 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.

MLC 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.

MLC 4950 Directed Reading in Mass Communications - (1-3) 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.

MLC 4965 Clinical Immunohematology - (6) AS IAS
PR: Senior standing and acceptance into an approved affiliated hospital. A hospital clinical course on blood and tissue typing, including blood group systems, transfusion associated diseases, HLA testing, and preparation of blood and blood components for transfusion therapy.
MUC 4201C Leadership and Management - (3) US MIS
Discuss staff organization, functions, and processes, analyze counseling responsibilities and methods, and apply leadership problems solving principles to a complex case study/simulation.

MUC 4202C Officership - (3) US MIS
Capstone course to explore topics relevant to second lieutenants entering the Army, describe legal aspects of decision making and leadership, analyze Army organization from tactical to strategic level.

MUC 4930 Advanced Directed Study and Research - (1-3) US MIS
PR: CI 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 CI. Topics will be selected from modern plane geometry. Mobius geometry, elliptic and hyperbolic geometry.

MTG 4302 Introduction to Topology -6A (3) AS MTH

MTG 5116 Topology I - (3) AS MTH

MTG 5117 Topology II - (3) AS MTH
PR: MTG 5116. The fundamental group; elements of homotopy theory and homology theory.

MUC 2221 Composition - (3) VP MUS
PR: Necessary competency at junior level determined by faculty jury. DPR. Private instruction in original composition. Required of composition majors.

MUC 2301 Introduction To Electronic Music - (3) VP 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) VP MUS
PR: Necessary competency at senior level determined by faculty jury. DPR. Private instruction in original composition. Required of composition majors.

MUC 3401 Electronic Music-Analog Synthesis I - (3) VP MUS
PR: MUC 3401 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) VP 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) VP 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) VP 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) VP 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) VP MUS
PR: MUC 3402 and MUC 3442 or equivalent. DPR. Composition for analog/digital equipment, performance applications; sound synthesis, interfacing electronics with conventional instruments.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
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<tbody>
<tr>
<td>MUE 4332</td>
<td>Instrumental Music In The Secondary School</td>
<td>(3) VP</td>
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<tr>
<td>MUE 4480</td>
<td>Senior Seminar In Music</td>
<td>(2) VP</td>
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<td>PR: MUE 4940. DPR. Synthesis of teacher candidate’s courses in complete college program. Required concurrently with internship.</td>
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<tr>
<td>MUE 4936</td>
<td>Internship: Music Education</td>
<td>(1-12) VP</td>
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<td>CR: MUE 4936. S/J only. DPR. 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.</td>
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<tr>
<td>MUG 3104</td>
<td>Basic Conducting</td>
<td>(2) VP</td>
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<tr>
<td></td>
<td>PR: DPR. The study and practical application of basic conducting techniques. Development of skills related to the conducting of musical scores.</td>
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<tr>
<td>MUG 3105</td>
<td>Instrumental Conducting</td>
<td>(2) VP</td>
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<td></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>
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<tr>
<td>MUN 3443</td>
<td>Percussion Ensemble</td>
<td>(1) VP</td>
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<td></td>
<td>PR: DPR. Open to any major area.</td>
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<tr>
<td>MUN 3432</td>
<td>Horn Ensemble</td>
<td>(1) VP</td>
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<td>PR: DPR. Open to any major area.</td>
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<tr>
<td>MUN 3431</td>
<td>Brass Quintet</td>
<td>(1) VP</td>
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<td>PR: DPR. Open to any major area.</td>
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<tr>
<td>MUN 3424</td>
<td>Woodwind Quintet</td>
<td>(1) VP</td>
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<td>PR: DPR. Open to any major area.</td>
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<tr>
<td>MUN 3433</td>
<td>Brass Choir</td>
<td>(1) VP</td>
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<td>PR: DPR. Open to any major area.</td>
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<tr>
<td>MUN 3443</td>
<td>Percussion Ensemble</td>
<td>(1) VP</td>
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<td></td>
<td>PR: DPR. Open to any major area.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>MUN 3444</td>
<td>Marimba Ensemble - (1) VP MUS</td>
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<td>Open to all university students with the necessary proficiency in their performance media.</td>
</tr>
<tr>
<td>MUN 3453</td>
<td>Piccolo Ensemble - (1) VP MUS</td>
<td></td>
<td>Open to all university students with the necessary proficiency in their performance media.</td>
</tr>
<tr>
<td>MUN 3473</td>
<td>Collegium Musicum - (1) VP MUS</td>
<td></td>
<td>Open to all university students with the necessary proficiency in their performance media.</td>
</tr>
<tr>
<td>MUS 3714</td>
<td>Jazz Ensemble - (1) VP MUS</td>
<td></td>
<td>Open to all university students with the necessary proficiency in their performance media.</td>
</tr>
<tr>
<td>MUS 3713</td>
<td>Jazz Ensemble - (1) VP MUS</td>
<td></td>
<td>Open to all university students with the necessary proficiency in their performance media.</td>
</tr>
<tr>
<td>MUS 2201</td>
<td>Language Diction For Singers - (1) VP MUS</td>
<td></td>
<td>PR: DPR. Course is designed to begin training in aural recognition and vocal realization of materials used in music composition.</td>
</tr>
<tr>
<td>MUS 2216</td>
<td>Music Theory I - (3) VP MUS</td>
<td></td>
<td>PR: MUT 1111, DPR. Required of music majors, continuation of MUT 1111 and 1112.</td>
</tr>
<tr>
<td>MUS 2217</td>
<td>Music Theory IV - (3) VP MUS</td>
<td></td>
<td>PR: MUT 2116, DPR. Required of music majors, continuation of MUT 1111, 1112, and 2116.</td>
</tr>
<tr>
<td>MUS 2246</td>
<td>Advanced Aural Theory I - (1) VP MUS</td>
<td></td>
<td>PR: MUT 1242. To be taken concurrently with MUT 2116, MUT 2117, DPR. Course designed to reinforce training in aural recognition and vocal realization of materials used in music composition.</td>
</tr>
<tr>
<td>MUS 2247</td>
<td>Advanced Aural Theory II - (1) VP MUS</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>MUS 2641</td>
<td>Jazz Theory And Improvisation I - (2) VP MUS</td>
<td></td>
<td>PR: MUT 1112 and/or DPR. A study of jazz improvisational techniques and related jazz theory.</td>
</tr>
<tr>
<td>MUS 2642</td>
<td>Jazz Theory And Improvisation II - (2) VP MUS</td>
<td></td>
<td>PR: MUT 2641 or DPR. A study of jazz improvisational techniques and related jazz theory.</td>
</tr>
<tr>
<td>MUS 3353</td>
<td>Jazz Composition And Arranging I - (3) VP MUS</td>
<td></td>
<td>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.</td>
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<tr>
<td>MUS 3354</td>
<td>Jazz Composition And Arranging II - (3) VP MUS</td>
<td></td>
<td>PR: MUT 3353 and DPR. Course designed to continue improving arranging and/or compositional skills in the jazz idiom through the study of jazz orchestration, harmonic, and melodic practices.</td>
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<tr>
<td>MUS 3663</td>
<td>Advanced Jazz Improvisation I - (2) VP MUS</td>
<td></td>
<td>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' solos.</td>
</tr>
<tr>
<td>MUS 3664</td>
<td>Advanced Jazz Improvisation II - (2) VP MUS</td>
<td></td>
<td>PR: MUT 3663. 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.</td>
</tr>
<tr>
<td>MUS 3693</td>
<td>Jazz Composition And Arranging I - (3) VP MUS</td>
<td></td>
<td>PR: MUT 1112 and DPR. A study of jazz improvisational techniques and related jazz theory.</td>
</tr>
<tr>
<td>MUS 3353</td>
<td>Jazz Composition And Arranging II - (3) VP MUS</td>
<td></td>
<td>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.</td>
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<tr>
<td>MUS 3471</td>
<td>Eighteenth Century Practice - (3) VP MUS</td>
<td></td>
<td>PR: MUT 2117, DPR. An intensive study of the contrapuntal practice of the 18th century; development of skills in writing music in the style of the period through the use of aural and visual analysis.</td>
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<tr>
<td>MUS 4571</td>
<td>Twentieth Century Practice - (3) VP MUS</td>
<td></td>
<td>PR: MUT 2117, DPR. A study of 20th century theoretical concepts; development of skills in communicating and writing music in contemporary styles through the use of aural and visual analysis.</td>
</tr>
<tr>
<td>MUS 5051</td>
<td>Graduate Review Of Music Theory - (2) VP MUS</td>
<td></td>
<td>PR: DPR. A graduate level overview of basic theoretical concepts and musical analysis that prepares the student to function as an effective generalist.</td>
</tr>
<tr>
<td>MVB 1211</td>
<td>Applied Trumpet - (1) VP MUS</td>
<td></td>
<td>PR: DPR. Course is open by audition only. One-half hour private lesson or one hour 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.</td>
</tr>
<tr>
<td>MVB 1212</td>
<td>Applied French Horn - (1) VP MUS</td>
<td></td>
<td>PR: DPR. Course is open by audition only. One-half hour private lesson or one hour 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.</td>
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<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Instructor Hours</td>
<td>Description</td>
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**MVB 1214 Applied Euphonium**
- **Course Code**: MVB 1214
- **Course Name**: Applied Euphonium
- **Instructor Hours**: (1) VP MUS
- **Description**: 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 1215 Applied Tuba**
- **Course Code**: MVB 1215
- **Course Name**: Applied Tuba
- **Instructor Hours**: (1) VP MUS
- **Description**: 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**
- **Course Code**: MVB 1312
- **Course Name**: French Horn Principal
- **Instructor Hours**: (2) VP MUS
- **Description**: 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**
- **Course Code**: MVB 1313
- **Course Name**: Trombone Principal
- **Instructor Hours**: (2) VP MUS
- **Description**: 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**
- **Course Code**: MVB 1314
- **Course Name**: Euphonium Principal
- **Instructor Hours**: (2) VP MUS
- **Description**: 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**
- **Course Code**: MVB 1315
- **Course Name**: Tuba Principal
- **Instructor Hours**: (2) VP MUS
- **Description**: 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**
- **Course Code**: MVB 1411
- **Course Name**: Trumpet Major
- **Instructor Hours**: (3) VP MUS
- **Description**: 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 1412 French Horn Major**
- **Course Code**: MVB 1412
- **Course Name**: French Horn Major
- **Instructor Hours**: (3) VP MUS
- **Description**: 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 1413 Trombone Major**
- **Course Code**: MVB 1413
- **Course Name**: Trombone Major
- **Instructor Hours**: (3) VP MUS
- **Description**: 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 1414 Euphonium Major**
- **Course Code**: MVB 1414
- **Course Name**: Euphonium Major
- **Instructor Hours**: (3) VP MUS
- **Description**: 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**
- **Course Code**: MVB 2322
- **Course Name**: French Horn Principal
- **Instructor Hours**: (2) VP MUS
- **Description**: 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**
- **Course Code**: MVB 2324
- **Course Name**: Euphonium Principal
- **Instructor Hours**: (2) VP MUS
- **Description**: 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 1219 Jazz Percussion - (1) VP 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 1210 Applied Jazz Piano Principal - (2) VP 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 1214 Applied Jazz Bass - (1) VP 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 3333 Jazz Guitar Principal - (2) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP MUS  
PR: DPR. Necessary competency at senior level determined by faculty jury examination. Required of all applied music majors. 
Private and class instruction.

MVJ 4850 Applied Jazz Performance - (3) VP MUS  
PR: MUT 290 and DPR. Necessary competency at junior level determined by faculty jury examination. Private and class instruction.

MVJ 5250 Applied Jazz Piano Secondary - (2) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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 1121 Keyboard Skills II - (2) VP 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 1411 Piano Major - (3) VP 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.

MVK 1811 Beginning Piano I - (2) VP MUS  
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) VP 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) VP MUS  
PR: MVK 2111 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 2121 Keyboard Skills IV - (2) VP MUS  
PR: MVK 2111 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 2321 Piano Principal - (2) VP 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 3111 Music Major - (2) VP 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.
MVP 3331 Piano Principal - (2) VP 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 Piano Major - (3) VP MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors.
Private and class instruction.

MVP 4341 Piano Principal - (2) VP 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) VP 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 Violin Principal - (2) VP 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.

MVP 1413 Cello Major - (3) VP 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.

