
COURSE DESCRIPTIONS

CAAS 501: Africa and the African Diaspora. **3 credits**
Introduction to research methods and basic and current concepts of culture and value systems as applied to Africa and African-derived cultures of the Americas. Various cultures of the Diaspora are viewed as exemplars.

CAAS 535: African and African-American Folklore. **3 credits**
A survey of the principal characteristics of African-American folklore in its social, historical, and aesthetic contexts.

CAAS 550: African and African-American Music. **3 credits**
A study of the principal characteristics of African-American music with pertinent references to music on the Continent.

CAAS 560: African-American Art. **3 credits**
A study of the aesthetic tradition and the social context of African-American art.

CAAS 564: African Art. **3 credits**
A survey of the basic forms and styles of traditional African art and a look at colonial and post-independence styles and trends.

CAAS 601: Directed Study.* **Fall, 2-3 credits**
Readings and other research based on a corpus suited to the research needs and interests of the individual student.

CAAS 602: Directed Study.* **Spring, 2-3 credits**
Readings and other research based on a corpus of works suited to the research needs and interests of the individual student. (May be repeated for credit.)

CAAS 630: Seminar in Selected African-Americans. **3 credits**
Men and women of historical importance in the shaping of the African-American destiny or culture such as Frederick Douglass, W.E.B. DuBois, Alain Locke are studied in detail.

CAAS 640: Seminar in Comparative Black Literature. **3 credits**
Selected research problems comparing and contrasting traditions in Francophone, Afro-Hispanic and African-American literature. Prerequisites: a reading knowledge of French; consent of the instructor. Reading knowledge of Spanish recommended (Cross-referenced with CFRE 640 and CSPA 640, ENG 524).

CAAS 801: Thesis Consultation.*	Fall, 1 credit
CAAS 802: Thesis Consultation.*	Spring, 1 credit
CAAS 804: Thesis Research.*	Fall, Variable credits
CAAS 805: Thesis Research.*	Spring, Variable credits

COURSE DESCRIPTIONS

CAWS 490: Introduction to Women's Studies. 3 credits
A survey course which introduces the history, trends, basic ideas, scholars, problems, and content of Women's Studies programs. Open to undergraduate students.

CAWS 500: Political Theory (Identical to CPSC 543). 3 credits
An in-depth analysis of the major schools of thought in the field of political theory from the classical period to the present with emphasis on theories about women and politics. Particular attention is given to Third-World theories about women in politics.

CAWS 501: Feminist Theory (Identical to CPSC 606). 3 credits
Examines and analyzes the various theoretical, strategic and political positions which characterize the literature and the study of women-related issues. Special emphasis is given to the study of black feminist theory.

CAWS 502: Africana Feminist Theory. 3 credits
A critical examination and analysis of the historical and current theories about the role and status of women of African descent. Open to advanced undergraduates with permission of instructor.

CAWS 503: Feminist Methodology. 3 credits
A variety of research, resources, techniques, and approaches to women's studies are reviewed and assessed.

CAWS 504: Comparative Third-World Women. 3 credits
An examination of the social, political, psychological and economic conditions of African-American, Caribbean, and African women, with a view towards identifying and comparing similarities and differences among the three groups of women.

CAWS 505: Women in the Labor Market. 3 credits
An examination of occupational and economic conditions, constraints, and patterns of female wage earners in America; black, white, rural, urban, poor, middle class, and women at various educational levels are discussed.

CAWS 506: Women and Development. 3 credits
Emphasis is on the role, priorities and systematic problems associated with female participation in the development process. This is a required course for all students in the AWS and IAD programs.

CAWS 507: Rural Women. 3 credits
A cross-cultural look at the lifestyles, socioeconomic, and political conditions and concerns of rural African, Caribbean and African-American women.
Prerequisite: CAWS 506.

CAWS 508: Urban Women in Africa and the Caribbean. 3 credits
A cross-cultural analysis of the concerns and conditions of African and Caribbean women who live in urban areas.