MVP 2322 Viola Principal - (2) VP 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 2323 Violoncello Principal - (2) VP 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 1411 Violin Major - (3) VP 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.

MVS 1413 Cello Major - (3) VP 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.

MVS 2321 Violin Principal - (2) VP 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 1412 Viola Major - (3) VP 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.

MVS 1413 Cello Major - (3) VP 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.

MVS 1414 Double Bass Major - (3) VP 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.

MVS 2321 Violin Principal - (2) VP 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 1211 Applied Violin - (1) VP 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.

MVS 1212 Applied Viola - (1) VP 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.

MVS 1213 Applied Violoncello - (1) VP 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.

MVS 1214 Applied Double Bass - (1) VP 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.

MVS 1215 Applied Bassoon - (1) VP 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.

MVS 1216 Applied Harp - (1) VP 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.

MVS 1217 Applied Recorder - (1) VP 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.

MVS 1218 Applied Organ - (1) VP 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.

MVS 1219 Applied Oboe - (1) VP 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.

MVS 1220 Applied Piccolo - (1) VP 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.

MVS 1221 Applied Saxophone - (1) VP 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.

MVS 1222 Applied Trombone - (1) VP 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.

MVS 1223 Applied Tuba - (1) VP 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.

MVS 1224 Applied Trumpet - (1) VP 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.

MVS 1225 Applied Trombone - (1) VP 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.

MVS 1226 Applied Tuba - (1) VP 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.
Private and class instruction.
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors.

MVV 2321 Voice Principal - (2) VP 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 2331 Voice Major - (3) VP 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 Violin Principal - (2) VP 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 3432 Viola Principal - (3) VP MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 3433 Cello Major - (3) VP MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 4441 Violin Major - (3) VP MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 4442 Viola Major - (3) VP MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.

MVV 5443 Cello Major - (3) VP MUS
PR: DPR. Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and class instruction.
MVW 1212 Applied Oboe - (1) VP 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) VP 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) VP 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) VP 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 4341 Flute Principal - (2) VP 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 4342 Oboe Principal - (2) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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) VP 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.

GFR 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, data and classification systems, health care documentation, electronic medical records, and web-based technologies for healthcare.

NSC 1110 Introduction to Naval Science - (3) US NVY
Emphasis on the mission, organization, regulations and components of the Navy and Marine Corps.
NUR 3114L Nursing Fundamentals Clinical - (3) NU NUR
PR: Admission to the nursing major or CI; CR: NUR 3114L Clinical experiences in the fundamentals of clinical nursing practice. Focus on developing critical thinking applying nursing process, physical assessment, and concepts of health and illness to meet the basic needs of the individual across the life span.

NUR 3125 Pathophysiology for Nursing Practice - (3) 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. 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 3064, NUR 3125, NUR 3114, NUR 3114L. Focuses on the 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, Cardiovascular System, Respiratory System, Renal System, Endocrine, Cancer, Multisystem Dysfunction.

NUR 3215L Medical Surgical Nursing Clinical I - (3) NU NUR
PR: NUR 3064, NUR 3125, NUR 3114, NUR 3114L. Clinical intervention for patients with selected health problems related to specific abnormalities in functional patterns.

NUR 3245C Gerontological Nursing - (2) NU NUR
PR: NUR 3113, NUR 3114, NUR 3114L, NUR 3064. Nursing Majors. Focuses on theories of aging and human development; assessment of functional health patterns; and planning health promotion and disease prevention activities with older adults. Critical thinking is used to analyze the effects of interventions on individuals and groups.

NUR 3525 Psychiatric/Mental Health Nursing - (3) NU NUR
PR: NUR 3076, NUR 3064, NUR 3125, NUR 3114 and NUR 3114L. CR: NUR 3525L. Explores mind, body, and spirit alterations in functional health patterns experienced by patients with acute and chronic mental illness. Examines psychopathology, psychopharmacologic therapies and community resources and the role of the nurse in psychiatry.

NUR 3525L Psychiatric/Mental Health Nursing Clinical - (3) NU NUR
PR: NUR 3076, NUR 3064, NUR 3125, NUR 3114 and NUR 3114L. CR: NUR 3525. 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 3806 Education Transitions for Registered Nurses - (3) NU 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 3829 Ethical Legal Aspects in Nursing and Health Care - MW (3) NU NUR
PR: CI. Nursing Majors. Introduction to contemporary bioethical and legal issues confronting health care in settings. Focuses on identification of legal and ethical principles underlying the decision-making process in nursing and health care.

NUR 4041 Culture In Nursing Practice - (2) NU NUR
PR: CI. Nursing Majors. Introduces knowledge and skills needed to give culturally congruent nursing care to people from diverse cultural groups. Compares and analyzes health-related practices, values, beliefs and customs.

NUR 4165 Nursing Inquiry - (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 - 64 MW LW (3) NU NUR
PR: Admission to the nursing major or CI. CR: NUR 4216. 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 and ethics, and their influences on response to HIV, and how the media has shaped the epidemic.

NUR 4216 Medical Surgical Nursing II - (4) NU NUR
PR: NUR 3215, NUR 3215L, NUR 4145, CR: NUR 4216L. Focus on the nursing assessment, prevention, and management of multiple health care problems. Critical thinking is used to analyze the effects of changes in health status and the impact of nursing intervention for patients with alterations in Visual and Auditory systems, Neurological systems, Musculoskeletal systems, Gastrointestinal systems, and Reproductive systems.

NUR 4216L Medical Surgical Nursing Clinical II - (5) NU NUR

NUR 4355 Child and Adolescent Health Nursing - (3) NU NUR

NUR 4421 Women’s Health Nursing - (2) NU NUR
PR: NUR 4216, NUR 4216L, CR: NUR 4653L, NUR 4636, NUR 4355. Focus on health promotion, identification of risk factors, illness care, and health restoration related to the physiological and psychological changes occurring during a woman’s life cycle, including pregnancy.

NUR 4635L Integrated Nursing Clinical: Community/Public Health, Children and Adolescent Health, and Women’s Health - (7) NU NUR
PR: NUR 4216, NUR 4216L. CR: NUR 4421, NUR 4636, NUR 4355. Provides clinical learning experiences in diverse community and hospital settings. Focuses on nursing care designed to prevent and/or reduce risk of disease and injury, promote health and wellness, and treat illness and injury in children, adolescents, adults and families, and diverse community populations across the age spectrum.

NUR 4636 Community/Public Health: Population-Focused Nursing - (3) NU NUR
PR: NUR 4216, NUR 4216L or CI. In-depth examination of community health nursing, public health, epidemiology, culture, and environment essential to preventing illness and injury and promoting and preserving health among diverse populations across the age spectrum.

NUR 4636L Community/Public Health Nursing Clinical for the RN - (3) NU NUR
PR: NUR 4636 or CI. Provides clinical learning experiences in community-based sites in both urban and rural settings. Focus on nursing care designed to prevent and/or reduce risk of disease and injury, and promote health and wellness to diverse populations across the age spectrum.

NUR 4643 Nursing Interventions into the Acute Effects of Drug and Alcohol Abuse - (2) NU NUR
Focuses on the assessment and treatment of individuals and families who are in the acute phases of addiction. Emphasis will be placed on treatment outcomes for designated populations with consideration for cultural, socioeconomic, political and ethical/legal factors.

NUR 4644 Nursing Interventions into the Rehabilitation of Clients who Abuse Substance - (2) NU NUR
Focuses on models of treatment and interventions for clients and families who are in the rehabilitation and relapse prevention phases of treatment for addictions. Emphasis will be placed on rehabilitation outcomes for designated populations with consideration for criminal socioeconomic, political and legal/ethical factors.

NUR 4645 Substance Abuse Across the Lifespan - 64 MW LW (3) NU NUR
Introduction to concepts of substance abuse and theories of addiction. The applicability of theories to clinical assessment, diagnosis and intervention with client populations across the lifespan is explored.

NUR 4692 Occupational Health Nursing - (2) NU NUR
Focuses on the historical, legal, cultural, scientific, and professional foundation of occupational and environmental health nursing; the occupational health nurse role in the delivery
of health services to workers and worker aggregates; business, social, economic, and legal forces influencing that role; standards and characteristics of practice; and settings for occupational health nursing practice.

NUR 5945C Rehabilitation Across the Life Span - (2) NU NUR
PR: Nursing Majors or CI. Basic concepts of rehabilitation related to human responses. Analysis of the changes in health status and nursing implications.

NUR 4913 Educational Role of the Nurse in Healthcare - (3) NU NUR
This course provides the learner with an opportunity to gain knowledge and skills to facilitate the teaching role of the nurse.

NUR 4338 Leadership and Management in Professional Nursing Practice - (3) NU NUR
PR: NUR 4421, NUR 4355, NUR 4636, NUR 4636L or CI. Principles of nursing leadership and management with an emphasis on decision-making, priority setting, delegating, and managing nursing care. Focus on preparation of the professional nurse to work collaboratively in the interdisciplinary health care environment. Clinical experience 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. Projects requirements individually planned with faculty preceptor.

NUR 4935 Selected Topics In Nursing - (2-8) 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 4948L Preceptorship - (5) NU NUR
PR: NUR 4216, NUR 4216L, NUR 4355, NUR 4421, NUR 4636, NUR 4636L. Individually contracted 150 hours of clinical practicum collaboratively planned by students, faculty, and agency personnel. Opportunity to synthesize theory and clinical practice for professional nursing.

OCE 2001 Introduction to Oceanography - NS(3) MS MSC
Overview of biological, chemical, geological, and physical oceanography. Also listed under Geology.

OCE 4930 Selected Topics in Marine Science - (1-4) MS MSC
Selected topics in the marine sciences 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: ORI 2000 or CI. The study, rehearsal, and performance of literature for Readers Theatre and Chamber Theatre productions.

ORI 4120 Performance of Poetry - (3) AS SPE
PR: ORI 2000 or CI. Critical appreciation of lyric and narrative poetry and communication of that appreciation to audience. Study of poetic theory and prosodic techniques.

ORI 4310 Group Performance of Literature - (3) AS SPE
PR: ORI 2000 or CI. Designed to introduce the student to and give experience in various forms of group approaches to performance.

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 PAJ
Satisfies 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 5159 Urban Policy Analysis - (3) AS PAD
Examination of the organizational and administrative aspects of planning, program development, reporting and evaluation at the local level by state, regional, and other agencies.

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 base and limitations of the administrative process, administrative adjudication, rule-making, and the judicial review of such actions. Attention is also directed to regulatory commissions, their functions, powers, management and relationship with other branches of government.

PAD 5700 Research Methods in Public Administration - (3) AS PAD
This course provides the student with the fundamental skills and knowledge of how research is designed, implemented, analyzed, and utilized in public sector agencies. Available to majors and non-majors.

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 BIO
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2045, CHM 2045L, CHM 2046, CHM 2046L. A discussion of the concept and significance of the cell to biology; biological molecules
and metabolic processes within the cell; cellular energy conversion systems; and control of cellular metabolism. Lec.

PCB 3023L Cell Biology Laboratory - (1) AS BIO CP: PCB 3023. Laboratory portion of Cell Biology. Metabolic processes within the cell.


PCB 3063L General Genetics Laboratory - (1) AS BIO CP: PCB 3063. Laboratory investigation techniques in general genetics including Mendelian and non-Mendelian relationships, and gene interactions.

PCB 4064C Experimental Genetics - (3) AS BIO CP: PCB 3063. Experimental analysis of genetic systems, Lec.-lab.

PCB 4674 Organic Evolution - (3) AS BIO PR: PCB 3063. An introduction to modern evolutionary theory. Lecture on population genetics, adaptations, speciation theory, phylegony, homologous evolution and related areas. Lec.-dis.

PCB 4723 Animal Physiology - (3) AS BIO PR: PCB 3023, PCB 3043, PCB 3063 or ZOO 3323 and CHM 2211. Advanced presentation of mechanisms employed by animals to interact with their environment and to maintain their organization. Lec.

PCB 4723L Animal Physiology Laboratory - (1) AS BIO CP: PCB 4723. Laboratory portion of Animal Physiology.

PCB 5235 Principles of Immunology - (3) AS BIO PR: PCB 3023 or MCB 3020C, CI. Course will emphasize the biological principles involved in the vertebrate immune response. It will present the homeostatic, defense, and detrimental aspects of the immune system in terms of basic cellular and molecular mechanisms. Techniques will be described to familiarize the student with the types of immunological tools available to the cellular and molecular biologist.

PCB 5256 Developmental Biology - (5) AS BIO PR: PCB 3023, CI. Topics in modern developmental biology to be covered in lecture and through readings so as to gain a working knowledge and understanding of the cellular and molecular control aspects of signal transduction and embryonic specification in both plants and animals.

PCB 5306 Limnology - (3) AS BIO PR: PCB 3043, CHM 2046, PHY 2053, CI. An introduction to the physical, chemical, and biological nature of fresh-water environments. Lec.

PCB 5306L Limnology Laboratory - (1) AS BIO CP: PCB 5306. Laboratory portion of Limnology Laboratory and field experience in the area of aquatic ecology.

PCB 5413 Behavioral Ecology - (3) AS BIO PR: PCB 3043 or PCB 4674, CI. An emphasis on the evolutionary mechanisms that influence an organisms behavioral responses to environmental events. The theoretical framework is presented and analyzed.

PCB 5525 Molecular Genetics - (3) AS BIO 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 5835 Neurophysiology - (3) AS BIO PR: CI. A comparative analysis of the physiochemical basis and evolution of nervous systems and sensory mechanisms.

PCB 5845C Principles of Neuroscience - (4) AS BIO PR: PCB 4723, CI. Study of the mammalian brain’s structure and function, with an emphasis on the neuroanatomy, neuropharmacology, and neurophysiology of the human brain. Topics include brain imaging, demyelination, and mechanisms of learning/memory. Brain research techniques are also discussed, as are basic neuropathological processes that result in abnormal brain function and cognition.

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 1341. Emphasis on course play, refinement of basic skills and complementary 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.

PEN 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.

PEN 2113 Lifeguard Training - (2) ED EDJ PR: PEN 2122 or equivalent. S/U only. Knowledge and skills necessary for saving the lives of others in the event of aquatic emergency. ARC certified lifeguard or equivalent. Lec.

PEN 2136 Skin & Scuba Diving - (2) ED EDJ PR: PEN 2172 or equivalent. S/U only. Development of the essential skills and knowledge necessary for enjoying the sport of Skin & Scuba Diving. Introduction to the basics of scuba diving equipment; emphasis on personal safety.

PEP 3940 Practicum in Health Promotion/Wellness - (4) ED EDP PR: Completion of Semesters I and II and admission to the College of Education. S/U only. Practical experience as a professional in a community or worksite health promotion or wellness program.

PEP 3951 Communication Skills For Wellness Leaders - (3) ED EDP Wellness majors only. Designed to develop knowledge and skills in communication and counseling that is specific to wellness and health promotion.

PEQ 3170 Aquatic Exercise - (2) ED EDP An instructor training course in aquatic exercise. Focuses on teaching aerobic, strength, flexibility, and weight control exercises performed in swimming pools. Open to non-majors.

PET 2322C 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 2441 Motor Development and Assessment - (3) ED EDP 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 3080 Survey of Wellness Program - (3) ED EDP Wellness majors only. An analysis of various types of wellness programs in the public and private sector including community-based programs, commercial health and fitness enterprises, government-based programs, corporate-based programs, and hospital health and fitness centers.

PET 3252 Issues in Sport - M/W (3) ED EDP PR: Junior, Senior standing. A study of organized sport as a pervasive part of contemporary society. By increasing understanding of some of the issues and controversies based in the structure of sport and society, individuals will be able to understand and improve sport experiences for themselves and others.

PET 3310 Kinesiology - (3) ED EDP A study of the structure and function of the skeletal and muscular systems and of nervous and chemical principles related to psycho-motor performance. Open to non-majors.

PET 3351 Exercise Physiology I - (3) ED EDP 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 3421 Curriculum and Instruction in Physical Education - (3) ED 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 3422 Instructional Design and Content: Movement Experiences - (3) ED EDP
PR: CC. Physical Education majors only. This course develops a variety of motor skills and includes the study of systems for analyzing movement. It prepares students to plan and conduct movement experiences in a wide variety of educational settings.

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 3617C Orthopaedic Physical Assessment I (Upper Extremity) - (3) ED EDP
Athletic Training majors only. The study and practice of techniques used when assessing athletic injuries to the upper extremity, head and spine.

PET 3618C Orthopaedic Physical Assessment II (Lower Extremity) - (3) ED EDP
Athletic Training majors only. The study and practice of techniques used when assessing athletic injuries to the lower extremity, hip, pelvis and gait.

PET 3621C Prevention of Athletic Injuries - (3) ED EDP
Athletic Training majors only. Advanced principles in the selection, fabrication and application of protective equipment, tape, splints, casts, braces and other orthotic devices commonly used in athletic training and sports medicine settings. Theory and practice in risk management and injuries related to environmental factors.

PET 3624C Emergency Management of Athletic Trauma & Illness - (3) ED EDP
Athletic Training majors only. Theory and practice of basic emergency management techniques dealing with trauma resulting from injuries and illnesses suffered by an athletic population.

PET 3630C Techniques in Therapeutic Exercise - (3) ED EDP
Athletic Training majors only. Theory and practical applications of therapeutic exercise and movement science. Includes techniques in Feldenkrais movement patterns, aquatic exercise, lifting protocols, plyometric training, isokinetic testing, stability ball training, and a variety of common exercise equipment.

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) ED EDP
Athletic Training majors only. Analysis and application of organizational and administrative structure of the athletic training profession, including current theory about budget management, medical record keeping, drug testing, facility design and maintenance, legal aspects of sports medicine, athletic physical examinations, medical ethics, current educational concepts, and administrative policy.

PET 3670L Clinical Instruction in Athletic Training I - (3) ED EDP
Athletic Training majors only. Observation and performance of basic athletic training skills under the direct supervision of an NATABOC certified/state licensed athletic trainer. This course provides students with the opportunity to develop competence in a variety of introductory athletic training skills. Clinical experiences are obtained in the university's sports medicine facilities and will be accompanied by a one-hour seminar each week.

PET 3671L Clinical Instruction in Athletic Training II - (3) ED EDP
PR: PET 3670L. Athletic Training majors only. Continuation of clinical experiences utilizing new skills under the direction of an NATABOC certified/state licensed athletic trainer. This course provides students with the opportunity to develop competence in a variety of introductory and mid-level athletic training skills. Clinical experiences are obtained in the university's sports medicine facilities and/or approved affiliates and will be accompanied by a one-hour seminar each week.

PET 3931 Selected Topics - (1-3) ED EDJ
DPR: Topics offered are selected to reflect student need and faculty interest.

PET 3943 Physical Education Internship: Middle School - (4) ED EDP
Physical Education majors only. A part-time internship in middle school physical education. Focus on the relationship of physical education to the needs of the pre- and early adolescent learner, the organization and philosophy of the middle school, and application appropriate content and methodologies.

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 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 Health-Fitness Appraisal & Exercise Prescription - (3) ED EDP
PR: PET 3351. Techniques in conducting health-fitness test and exercise prescription for adults. Includes cardiovascular strength, flexibility, body composition, health risk testing, exercise prescribing, and monitoring. Open to non-majors.

PET 4401 Organization & Administration of Physical Education Programs - (3) ED EDP
Physical Education majors only. A study of organizational and administrative procedures for physical education programs in elementary and secondary schools. Includes scheduling, budget, facilities, extra-curricular programs, and the selection and supervision of staff.

PET 4404 Organization & Administration of Wellness Programs - (3) ED EDP
Wellness majors only. Design and implementation of wellness programs with emphasis on assessment and evaluation, management, staffing, participant adherence, program design, budgeting, legal liability, and marketing.

PET 4432 Instructional Design and Content: Physical Education Elementary - (3) ED EDP
Physical Education majors only. This is the second of a three-course sequence in which students study movement forms and instructional processes suitable for elementary age students.

PET 4433 Instructional Design and Content: Physical Education Elementary II - (3) ED EDP
Physical Education majors only. This course is the third of a three-course sequence in which students study movement forms and instructional processes suitable for elementary age students.

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 4443 Instructional Design and Content: Physical Education Secondary II - (3) ED EDP
Physical Education majors only. In this course, students are prepared to plan, conduct, and evaluate complex movement experiences in games, dance, gymnastics and physical fitness appropriate for students.

PET 4497 Management of Athletic Injuries - (3) ED EDP
Athletic Training majors only. 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) ED EDP
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, electrotherapy, electrical stimulation, hydrotherapy, ultrasound, biofeedback and manual techniques will be emphasized.

PET 4633C Therapeutic Rehabilitation - (3) ED EDP
Athletic Training majors only. Theories and applications methods of comprehensive therapeutic treatment and rehabilitation programs for injuries commonly sustained by the physically active.

PET 4672L Clinical Practice in Athletic Training - (3) ED EDP
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 and II students.

PET 4673L Clinical Practice in Athletic Training II - (3) ED EDP
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 4933 Seminar in Sports Medicine - (2) ED EDP
Athletic Training 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 application of appropriate content and instructional competencies.

PET 4942 Physical Education Pre-Internship: Elementary - (4) ED EDP
S/U only. Physical Education majors only. 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 - (4) ED EDP
S/U only. Physical Education majors only. A part-time internship in high school level physical education with focus on the relationships of physical education to the needs of the early adolescent and the implementation of appropriate content and methodology.

PET 4946 Associate Teaching Physical Education: Elementary - (12) ED EDP
S/U only. Physical Education majors only. 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 Associate Teaching Physical Education: Secondary - (12) ED EDP
S/U only. Physical Education majors only. A full-time 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 2401C Beginning Photography - (3) VP 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 3000 Photography in American Culture - (3) AS AMS
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) VP ART
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 3620C Photographic Journalism I - (3) AS COM

PGY 3620C Photographic Journalism II - (3) AS COM
PR: PGY 3610C. Laboratory required. Advanced process and practice of photography for publication.

PGY 3801C Digital Media I - (3) VP 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) VP ART
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) VP ART
PR: PGY 3410C Continued problems in photography. May be repeated.

PGY 4802C Digital Media II - (3) VP 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 Photography - (4) VP ART
PR: Cs. Advanced work in photography and related media leading to development of personal/expressive statements.

PHC 2581 Sex, Health, and Decision Making - (3) PH CFH
This course will provide the student with an overview of the issues involving sexual behavior, decision-making processes and health outcomes. The course will offer a public health perspective of the consequences of risk-taking activities as well as a psychosocial and cultural view of antecedent behaviors.

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 current theories of stress as they relate to types of stressors, physiological reactions and predisposition to disease, and techniques related to the recognition and prevention of an unhealthy level of stress.

PHH 4820 Chinese Philosophy - (3) AS PHI
A survey of Western philosophy from the pre-Socratics to the end of the Middle Ages.

PHH 4821 Chinese Philosophy - (3) AS PHI
A survey of Western philosophy from the end of the Middle Ages to the nineteenth century.

PHI 4440 Continental Philosophy - (3) AS PHI
A study of developments in post-Kantian European philosophy.

PHI 4600 Contemporary Philosophy - (6A MW)(3) AS PHI
Selected schools of twentieth century thought such as idealism, positivism, pragmatism, realism, and existentialism.

PHI 4700 American Philosophy - (6A MW)(3) AS PHI
Major traditions in American thought, Puritanism, the Enlightenment, Transcendentalism, Idealism, Pragmatism, and Analytic Philosophy in relation to American culture.

PHI 4820 Chinese Philosophy - (3) AS PHI
A survey of Confucianism, Taoism and other aspects of Chinese thought. The course is available to both majors and non-majors and does not have laboratory sections associated with it.

PHI 1103 Critical Thinking - (3) AS PHI
Methods of thinking that lead to reliable conclusions, with emphasis on concrete cases in ordinary thinking and the sciences.

PHI 1104 Critical Reasoning in Science and Society - (6A SS)(3) AS PHI
This class teaches students to become a better “Scientific Citizen,” i.e. to be able to better understand and participate in the process by which we come to conclusions about the natural and social world that matter to us as a society.

PHI 1600 Introduction to Ethics - (6A SS)(3) AS PHI
A study of ethical theories, concepts, problems and methods.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 2101</td>
<td>Introduction to Formal Logic - 6A GW (3) AS PHI</td>
<td>An elementary study of propositional, predicate, class and syllogistic logic with some attention to basic problems of logical theory.</td>
</tr>
<tr>
<td>PHI 2631</td>
<td>Ethics and Business - SS(3) AS PHI</td>
<td>An application of traditional ethical theories to contemporary problems in business.</td>
</tr>
<tr>
<td>PHI 3404</td>
<td>Scientific Method - (3) AS PHI</td>
<td>Probability, non-deductive inference, the hypothetico-deductive method, experimentation, and selected topics in the philosophy of science.</td>
</tr>
<tr>
<td>PHI 3630</td>
<td>Contemporary Moral Issues - SS(3) AS PHI</td>
<td>Open to all students. A study of contemporary moral issues concerning sex, sexism, abortion, poverty, crime, war, suicide, and human rights in general.</td>
</tr>
<tr>
<td>PHI 3633</td>
<td>Biomedical Ethics - (3) AS PHI</td>
<td>This course will focus on the ethical issues arising from advances in medical practice, delivery of health care, and scientific research.</td>
</tr>
<tr>
<td>PHI 3636</td>
<td>Professional Ethics - (3) AS PHI</td>
<td>An examination of the ethical problems that professionals will face in the complex, global society of the next few decades: confidentiality, divided loyalty, racism/sexiism, etc.</td>
</tr>
<tr>
<td>PHI 3640</td>
<td>Environmental Ethics - SS(3) AS PHI</td>
<td>A study of alternative theories of environmental ethics, including the implications of these theories to contemporary environmental problems, such as pollution, resource depletion, species extinction, and land use.</td>
</tr>
<tr>
<td>PHI 3700</td>
<td>Philosophy of Religion - 6A SS(3) AS PHI</td>
<td>Analysis of religious experience and examination of principal religious ideas in light of modern philosophy.</td>
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<tr>
<td>PHI 3905</td>
<td>Directed Study - (1-4) AS PHI</td>
<td>PR: CI. Approval slip from instructor required. Individual study directed by a faculty member.</td>
</tr>
<tr>
<td>PHI 4073</td>
<td>African Philosophy - MW (3) AS PHI</td>
<td>A descriptive and analytical study of African philosophical thought, featuring reflective comparisons of African and Western categories of thought.</td>
</tr>
<tr>
<td>PHI 4300</td>
<td>Theory of Knowledge - 6A MW(3) AS PHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHI 4320</td>
<td>Philosophy of Mind - 6A MW(3) AS PHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHI 4632</td>
<td>Feminist Ethics - MW (3) AS PHI</td>
<td>A study of the varied approaches to moral reasoning taken by feminist ethical writers such as Wollstonecraft, Mill, Gilligan, Daly, Hoagland and others.</td>
</tr>
<tr>
<td>PHI 4670</td>
<td>Contemporary Ethical Theory - (3) AS PHI</td>
<td>A survey of contemporary ethical theory, focusing both on the literature about the status of ethical theorizing—moral scepticism, moral nihilism, narrative ethics—and on specific types of theories—deontological theories, consequentialist theories, rights-based theories, virtue theories.</td>
</tr>
<tr>
<td>PHI 4800</td>
<td>Aesthetics - 6A MW(3) AS PHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHI 4905</td>
<td>Directed Study - (1-4) AS PHI</td>
<td>PR: CI. Approval slip from instructor required. Individual study directed by a faculty member.</td>
</tr>
<tr>
<td>PHI 5135</td>
<td>Symbolic Logic - (3) AS PHI</td>
<td>PR: CI. Study of topics such as the following: Metatheory of propositional and predicate logic, related metatheoretic results, alternative logic.</td>
</tr>
<tr>
<td>PHI 5225</td>
<td>Philosophy of Language - (3) AS PHI</td>
<td>PR: Eight hours of philosophy, major in linguistics, or CI. An examination of semantically, syntactical, and functional 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.</td>
</tr>
<tr>
<td>PHI 5569</td>
<td>Social Issues in Biomedical Ethics - (3) AS PHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHI 5913</td>
<td>Research - (1-4) AS PHI</td>
<td>PR: CI. Approval slip from instructor required. Individual research supervised by a faculty member.</td>
</tr>
<tr>
<td>PHI 5934</td>
<td>Selected Topics - (1-3) AS PHI</td>
<td>PR: CI. Approval slip from instructor required. Selected topics according to the needs of the student.</td>
</tr>
<tr>
<td>PHM 3100</td>
<td>Social Philosophy - 6A SP(3) AS PHI</td>
<td>An analysis of rival theories of social order and their philosophical foundations.</td>
</tr>
<tr>
<td>PHM 3400</td>
<td>Introduction to Philosophy of Law - (3) AS PHI</td>
<td>A study of the fundamental concepts of law from a philosophical standpoint including crime, justice, punishment, free speech, insanity.</td>
</tr>
<tr>
<td>PHM 4120</td>
<td>Major Black Thinkers - (3) AS AFA</td>
<td>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.</td>
</tr>
<tr>
<td>PHM 4322</td>
<td>Ancient and Medieval Political Philosophy - MW (3) AS PHI</td>
<td>A survey of political philosophy from 6 B.C. until 1600 A.D., including an examination of the ethical, metaphysical, and epistemological bases of these philosophies.</td>
</tr>
<tr>
<td>PHM 4331</td>
<td>Modern Political Philosophy - 6A MW(3) AS PHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHM 4340</td>
<td>Contemporary Political Philosophy - 6A MW(3) ASPHI</td>
<td>A descriptive and analytical study of modern philosophical thought, featuring reflective comparisons of African and Western categories of thought.</td>
</tr>
<tr>
<td>PHM 5125</td>
<td>Topics in Feminist Philosophy - (3) AS PHI</td>
<td>A study of recent feminist philosophical approaches to epistemology, aesthetics and political philosophy. May also be taken for credit in Women's Studies.</td>
</tr>
<tr>
<td>PHM 5126</td>
<td>Social Issues in Biomedical Ethics - (3) AS PHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHP 3785</td>
<td>Existentialism - 6A SP(3) AS PHI</td>
<td>A study of the religious and atheistic existentialists and the bearing of their views on religion, ethics, metaphysics, and the theory of knowledge.</td>
</tr>
<tr>
<td>PHP 4000</td>
<td>Plato - 6A MW(3) AS PHI</td>
<td>The examination of Plato will include the dialogues Protagoras, Georgias, Meno, Republic.</td>
</tr>
<tr>
<td>PHP 4410</td>
<td>Aristotle - 6A MW(3) AS PHI</td>
<td>Study of Aristotle's philosophy.</td>
</tr>
<tr>
<td>PHP 4410</td>
<td>Kant - (3) AS PHI</td>
<td>Lecture and discussion of Kant's philosophy, especially the Critique of Pure Reason.</td>
</tr>
<tr>
<td>PHP 4740</td>
<td>The Rationalists - 6A MW(3) ASPHI</td>
<td>A careful study of the metaphysics and epistemologies of Descartes, Spinoza, Leibniz, and Malebranche.</td>
</tr>
<tr>
<td>PHP 4745</td>
<td>The Empiricists - 6A AS PHI</td>
<td>A careful study of the metaphysics and epistemologies of Locke, Berkeley, Hume, and Thomas Reid.</td>
</tr>
<tr>
<td>PHP 4784</td>
<td>Analytical Philosophy - 6A ASPHI</td>
<td>A study of the methods directed to clarifying philosophical problems through analysis of the language in which these problems are stated.</td>
</tr>
<tr>
<td>PHP 4788</td>
<td>Philosophy of Marxism - 6A MW(3) ASPHI</td>
<td>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.</td>
</tr>
<tr>
<td>PHT 5021</td>
<td>Professional Issues - (2) ME PHT</td>
<td>An examination of the formulations of reasoning, decision making, professional expression, responsibility, and accountability (including legal/ethical concepts), culture and argumentation for the roles of the physical therapist in administration, consultation, critical inquiry, education and patient/client management. Restricted to majors.</td>
</tr>
</tbody>
</table>
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 implications. Restricted to majors.

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.

Focus on physiology of the peripheral sensorimotor and cardiopulmonary systems. Restricted to majors.

Emphasis on physiology of the peripheral sensorimotor and cardiopulmonary systems. Restricted to majors.

Foundational principles of histology, pathology, histophathology, applied biomechanics, pharmacology and clinical medicine are introduced and applied to the physical therapy management of individual musculoskeletal disorders involving the limbs. Restricted to majors.

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.

Learners apply principles of patient/client management to patients with progressive, non-progressive diseases and injuries of the nervous system. Restricted to majors.

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.

Introduction to physical therapy skills used in examination, evaluation, and intervention of patients with activity-related 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.

Initial clinical experience practice for the development of patient care skills. The course is graded Satisfactory/Unsatisfactory. Restricted to majors.

Directed independent study, content to be decided. Restricted to majors.

No credit for Physics or Mathematics majors. A qualitative, non-calculus based general physics course. No credit for both the PHY 2053 and PHY 2048L courses. First semester of a two-semester sequence of general physics (mechanics, wave motion, sound, electricity, magnetism, optics, modern physics) for physics and science students.

Must be taken concurrently with lecture and, if dropped, then dropped simultaneously. May not receive credit for both the PHY 2053 and PHY 2048L courses. First semester of a two-semester sequence of general physics (mechanics, heat, wave motion, sound, electricity, magnetism, optics, modern physics) for physics and science students.

Must be taken concurrently with lecture and, if dropped, then dropped simultaneously. May not receive credit for both the PHY 2053 and PHY 2048L courses. First semester of a two-semester sequence of general physics (mechanics, heat, wave motion, sound, electricity, magnetism, optics, modern physics) for physics and science students.
PHZ 4324 Electricity and Magnetism II - (3) AS PHY
PR: PHY 3323, PHY 4222; CR: MAP 2302. Continuation of PHY 3323C. Introduction to special relativity, magnetic fields and potentials, nuclear materials, RL and RLC circuits, Maxwell’s equations and applications. Laboratory.

PHZ 4523 Statistical Physics - (3) AS PHY
PR: PHY 4523. Not for major credit. 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 equipment (oscilloscopes, digital multimeters, etc.)

PHZ 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: CI. 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 and 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 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
PR: 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 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 5115 Methods of Theoretical Physics I - (3) AS PHY
PR: MAP 2302 or CI. 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 CI. 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 5420 or CI. 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 CI. 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. 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 5426.

PHZ 5505 Plasma Physics I - (3) AS PHY
PR: PHY 4324 or CI. Introduction to Boltzmann, magnetohydrodynamics and orbit approaches to plasmas. Longitudinal and electromagnetic waves in plasmas. Collisions and radiation, instabilities.

POL 1120 Beginning Polish I - (4) AS WLE
CR: POL 1120 or equivalent. CR: POL 1121L. This course continues the four basic skills of POL 1120, with continued emphasis on structures, analogues, readings, dictation, and vocabulary-building. Knowledge of Russian can help. S/U available.

POL 1121L Beginning Polish Laboratory - (1-5) AS WLE
CR: POL 1120L. 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 1122 Beginning Portuguese I - (4) AS WLE
Departmental approval required. S/U only. Permits study options in Polish not available in regularly scheduled curriculum at departmental discretion.

POR 2200 Intermediate Portuguese I - (3) AS WLE
POR 2200 builds upon the four language skills (speaking, comprehension, reading, and writing) introduced in POR 1120 and POR 1121.

POR 2201 Intermediate Portuguese II - (3) AS WLE
For language students who intend to attain basic proficiency.

POS 2041 American National Government - (5) AS POL
Analysis of the structure and function of state and local governments, of the social and political influences that shape them, and of the dynamics of their administrative processes.

POS 3342 Introduction to Urban Politics and Government - (3) AS POL
Governmental and political structures and processes as they function in urban areas, with special focus on municipalities and in socially based public policy making.

POS 3173 Southern Politics - (3) AS POL
Examines changes in electoral politics in the South, and 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. Special emphasis is given 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, executive, 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 understanding of legal aspects of sex and sex-based discrimination as embodied in statutory 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. U/S 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.

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, 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 4094 Contemporary Political Thought - (3) AS POL
Examines various political and philosophical 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 4861 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.

PSY 4004 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.

PSY 4011 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.

PSY 4041 Psychological Science I - SS (3) AS PSY
A broad survey of psychology for both majors and non-majors with special emphasis on the more applied areas of psychology (e.g., social psychology, abnormal psychology, personality, and developmental psychology).

PSY 3044 Psychological Science II - SS (3) AS PSY
PR: PSY 3012. 2003-2004 UNDERGRADUATE CATALOG. Designed as an in-depth examination of the basic principles and concepts of psychological science. Extensive coverage of topics such as learning, perception, physiological psychology, and cognition.

PSY 3213 Research Methods in Psychology - (4) AS PSY
PR: PSY 2012 with a grade of C or better or CI. This course covers the logic of experimental design, data analysis, and the analysis of experimentally obtained data. The laboratory section provides experience applying the concepts discussed in lecture. Two lectures plus two-hour lab. May be taken concurrently with PSY 3044.

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: CI. U/S only. 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.

PSY 4931 Selected Topics in Psychology - (3) AS PSY
PR: 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: Admission to honors program in psychology and CI. May not count for major credit. The student, under supervision of a faculty member, will formalize, conduct, analyze, and report in writing a research project in psychology.
PSY 4923 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 - (3) AS PSY
PR: 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 formalize, conduct, analyze, and report in writing a project in psychology.

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(5) 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 565 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 2002. 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: MMC 2100 and MMC 3602. 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 the discipline and contemporary issues.

QMB 2100 Business And Economic Statistics I - 6A QM (3) BA 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) BA QMB
PR: MAC 2224 or MAC 3243. Simple linear regression and correlation; multiple regression and model building; forecasting models; analysis of variance; chi-square tests; nonparametric methods.

RCS 3030 Rehabilitation Counseling Issues in Alcoholism and Other Addictions - (3) AS REH

RCS 3035 Rehabilitation Counseling: Concepts and Applications - (3) AS REH
PR: CI. Introduction to the profession of Rehabilitation Counseling and current issues in the field. Coverage includes rehabilitation history, legislation, case management and related services for Americans with disabilities.

RCS 5080 Medical Aspects of Disability - (3) AS REH
PR: RCS 5700 or CP. A survey of medical conditions and disabilities encountered by rehabilitation and mental health counselors. Examines the relationship of client handicaps, physical and mental, to rehabilitation and mental health programming.

RCS 5404 Foundations of Mental Health Counseling - (3) AS REH
PR: CI. 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.

RCS 5406 Human Growth and Development - (3) AS REH
PR: RCS 5700, RCS 5404. Majors only. Human development theory as applied in psychotherapy and case management rehabilitation, mental health, and addiction settings.

RCS 5700 Legal, Ethical, Professional Standards and Issues in Counseling - (3) AS REH

RCS 5700 Legal, Ethical, Professional Standards and Issues in Counseling - (3) AS REH

RCS 5802 Practicum I - (1) AS REH
PR: Majors Only. Must be taken concurrently with RCS 5406. S/U. Supervised experience and practice in counseling in various rehabilitation and mental health settings for a minimum of 120 hours.

RCS 5905 Directed Studies - (1-4) AS REH
PR: CI. Supervised rehabilitation studies under the direction of a faculty member.

REA 1105 Advanced Reading - (3) AS ENG
Designed to help students develop maximum reading efficiency. The course includes intensive instruction and laboratory practice in the improvement of adequate rates of reading, vocabulary, and comprehensive skills. An independent study approach is also available for students who prefer to assume responsibility for their own progress toward the English major.

REA 1605 Learning Strategies Within Academic Disciplines - (2) AS ENG
To provide within any academic discipline the necessary learning strategies needed for success related to academic coursework. Practice of learning strategies will be within the framework of the student’s course work, providing direct transfer to academic area material. Will not be counted toward the English major.

REA 2505 Vocabulary - (3) AS ENG
A practical course in rapid vocabulary improvement for students in all areas. Stress is on words in context. Will not be counted toward the English major.

REA 2930 Selected Topics: Learning Strategies - (1-4) AS ENG
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
For admission to College 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 support reading development and reading in all areas. Stress is on words in context. Will not be counted toward the English major.

RED 4511 Literacy in the Intermediate Grades - (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 reading and writing in literacy learning. Based on individual student profiles, teachers will design instruction to enhance literacy development.

REE 3043 Real Estate Decision Making - (3) BA FIN
PR: FIN 3402. Acquaints students with the range of knowledge required to engage in real estate decision-making in the United
REL 3146 Womanist Vision in Religion - (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 3155 Life After Death - (3) AS REL
An exploration of ideas about life after death and its relations to this life in Judaism, Christianity, Islam, Hinduism, and Buddhism.

REL 3170 Religion, Ethics and Society Through Film - (6) SS HP AF (3) 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 3280 Biblical Archaeology - (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 - (3) AS REL
This course is framed within the academic study of religion, and it is not concerned with contemporary political differences in the Middle East. It treats as Islam the normative statements of the Qur an and related traditions, and as Judaism the authoritative statements of the Torah, oral and written.

REL 3310 World Religions - (3) AS REL
A comparison of the ideas, the literature and institutions of the major religions of the world including Judaism, Christianity, Islam from the Near East and Hinduism, Taoism, Confucianism, and Buddhism from the Far East. General comparison of Western and Eastern beliefs.

REL 3330 The Religions of India - (3) AS REL
All religions of the world came to India and all became Indian. What is this"Indianness" 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 3362 Introduction to Islam - (3) AS REL
A cross-cultural exploration of the major religions of the world, from Judaism, Christianity, Islam, Taoism, Confucianism, and Buddhism to the Far East. General comparison of Western and Eastern beliefs.

REL 3367 Islam in the Modern World - (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 3371 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 3372 Religion in America - (3) AS REL
A course designed to allow the student to survey the wide spectrum of contemporary sects and cults in America and learn what motivates their development.

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 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 3425 Religion and the Meaning of Life - (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 3501 History of Christianity - (3) 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 3561 Roman Catholicism - (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 3600 Introduction to Judaism - (3) AS REL
An introduction to Judaism: its religious tenets, its codes of ethics, its rites and customs.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>REL 3602</td>
<td>Classics of Judaism - 6A MW (3) AS REL</td>
<td>3</td>
</tr>
<tr>
<td>REL 3611</td>
<td>History of Judaism - (3) AS REL</td>
<td>3</td>
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<tr>
<td>REL 3613</td>
<td>Modern Judaism - 6A MW LW (3) AS REL</td>
<td>3</td>
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<tr>
<td>REL 3801</td>
<td>History of Writing - (2) AS REL</td>
<td>2</td>
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<tr>
<td>REL 3900</td>
<td>Directed Readings - (1-4) AS REL</td>
<td>1-4</td>
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<tr>
<td>REL 3936</td>
<td>Selected Topics - (1-4) AS REL</td>
<td>1-4</td>
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<tr>
<td>REL 4113</td>
<td>The Hero and Religion - WM (3) AS REL</td>
<td>3</td>
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<tr>
<td>REL 4161</td>
<td>Religion, Technology and Society - (3) AS REL</td>
<td>3</td>
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<tr>
<td>REL 4171</td>
<td>Contemporary Christian Ethics - 6A MW(4) AS REL</td>
<td>4</td>
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<tr>
<td>REL 4177</td>
<td>Comparative Religious Ethics - 6A MW LW (4) AS REL</td>
<td>4</td>
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<tr>
<td>REL 4215</td>
<td>Ancient Israel and the Development of the Hebrew Bible - 6A HP AF MW LW (3) AS REL</td>
<td>3</td>
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<td>REL 4218</td>
<td>Women and the Bible - 6A HP AF MW LW (3) AS REL</td>
<td>3</td>
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<tr>
<td>REL 4250</td>
<td>Jesus' Life and Teachings - (4) AS REL</td>
<td>4</td>
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<tr>
<td>REL 4333</td>
<td>Hinduism - (4) AS REL</td>
<td>4</td>
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<tr>
<td>REL 4344</td>
<td>Buddhism in India, Sri Lanka, and South East Asia - (4) AS REL</td>
<td>4</td>
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<tr>
<td>REL 4462</td>
<td>Reason in Religion: Talmudic Logic - W (3) AS REL</td>
<td>3</td>
</tr>
<tr>
<td>REL 4670</td>
<td>Judaism and Christianity After the Holocaust - 6A MW LW (4) AS REL</td>
<td>4</td>
</tr>
<tr>
<td>REL 4900</td>
<td>Undergraduate Research - (1-4) AS REL</td>
<td>1-4</td>
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<tr>
<td>REL 4930</td>
<td>Selected Topics - (3) AS REL</td>
<td>3</td>
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<tr>
<td>REL 4931</td>
<td>Seminar in Religion - (3) AS REL</td>
<td>3</td>
</tr>
<tr>
<td>REL 4939</td>
<td>The Development of Religious Studies - (3) AS REL</td>
<td>3</td>
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<tr>
<td>RMI 3011</td>
<td>Principles of Insurance - (3) BA FIN</td>
<td>3</td>
</tr>
<tr>
<td>RMI 4115</td>
<td>Life, Health, And Disability Insurance - (3) BA FIN</td>
<td>3</td>
</tr>
<tr>
<td>RMI 4210</td>
<td>Property Insurance - (3) BA FIN</td>
<td>3</td>
</tr>
<tr>
<td>RMI 4220</td>
<td>Casualty Insurance - (3) BA FIN</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course Descriptions:**

**REL 3602 Classics of Judaism - 6A MW (3) AS REL**

One course in Religious Studies, How to read the principal documents of Judaism beyond the Old Testament, particularly the Mishnah, Talmuds, and Midrash.

**REL 3611 History of Judaism - (3) AS REL**

A study of the evolution of the religion of ancient Israel from the Exodus to the end of the second century of our era, 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 Jewish life in the West since 1789, emphasizing Jewish beliefs, practices, and institutions.

**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**

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 - WM (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 - M W (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 interact 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**

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 Gandhi and M. L. King Jr., and ecosystemic theorists, 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 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.

**REL 4221 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.


An exploration of the Gospels and Acts, including their backgrounds in Judaism and pagan 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 4333 Hinduism - (4) AS REL**

The philosophy of the sants; the complex rituals of the Brahmins; the philosophy of its temples; the psychology and physiology of yoga; the social rigidity of the caste system; the esoteric science of meditation; the ascetic activism of Mahatma Gandhi—all of these are Hinduism, and more. Close readings of classical texts, philosophical systems and meditation.

**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 interactions, and development of these cultures.

**REL 4462 Reason in Religion: Talmudic Logic - W (3) AS REL**

Analyses 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 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. Offers 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 4939 The Development of Religious Studies - (3) AS REL**

Course designed for senior majors and minors in religious studies. Discussion of key approaches and methodological advances in the development of the field from the 18th century to present, with readings of classics in the development.

**RMI 3011 Principles of Insurance - (3) BA FIN**

Analysis of insurables risks of both business and individuals. An examination of the characteristics of those areas of risk and uncertainty where the mechanisms of insurance are effective alternatives. The concept, contracts, and institutions involved in insurance are examined in relationship to the socio-economic environment.

**RMI 4115 Life, Health, And Disability Insurance - (3) BA FIN**

PR: QMB 3200, RMI 3011. The course will analyze the use of life, health, and disability insurance contracts as a method of dealing with the financial risks of death, sickness, and disability. It will include an analysis of cost determination of the various types of coverage.

**RMI 4210 Property Insurance - (3) BA FIN**

PR: RMI 3011. Course dealing with recognition of personal and business property risks, and coverage that can be used in dealing with these risks. Consider the underwriting, marketing, and associated problems associated with these coverages. Topics include commercial and residential fire insurance, inland marine and transportation coverages, and multiperil contracts. Not limited to Finance majors.

**RMI 4220 Casualty Insurance - (3) BA FIN**

PR: RMI 3011. Course dealing with recognition of personal and business casualty risks and coverages that can be used in dealing with these risks. Considers the underwriting, marketing, and social problems associated with these coverages. Topics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department/School</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUT 3100</td>
<td>Russian Classics in English - 6A MW L(3) AS WLE</td>
<td>3</td>
<td>AS WLE</td>
<td>Masterpieces of 19th century Russian literature in English. The major works of Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Elective for all students in all departments.</td>
</tr>
<tr>
<td>SCE 4326</td>
<td>Science, Technology, Society Interaction - 6A MW(4)</td>
<td></td>
<td>ED EDN</td>
<td>Achieve a 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.</td>
</tr>
<tr>
<td>RUS 3500</td>
<td>Russian Civilization - 6A MW(3) AS WLE</td>
<td>3</td>
<td>AS WLE</td>
<td>A survey of the cultural history of Russia.</td>
</tr>
<tr>
<td>RUT 3401</td>
<td>Conversation II - (4) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: Previous course in series or equivalent. Development of conversational skills.</td>
</tr>
<tr>
<td>RUS 3402</td>
<td>Advanced Russian Conversation &amp; Composition I - (4)</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 4241 or CI. Third year Russian.</td>
</tr>
<tr>
<td>RUS 3403</td>
<td>Advanced Russian Conversation &amp; Composition II - (4)</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 4241 or CI. Third year Russian.</td>
</tr>
<tr>
<td>RUS 4241</td>
<td>Conversation II - (4) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 4241 or CI. Third year Russian.</td>
</tr>
<tr>
<td>RUS 4402</td>
<td>Advanced Russian Conversation &amp; Composition I - (4)</td>
<td></td>
<td>AS WLE</td>
<td>PR: Previous course in series or equivalent. Development of conversational skills.</td>
</tr>
<tr>
<td>RUS 4403</td>
<td>Advanced Russian Conversation &amp; Composition II - (4)</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 4241 or CI. Third year Russian.</td>
</tr>
<tr>
<td>RUS 4471</td>
<td>Overseas Study - (1-6) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>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.</td>
</tr>
<tr>
<td>RUS 4900</td>
<td>Selected Topics - (1-3) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>Departmental approval required.</td>
</tr>
<tr>
<td>RUT 4130</td>
<td>Russian Literature: Masterpieces of 20th Century</td>
<td></td>
<td>AS WLE</td>
<td>Masterpieces of 20th century Soviet literature in English, the major works of Bely, Olesha, Babel, Zamytin, Bulgakov, Pasternak, and Solzhenitzen. Elective for all students in all departments.</td>
</tr>
<tr>
<td>RTV 4300</td>
<td>Telecommunications Law and Policy - (3) AS COM</td>
<td>3</td>
<td>COM</td>
<td>PR: for broadcast news option: MMC 4200, POS 2112 or POS 3140, RV 3001, and RTV 3301; for production option: RTV 2100 or RTV 3301, RV 3001 and RTV 4500. Senior Standing. A study of the electronic media from the perspective of governmental regulation and the political process with special emphasis on how regulatory policy is determined.</td>
</tr>
<tr>
<td>RUS 4242</td>
<td>Reading and communication skills important in</td>
<td></td>
<td>AS WLE</td>
<td>Reading and communication skills important in understanding scientific and science education literature and communicating findings to others.</td>
</tr>
<tr>
<td>RUS 1210</td>
<td>Beginning Russian I - (4) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 1120 or CI; CR: RUS 1121. The first course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.</td>
</tr>
<tr>
<td>RUS 1121</td>
<td>Beginning Russian II Laboratory - (1) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 1120 or CI; CR: RUS 1121. The second course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.</td>
</tr>
<tr>
<td>RUS 2200</td>
<td>Russian III - (4) AS WLE</td>
<td></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>RUT 3101</td>
<td>RUS 2210</td>
<td>3</td>
<td>AS WLE</td>
<td>PR: RUS 2200 or equivalent. Review and development of basic skills in conversation, composition, and reading.</td>
</tr>
<tr>
<td>RUS 2270</td>
<td>Overseas Study - (1-6) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>Intensive study abroad in 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 4325</td>
<td>Conversation I - (4) AS WLE</td>
<td></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 - (1-6) AS WLE</td>
<td></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 and Russia. Students from other institutions eligible.</td>
</tr>
<tr>
<td>SLS 1101</td>
<td>The University Experience - (2) ED EDG</td>
<td></td>
<td>EDG</td>
<td>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.</td>
</tr>
<tr>
<td>RUS 1210</td>
<td>Beginning Russian I Laboratory - (1) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 1120 or CI; CR: RUS 1121. The second course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.</td>
</tr>
<tr>
<td>RTV 4300</td>
<td>Telecommunications Programming and Management - (3)</td>
<td></td>
<td>COM</td>
<td>PR: RV 3001 and CI; CR: RV 3001. Advanced producing, scripting, lighting, camera, and editing for video and news production. Introduction to computer editing and graphics.</td>
</tr>
<tr>
<td>RTV 4700</td>
<td>Electronic Field Production - (3) AS COM</td>
<td>3</td>
<td>COM</td>
<td>PR: RV 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>RUS 1120</td>
<td>Beginning Russian I - (4) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 1120 or CI; CR: RUS 1121. The second course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.</td>
</tr>
<tr>
<td>RUT 5100</td>
<td>RUS 2210</td>
<td>3</td>
<td>AS WLE</td>
<td>PR: RUS 2200 or equivalent. Review and development of basic skills in conversation, composition, and reading.</td>
</tr>
<tr>
<td>RUS 1121</td>
<td>Beginning Russian II Laboratory - (1) AS WLE</td>
<td></td>
<td>AS WLE</td>
<td>PR: RUS 1120 or CI; CR: RUS 1121. The second course in the study of elementary Russian. Emphasis on the development of basic skills in comprehension, speaking and reading.</td>
</tr>
<tr>
<td>RUS 2200</td>
<td>Russian III - (4) AS WLE</td>
<td></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>
</tbody>
</table>
SOW 3101 Human Behavior and the Social Environment I - (4) US STL
Students will study vocational choice theories and participate in career decision processes. Development of self-awareness and knowledge of career opportunities and requirements is necessary for decision making. Available to lower level majors or non-majors.

SLS 2401 Career Development Process - (2) US STL
PR: SLS 2260. Survey of historical and contemporary writings on leadership skills and practices. Examines the contextual manner in which the leader functions.

SLS 4273 Theories of Leadership - (3) US STL
PR: SLS 2260, PR: SLS 4272. Course focuses on historical and modern views of leadership. Designed to assist students in establishing a general understanding of leadership theories and styles as well as the effects of various leadership theories in specific settings.

SLS 4274 Ethics and Power in Leadership - (3) US STL
PR: SLS 2260, PR: SLS 4272. Course reviews arguments for ethics in leadership as proposed by both contemporary and ancient leadership theories. It also examines theories of power and authority, and seeks answers to the apparent dilemmas through applied moral theory and psychology.

SLS 4276 Images of Leadership in Print and Film - (3) US STL
PR: SLS 2260, PR: SLS 4272. This course examines the historical development of leadership theory through contemporary times. Surveys literature and other media relevant to role of the leader and to the development and application of leadership skills.

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 4335 Social Psychology of HIV/AIDS - (3) AS PSY
PR: PSY 3213. This course studies social psychology theory and research while working at an AIDS service organization. They use the research as a framework for understanding, and developing solutions to, problems confronting the organization’s staff and clients.

SOP 4514 The Holocaust, Social Prejudice, and Morality - (3) AS PSY
PR: PSY 3213. 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) AS 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 families, groups, organizations, and communities. Effective leadership skills are examined.

SOW 3102 Human Behavior And The Social Environment II - (4) AS SOK
PR: SOW 3101, SOW 4522, SOW 4341. 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. Effective leadership skills are examined.

SOW 3203 The American Social Welfare System - SS(3) AS 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 3302 Introduction to Social Work - (3) AS 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 3401 Research and Statistics For Social Work - (4) AS SOK
PR: All provisional major courses. 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 - (4) AS SOK
PR: All provisional major courses, SOW 3101, SOW 3401, SOW 4341, SOW 4522, SOW 3102, SOW 3434. 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) AS 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 skills and interventive methods with individuals, families, and small groups. Course includes both didactic and experiential learning components.

SOW 4343 Multi-Methods of Social Work Practice II: Macro-System Intervention - (5) AS SOK
PR or CR: SOW 3101, SOW 4522. All provisional major courses. 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) AS SOK
PR: SOW 3101, SOW 3401, SOW 4341, SOW 3102, SOW 3434, 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) AS SOK
PR: SOW 3302, SOW 3203, SOW 3101, SOW 4341, SOW 3102, SOW 4522, SOW 3434, CR: SOW 4233, SOW 4510L. 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) AS SOK
PR: All provisional major courses. The course focuses on the students’ understanding of multicultural and intergenerational issues.

SOW 4900 Directed Readings - (1-9) AS 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) AS 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 student 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) AS 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 and professional development.

SOW 5930C Selected Topics in Social Work - (1-4) AS SOK
PR: CC. Restricted to Social Work majors, both graduate and undergraduate; others by School permission. Course is taken as an elective. Various title courses will selectively expand specific social work content areas.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 3660L</td>
<td>Introduction to Interpreting in Public Schools Lab</td>
<td>(1) AS CSD</td>
<td>PR: Admission to ITT Program. CR: SPA 3660. The lab assists students in assessing and improving their interpreting and transliterating skills through videotapes of simulated interpreting assignments.</td>
</tr>
<tr>
<td>SPA 3673</td>
<td>Introduction to Auditory Functions</td>
<td>(3) AS CSD</td>
<td>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 emphasizes the auditory and speech problems among children who have hearing impairment. It addresses techniques and methods of hearing measurement and enhancement of sound as well as the interpreter’s role in audiological evaluation and speech language therapy.</td>
</tr>
<tr>
<td>SPA 4000</td>
<td>Communication Disorders in the Public Schools</td>
<td>(3) AS CSD</td>
<td>PR: DPR. (Non-major course) 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.</td>
</tr>
<tr>
<td>SPA 4050</td>
<td>Introduction to the Clinical Process</td>
<td>MW(3) AS CSD</td>
<td>PR: SPA 3004 and SPA 3310. Observation and participation in speech-language pathology and audiology practicum in the University clinical laboratory. Ethical issues, multicultural concerns, and creativity are stressed through clinical and practical projects.</td>
</tr>
<tr>
<td>SPA 4201</td>
<td>Phonological Development and Disorders</td>
<td>(3) AS CSD</td>
<td>PR: SPA 3004, SPA 3310. An examination of normal and disordered articulatory and phonological development and behavior. Presentation of major theoretical orientations and the therapeutic principles based upon them.</td>
</tr>
<tr>
<td>SPA 4211</td>
<td>Local Disorders</td>
<td>(3) AS CSD</td>
<td>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 presented. Major theories and models of the development and origin of stuttering are also presented.</td>
</tr>
<tr>
<td>SPA 4222</td>
<td>Fluency Disorders</td>
<td>(3) AS CSD</td>
<td>PR: SPA 4201. A comprehensive study of fluent speech behavior. Differential diagnosis, principles of therapeutic intervention, and procedures for children and adults will be presented. Major theories and models of the development and origin of stuttering are also presented.</td>
</tr>
<tr>
<td>SPA 4335</td>
<td>Sign Language Codes</td>
<td>(3) AS CSD</td>
<td>PR: SPA 4335. Sign Language Codes (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.</td>
</tr>
<tr>
<td>SPA 4355</td>
<td>Counseling of Communicatively Handicapped and</td>
<td>(3) AS CSD</td>
<td>PR: SPA 3011 and SPA 3310. Discussion of role of counseling in the treatment of communication disorders. Based on exploration of course materials and techniques of therapeutic methodologies to reduce communication handicaps.</td>
</tr>
<tr>
<td>SPA 4613C</td>
<td>Intermediate American Sign Language</td>
<td>(4) AS CSD</td>
<td>PR: SPA 4613C. A continuation of the study of American Sign Language (ASL) at the advanced level. This course explores the structure and function of ASL, including kinesthetics and spatial relationships. The student will have the opportunity to practice the sign system.</td>
</tr>
<tr>
<td>SPA 4614C</td>
<td>Advanced American Sign Language</td>
<td>(4) AS CSD</td>
<td>PR: SPA 4614C. A continuation of the study of American Sign Language (ASL) at the advanced level. This course explores the structure and function of ASL, including kinesthetics and spatial relationships. The student will have the opportunity to practice the sign system.</td>
</tr>
<tr>
<td>SPA 4615C</td>
<td>American Sign Language</td>
<td>(4) AS CSD</td>
<td>PR: SPA 4615C. A continuation of the study of American Sign Language (ASL) at the advanced level. This course explores the structure and function of ASL, including kinesthetics and spatial relationships. The student will have the opportunity to practice the sign system.</td>
</tr>
<tr>
<td>SPA 4616C</td>
<td>American Sign Language</td>
<td>(4) AS CSD</td>
<td>PR: SPA 4616C. A continuation of the study of American Sign Language (ASL) at the advanced level. This course explores the structure and function of ASL, including kinesthetics and spatial relationships. The student will have the opportunity to practice the sign system.</td>
</tr>
<tr>
<td>SPA 4617C</td>
<td>Structure of Sign Language</td>
<td>(3) AS CSD</td>
<td>PR: SPA 4383 and SPA 4615L. A comprehensive introduction to the linguistic structure of American Sign Language (ASL). Topics include phonetics and phonemes; phonological processes; the identification, structure, and distribution of morphemes and the application of syntactic augmentation; detailed examination of the major syntactic structures of ASL; and the place of phonology, morphology, and syntax in the larger context of grammar.</td>
</tr>
</tbody>
</table>
SPC 2600 Public Speaking - (3) AS SPE
PR: Junior standing or CI. Study of principles of argumentation and research in 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: Junior standing or CI. Study of principles of argumentation and research in improving speaking and listening skills common to all forms of oral communication through a variety of experiences in public discourse.

SPC 3429 Group Communication - (3) AS SPE
PR: Junior standing 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 2600 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 - (3) AS SPE
Survey of the rhetorics associated with the civil rights movement, the women's movement, the anti-Vietnam War movement, the counterculture, the black power movement, and the women's movement.

SPC 3633 Popular Forms of Public Communication - (3) AS SPE
PR: Junior standing or CI. Analysis of public communication with emphasis on various presentational forms.

SPC 3800 Rhetorical Analysis - (3) AS SPE
This course introduces students to fundamentals of message analysis. Students examine persuasive strategies and language in oral and written discourse.

SPC 3710 Communication and Cultural Diversity - (3) AS SPE
Examination of communication and cultural diversity within the United States. Cultural groups include racial and ethnic (e.g.,...
SPN 1120L Beginning Spanish I Laboratory - (1) AS WLE
CR: SPN 1120L. 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 1121 Beginning Spanish II - (4) AS WLE
PR: 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.

SPC 4970 Honors Thesis - (3) AS SPE
PR: Admission to Communication Honors Program. Focused development of writing skills and independent research and study leading to the preparation of a thesis. Involves planning, research, analysis, and written thesis. InvolvesLI. Encourages students to develop their ability to communicate ideas effectively through various forms of written expression.

SPC 4932 Senior Seminar in Communication - (3) AS SPE
PR: Senior standing, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Maximum 6 hours. Individual investigations with faculty supervision.

SPC 4900 Directed Readings - (1-3) AS SPE
PR: Senior standing, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Maximum 6 hours.

SPC 4903 Honors Readings - (3) AS SPE
PR: Admission to Communication Honors Program. Focused readings directed toward preparation of a proposal for an undergraduate honors thesis.

SPC 4905 Undergraduate Research - (1-3) AS SPE
PR: Senior standing, minimum GPA 2.5, 15 hours of core requirements and 9 elective hours completed, and CI. Maximum 6 hours. 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, minimum GPA 3.0, 15 hours of core requirements and 9 elective hours completed, and CI. Communication major. 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.

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 and reading comprehension, 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.
This course is designed to study techniques and strategies employed by social sciences teachers that are effective in motivating teenage 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 materials that achieve concrete outcomes. Theoretical foundations of social studies covering topics such as motivation, instructional strategies, and technology in instruction are also examined.

SSE 4334 Teaching Secondary Grades Social Science - (3) ED EDW
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 Global and Multicultural Perspectives in Education - (3) ED EDW
PR: EDG 1004 or EDG 1002 or DPR. Examination of the major issues surrounding global and multicultural perspectives in education. Available to non-Education majors.

SSE 4940 Communication Skills in the Social Sciences - (2) ED EDW
PR: SSE 4933, SSE 4934. This course emphasizes preparation for instruction and demonstration of instructional techniques in social sciences courses such as SSE 4333 and SSE 4334 with an emphasis on students developing their communication, presentation, and organizational skills.

SPT 2524 Women Writers of Latin America - (AF) (3) AS WLE
Literature of Latin-American women (in translation). Topics related to race and ethnicity, values and ethics, social, economic, and political issues. Readings will include oral histories, interviews, diaries and memoirs, poetry, short stories, and novels.

SPW 3030 Introduction to Hispanic Literature - (3) AS WLE
PR: SPW 2201 or equivalent. Prose fiction, drama, poetry, and essay; techniques of literary analysis. Emphasis on the gaucho theme and contemporary prose fiction.

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.

SPW 4101 Survey of Spanish Literature II - (3) AS EDW
PR: SPW 3030 or equivalent. A study of the later periods of Spanish literature.

SPW 4131 Survey of Spanish-American Literature - (3) AS WLE
PR: SPW 3030 or equivalent. An introduction to the study of Spanish-American literature from the Modernism period to the present. Emphasis on modern writers since Dario.

SPW 4900 Directed Study - (1-3) AS WLE
Departmental approval required.

SPW 4930 Selected Topics - (1-3) AS WLE
Study of an author, movement or theme.

SPW 5135 Colonial Spanish American Literature - (3) AS WLE
PR: SPW 4131. Introduction to Colonial Spanish American Literature from the discovery through the Romantic Period.

SPW 5335 Spanish American Drama and Poetry - (3) AS WLE
PR: SPW 4131. Major writers of all genres. Emphasis on modern writers.

SPW 5337 Spanish American Prose - (3) AS WLE
PR: SPW 4131. Emphasis on the gaucho theme and contemporary prose fiction.

SPW 5405 Medieval Literature - (3) AS WLE
PR: SPW 4100 or equiv. Course gives an in-depth study of principal works and authors of the period such as El Poema de Mio Cid, Libro de Buen Amor, and La Celestina.

SPW 5465 19th Century Literature - (3) AS WLE

SPW 5605 Cervantes - (3) AS WLE
Cervantes’ masterpiece Don Quijote de la Mancha.

SPW 5725 Generation of 1898 - (3) AS WLE
PR: SPW 4101. The major figures of the period and their main followers.

SPW 5726 Vanguard Literature 1918 and 1936 - (3) AS WLE

SPW 5934 Selected Topics - (3) AS WLE
PR: Upper-level or GS. Study of an author, movement, or theme.

SSE 4313 Teaching Elementary Grades Social Studies - (3) ED EDE
PR: Admission to College of Education or CI. This course is designed to study techniques and strategies employed by social studies teachers that are effective in motivating students of the early childhood through elementary school ages 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 materials that achieve concrete outcomes. Theoretical foundations of social studies are also examined.

SSE 4333 Teaching Middle Grades Social Science - (3) ED EDW
This course is designed to study techniques and strategies employed by social sciences teachers that are effective in motivating students 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 materials that achieve concrete outcomes. Theoretical foundations of social studies are also examined.
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 correlation, regression. 

STA 2023 Probability and Statistics I - (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. No credit for Math Majors. 

STA 2023 Probability and Statistics II - (3) AS MTH 
PR: STA 2023 or CC. Factorials, ANCOVA; multiple curvilinear regression; response surfaces; Latin squares, Split Plots, randomized blocks; distribution free methods.

STA 4321 Probability and Statistics I - (3) AS MTH 

STA 5166 Computational Statistics I - (3) AS MTH 
PR: MAG 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 Computational Statistics II - (3) AS MTH 
PR: STA 4321 and CGS 3422, or CI. Statistical analysis of data by means of statistics 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 - (3) AS MTH 
PR: STA 5446. Sample distribution theory, point & interval estimation, quality control, 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 space, 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 CI. Theory and methods of non-parametric statistics, order statistics, tolerance regions, and their applications.

SUR 2101C Engineering Land Surveying - (3) EN GE EX 
Principles of land surveying for engineering practice. Traverses, levels, boundary surveys, route surveys, coordinate geometry, and mapping.

SYA 3010 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 3015 Contemporary Theory - (3) AS SOC 
PR: SYA 3010 and SYG 2000 or CI. An examination of recent trends in sociological theory. Emphasis is on the latest theories examining symbolic interactions, lived experience, popular culture, and social structures.

SYA 3021 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.

SYA 3509 Research Methods I - (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 - (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.

SYA 4910 Individual Research - (1-3) AS SOC 
PR: Four courses in sociology, including SYA 3300, upper level standing, at least 3.0 overall GPA, or CI. DPR. Content depends on the interest of the student. A contract between the student and the sponsoring faculty member must be signed before class registration.

SYA 4930 Topics in Sociology - (3) AS SOC 
Selected specialized topics in Sociology. Topics such as AIDS in society, drugs in society, AIDS in education, sociology of childhood, public life, sociobiology. Content will vary by semester and by section. See class schedule for specific contents each semester. This course, in different content areas, may be repeated for credit.

SYA 4935 Senior Seminar - M W (3)AS SOC 
PR: Senior standing. SYG 2000. SYA 3010, SYA 3300 plus 6 hours of Sociology electives. Majors only. DPR. The opportunity for senior Sociology majors to apply theory and methods to a selected topic of relevance in today's society. Topic changes by instructor.

SYA 4950 Sociological Internship - (1-6) AS SOC 
PR: Senior or graduate standing in Sociology plus CI. Supervised placement in community organization or agency for a minimum of 10 hours of volunteer work per week, and a weekly seminar on the principles and methods in the placement setting.

SYD 3441 Peasant Rural Perspectives - AF (3) AS SOC 
PR: SYG 2000 or 6 hours of other Social Sciences Gen. Ed. coursework or CI. Examines the applicability of sociological concepts to peasant life around the world, and explores the role played by “western” societies in creating and sustaining the conditions under which peasants live.

SYD 3700 Racial and Ethnic Relations - SS HP (3) AS SOC 
Comparative study of racial and ethnic relations, social tensions, attitudes, and modes of adjustment in various areas of the world.

SYD 4410 Urban Sociology - (3) AS SOC 
The social structure of the community in modern industrial societies. Analysis of community change.

SYD 4800 Gender and Society - (3) AS SOC 
Historical and current issues surrounding gender in America. Emphasis on exploring the causes, meaning, and consequences of gender differences, interpersonal relationships, and institutional participation.

SYG 2000 Introduction to Sociology - SS (3) AS SOC 
An introduction to sociological perspectives and methods and the basic areas of sociological interest such as socialization, gender, race and ethnic relations, deviance, social control, and social stratification. Required for Sociology majors and minor.

SYG 2010 Contemporary Social Problems - SS (3) ASSOC 
The analysis and dimensions of major public issues such as crime, the environment, inequality, gender, employment, and substance abuse.

SYG 2412 Marriage - (3) AS SOC 
Study of pre-marital relations. Social, cultural, and personal factors related to success and failure in mate selection and marriage. Does not count for sociology major credit.

SYG 3235 Latina Lives - AF (3) AS SOC 
An exploration of the experiences of Latinas in the United States. Uncover and examine such sociological themes as oppression, migration, work, family, activism, spirituality, and sexuality through short stories, poetry, and scholarly research.

SYO 3126 Sociology of Families - (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 - (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 donations in daily lives, social movements motivated by religious beliefs.

SYO 3500 Social Organization - (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.
THE 2305 Script Analysis - (3) VP TAR
PR: Sophomore standing, THE 2020. This course teaches theatre students the techniques of close reading of dramatic texts.

THE 3110 Theatre History I - MW (3) VP TAR
PR: Sophomore standing, THE 2020. The study of theatrical production in its cultural context, including theatre architecture, scenography, acting and directing. Normally fifteen plays will be read. Required of all theatre majors. Open to upper division non-majors.

THE 3111 Theatre History II - MW (3) VP TAR
PR: Sophomore standing, THE 2020. A study of Theatre History in more detail as a companion to Theatre History I. This course and the companion Theatre History I will offer the opportunity for more careful study and emphasis on particular aspects of cross-cultural theatre in context.

THE 4180 Theatre Origins - 6A MW L/W (3) VP 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 4184 History Of Costume - (3) VP 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) VP TAR
PR: Sophomore standing. Open to upper level non-majors with CI. A course in the function of the script for the theatre artist and the companion Theatre History I will offer the opportunity for reading in more detail as a companion to Theatre History I. This course requires of all theatre majors.

THE 4268 Theatre Of Myth And Ritual/Northern European (950-1600) & Oriental (400-1200) - 6A MW L/W (3) VP 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 L/W (3) VP TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. Close study of selected plays with special emphasis on their performance values.

THE 4360 The 19th Century Theatre Revolution - 6A L/W (3) VP TAR
PR: THE 3110 or THE 3111. Survey of the European art theatre revolution against the romantic realism of the commercial stage and its effect on subsequent theatre activity.

THE 4450 O'Neil And After - 6A MW L/W (3) VP TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. A course in the function of the script for the theatre artist treating materials in the American Theatre from 1915 to 1964.

THE 4453 Caribbean Theatre - (3) VP TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. This course is a study of plays and popular theatrical forms of the Caribbean. The student will investigate the social and political forces that shape the culture of the Caribbean, the residual effects of the colonialism and the turbulence of independence as expressed in the dramatic art and theatre of the English-speaking West Indies.

THE 4455 Theatre Of Pluralism - 6A MW L/W (3) VP TAR
PR: THE 3110 or THE 3111. Open to upper level non-majors with CI. Survey of the practice of theatre as it reflects cultural heritage, gender, race and sexual orientation. Study of contemporary scripts, directors, and artistic developments.

THE 4442 Comedy Of The Classic And Neo-Classical Stage - 6A MW L/W (3) VP 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 4490 Drama-Special Topics - (3) VP 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 L/W (3) VP TAR

THE 4593 Honors Seminar - (2) VP TAR
Enrollment limited to upper level majors who have been formally admitted to the departmental 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) VP 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) VP 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) VP ED
PR: CI. Methods of effective drama and theatre instruction in middle school, junior and high schools, recreation centers, community, and professional theatres.

THE 4930 Directed Study - (1-4) VP 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) VP 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) VP TAR
PR: CI and GCC. 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) VP 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.

TPA 2200 Introduction to Technical Theatre I - (3) VP 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 2211L. Open to non-majors.

TPA 2211 Introduction to Technical Theatre II - (3) VP 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) VP TAR
Beginning theory and practice in makeup for the stage. Open to non-majors. Theatre majors given preference. A studio course.

TPA 2290L Technical Theatre Lab I - (1) VP TAR
CR: TPA 2290 or CI. A practical laboratory involving the 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) VP TAR
CR: TPA 2291 or CI. A practical laboratory involving the 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) VP 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 3008 Directed Study - (3) VP 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.

TPA 3008 Introduction to Design II - (3) VP 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 3208 Drafting and CAD I - (3) VP 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 introduction to the various aspects of design and technical drafting. Required of all Design Track Theatre majors. Open to non-majors.

TPA 3221 Lighting Theory and Practice - (3) VP 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) VP TAR
PR: TPA 3208 or CI. A practical course in the drafting of patterns for costing 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) VP TAR
PR: TPA 2208. Continuation of TPA 2208. 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 drawings. Open to non-majors.

TPA 3265 Sound For The Stage - (3) VP 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) VP 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/cast/skill.

TPA 3401 Stage Management - (2) VP 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) VP 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) VP 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) VP 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: brainstorming, 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) VP 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) VP 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) VP 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) VP 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) VP 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 designing and developing a production design/craft/skill.

TPP 2110 Voice-Body-Improvisation - (3) VP 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 - (3) VP 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 - (2) VP 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) VP TAR
PR: TPP 2110. An intensive study in improvisation as an enhancement of the actor's exercise. Skills 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) VP 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. Required of all theatre majors. May be repeated. Open to non-majors with CI.

TPP 3230 Laboratory Workshop In Performance - (3) VP 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 - (2) VP TAR
PR: TPP 2110 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) VP 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) VP TAR
PR: Audition. All upper 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, and mind and emotions. This course will be team taught by the Performance faculty.

TPP 3921 Acting Studio II - (8) VP TAR
PR: TPP 3920. A continuation of Acting Studio I with greater emphasis on addressing individual needs in order to explore emotionally committed characters and scenes in a systematic way. This course will be team taught by the Performance faculty.

TPP 4140 Styles Of Acting - (3) VP TAR
PR: TPP 3920 or TPP 3921. Examination of the actor's craft and skills needed to fulfill the demands of classical theatre forms.

TPP 4180 Advanced Scene Study - (3) VP 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) VP 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 4220 Audition Workshop For Actors - (2) VP TAR
PR: TPP 3115 or TPP 3921. Preparation for professional audition; discussion of professional objectives.

TPP 4310 Directing I - (3) VP 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.

TPP 4311 Directing II - (3) VP 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.

TPP 4600 Writing For The Theatre - (3) VP TAR
PR: TPP 3110 or TES 3115. 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 full-length plays.

TTP 4920 Senior Workshop For Actors - (3) VP TAR
PR: TPP 2500, TPP 3790, TPP 3155, or TPP 3921. A workshop in advanced vocal and movement techniques. Required of all Theatre majors. May be repeated. Open to non-majors by audition only.

TTP 4955 Music Theatre Workshop - (3) VP 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 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 5321 ESOL Strategies for Content Area Teachers - (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 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
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.

TTE 4004 Transportation Engineering I - (3) EN EGX
PR: EGN 3321. Principles of surface transportation system development, design, and operations; administration, modal characteristics, capacities, and functional classifications; vehicle kinematics, human factors and minimum design standards; traffic flow theory and queuing, capacity and signalization; transportation planning and economics.

TTE 4005 Transportation Engineering II - (3) EN EGX
PR: TTE 4004. Techniques for the geometric route design of surface transportation systems; horizontal and vertical alignments. Spiral curves, superelevations and earthwork analysis; drainage, stability and a rigid pavement design; right-of-way acquisition and Environmental Impacts; site layout & design, and operation of alternate models including bus, air, rail, water, and pipeline facilities and terminals.
TTE 4821 Transportation Systems Design - (2) EN EGX
CR: TTE 4005. Comprehensive surface transportation design laboratory experience involving function design, traffic and facility sizing, complete alignments, site surveying & layout plan and quantity preparation with computerized designed applications.

TTE 5205 Traffic Systems Engineering - (3) EN EGX
PR: TTE 4004 or equivalent. Traffic models, intersection analysis, capacity analysis, data methods, parking studies, volume and speed studies, freeway management, and advanced technologies.

TTE 5501 Transportation Planning and Economics - (3) EN EGX
PR: College Algebra & C. Fundamentals of urban transportation planning, trip generation, modal split, traffic assignment. Introduction to environmental impact analysis, evaluation an choice of transportation alternatives.

URP 5350 City Planning and Community Development - (3) AS PO
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 3402, GEO 3602. The geographic foundations of the modern city, metropolitan development, and the trend toward metropolization are examined. The political jurisdictions at the local, county, state, national, and international levels.

URS 3002 Introduction to Urban Studies - (3) AS ISS
An interdisciplinary introduction to the study 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 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.

WST 2250 Female Experience in America - HP (3) AS WST
The female experience in America, in historical context, with an emphasis on women in families of various classes, races, and ethnic groups from colonial times to 1870.

WST 2600 Human Sexual Behavior - SS (3) AS WST
The dynamics of human sexuality including: biological, constitutional, psychological, and sociological aspects. The range of sexual behavior across groups. Sources of beliefs and attitudes about sex, including sex roles and especially human sexuality.

WST 3000 Intro to Women's Studies - SS AF (3) AS WST
Survey of major issues relevant to the female experience. The women's movement: historical, psychological, sociological, anthropological perspectives.

WST 3210 European Feminist History: Pre-18th Century - 6AHP (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 Women in Western Civilization II - HP (3) AS WST
Survey of European women from the late Middle Ages to the twelfth century: differing consequences of historical change for women and men.

WST 3225 Women, Environment and Gender - M W (3) AS WST
Course designed to: provide students with a basic understanding of relationships between women's physical, health and occupational environments; consider the position of women regarding environmental issues; examine role that women can and do play in effecting environmental change; and analyze concepts related to ecofeminism.

WST 3311 Issues in Feminism - SS (3) AS WST
Survey of major issues relevant to the female experience: marriage and the family, sexuality, work, creativity, 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 4262 Literature by American Women of Color - 6A LW (3) AS WST
Will not be counted toward the English major. An introduction to contemporary women writers of color in the U.S.: Native Americans, African Americans, Asian Americans, and Chicanas/ U.S. Latinas. Readings will include literature and contextual articles on historical and cultural issues.

WST 4310 Feminism in America - 6A MW (3) AS WST
A study of feminist critiques of American women's experiences and status, and their implications for women's lives, by 19th- and 20th-century theorists, and how adequately these various critiques address the intersections of gender, class, ethnicity, and race.

WST 4320 Woman's Body/Woman's Mind - (3) AS WST
An analysis of the historical, social and political perspectives of women's health and healing experiences, and how woman's role as patient and provider of care are shaped by public and cultural assumptions.

WST 4335 Women and Film - (4) AS WST

WST 4350 Women and Science - M W (3) AS WST
A study of issues related to women and the natural and physical sciences including: historical participation of women in science, current status of women in science, and feminist critiques of science as a discipline.

WST 4400 Third World Women Writers - 6A LW (3) AS WST
Will not be counted toward the English major. Introduces the literature of women from various anglophone countries in Africa, the Caribbean, and South Asia; some U.S. writers will be included to represent a third world diasporic consciousness.

WST 4522 Classics in Feminist Theory - M W (3) AS WST
A study of classic contributions to the elaboration of feminist thought from the 18th century to the present in an attempt to discover the roots of the contemporary feminist movement. (May also be taken for credit in Philosophy.)

WST 4560 Contemporary Feminist Theory - (3) AS WST
PR: Completion of one upper division Women's Studies course. An exposure to and an expolitain of a wide range of current feminist theories and debates, as well as an examination of the possible political and practical implications for various theoretical positions.

WST 4900 Directed Readings - (1-3) AS WST
PR: Registration requires instructor's written consent and signed contracts from instructor of choice. To provide advanced students with interdisciplinary research experience in areas of specific interest.

WST 4910 Directed Research - (1-3) AS WST
PR: Registration requires written contract signed by student and instructor of choice. To provide advanced students with interdisciplinary research experience in areas of specific interest.

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 5825 Internship in Women's Studies - (3) AS WST
PR: Must have completed Comprehensive Exam. Majors Only. All required courses in MA program, CC. Student placement in approved intern setting for a minimum of 150 hours of supervised experience. S/U, Departmental Consent Required.

WST 5934 Selected Topics - (1-4) AS WST
PR: DPR. Study of current research methods and scholarship on women from a multidisciplinary perspective.

WST 5935 Internship in Women's Studies - (3) AS WST
Student placement in an approved intern setting for a minimum of 150 hours of supervised experience. S/U only. PR: Majors only. All required courses in MA program, CC. Permit.
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 BIO
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L. The origin, diversity, and adaptations of vertebrates. Phylogenetic systematics (cladistics) will be used as the basis for determining evolutionary relationships of organisms.

ZOO 3205C Advanced Invertebrate Zoology - (4) AS BIO
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L. An introduction to the major invertebrate groups, with emphasis on local forms. Field work will be required. Lec.

ZOO 3323C Anatomy of Chordates - (4) AS BIO

ZOO 3713C Comparative Vertebrate Anatomy - (4) AS BIO

ZOO 4512 Sociobiology - M/W (3) AS BIO
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 4513C Animal Behavior - (3) AS BIO
PR: PCB 3043 or PCB 3063. An introduction to comparative animal behavior (Ethology), with emphasis on communication, social use of space, and behavioral evolution.

ZOO 4603 Animal Embryology - (4) AS BIO

ZOO 4753C Histology - (4) AS BIO
PR: PCB 3023 and PCB 3063. Comparative approach to the study of tissues and the relation of their structure and function. Lec.-lab.

ZOO 5235 Parasitology - (3) AS BIO
PR: MCB 3020C, PCB 3023, PCB 3043, PCB 3063, ZOO 3205C, ZOO 4753C. Cf. Fundamentals of animal parasitology and parasitism, the biology of selected animal parasites, including those of major importance to man.

ZOO 5425C Herpetology - (4) AS BIO
PR: Cf. Major aspects of amphibian and reptilian biology emphasizing fossil history, evolutionary morphology, sensory physiology, life history and reproductive behavior. Lec.-lab. Field trips.

ZOO 5456C Ichthyology - (3) AS BIO
PR: Senior or GS in Biology; ZOO 3323C. Cf. PCB 4674 is suggested. Evolution, systematics, structure, behavior, physiology, and ecology of fishes.

ZOO 5456L Ichthyology Lab - (1) AS BIO
CR/PR: ZOO 5456C. Laboratory portion of Ichthyology relating to evolution, systematics, structure, behavior, physiology and ecology of fishes.

ZOO 5555C Marine Animal Ecology - (4) AS BIO
PR: PCB 3043, senior standing, Cf. Investigation of energy flow, biogeochemical cycles, and community structure in marine environments. Lec.-lab.