CAWS 509: Africana Women and Public Policy. 3 credits
A review of public policy issues which impact on the status and conditions of Africana women. The degree and results of their participation in government policymaking is also examined. *Prerequisite: a course in public policy analysis.*

CAWS 510: Africana Women in International Affairs. 3 credits
A survey of the degree and level of Africana women's involvement in foreign policy making, diplomatic missions, international agencies and organizations. Positions held, career advancement patterns, and issues championed by these women are examined and analyzed. *Prerequisites: CAWS 409 and CAWS 506.*

Interdisciplinary Elective Courses:

CAWS 517: Women in Politics Seminar (Identical to CPCS 517). 3 credits
A study of the roles, activities and problems confronting women participating in the political system. The discrete subject of the Seminar will vary from semester to semester.

CAWS 537: The African Novel (or CENG 530). 3 credits
A study of modern African novels written in English with attention to their social contexts.

CAWS 538: Caribbean Women and Work. 3 credits
A study of the motives and conditions under which Caribbean women work in the formal and informal economics of their states.

CAWS 539: Third-World Women and Development (or CPSC 539). 3 credits
The history, status and role of Third-World women in development are the focus. Governmental policies and practices toward women as well as movement and activities of Third-World women are examined.

CAWS 540: Caribbean Women Writers. (Identical to ENG 592) 3 credits
A study of the writings of Caribbean women writers, their topics, perspectives, and motivation for writing.

CAWS 542: Seminar on Comparative Politics (Identical to CPSC 542). 3 credits
Designed for advanced students concentrating in Comparative Politics. Focus is on readings and research on selected topics and problems in comparative politics.

CAWS 549: Women in Contemporary Africana Fiction (or CENG 590). 3 credits

Examination of the status of women in modern African/African-American fiction including fiction of women throughout the African diaspora with comparisons to their actual status in these societies.

CAWS 591: The Black Aesthetic 3 credits

Analysis of the concept of a black worldview and culture, including readings in the Western and African aesthetics as well as black American critical writings.

CAWS 600: Seminar on Africana Women's Studies. 3 credits

A team-taught course designed to highlight the history, cultural diversity, contributions, and approaches to Africana Women's Studies.

CAWS 601: Directed Research. * 3-6 credits

CAWS 602: M.A. Thesis Research. * 1-6 credits

CAWS 615: Race, Sex, and Class. 3 credits

An examination of the causes and consequences of social and economic cleavages based on race, sex, and class. Emphasis is on the effects of these on African peoples generally and women specifically.

CAWS 617: Feminist Criticism. 3 credits

An exploration and assessment of historical and contemporary concepts, issues, and concerns from a critical, feminist perspective.

CAWS 651: Internship. ** 3-9 credits

Students may do supervised internships in the U.S. and abroad in a women's program, department, or project.

* May be repeated for credit.

**May be repeated for credit up to 9 hours.

COURSE DESCRIPTIONS

CENG 500: English in the Secondary School and College. 3 credits
(Identical to CEDC 562 English in the Secondary School and College).

Study of new materials and modern methods in the teaching of high school and freshman college English.

CENG 501: Reading on the Secondary and College Levels. 3 credits

Scope and sequence of a developmental reading program at the secondary and college levels. Fuller description under School of Education (CEDC 583).

CENG 502: Pro-Seminar: Materials and Methods of Research. 3 credits

Lectures and exercises in research in literature and language with emphasis on thesis problems; required of all students in English (first semester).

CENG 503: Technical Writing. 3 credits

Introduction to principles, forms, and techniques of writing. Course includes computer- assisted instruction.

CENG 509: Genres of Literary Expression. 3 credits

Studies in rotation of the formal parameters and evaluative criteria which define a given genre: the novel, biography and autobiography, drama and poetry (open only to students in the Doctor of Arts in Humanities Program).

CENG 510: Early American Literature.

Studies literature from the beginnings of The United States to the Civil War.

CENG 511: American Poetry.

Studies major works of American poetry, concentrating primarily on poetry after the Civil War,

CENG 512: American Romantics. 3 credits

Studies in the literary and cultural currents of American Romanticism from Freneau to Dickinson (1750-1830). Course also includes American Renaissance Authors such as Emerson, Hawthorne and Melville and abolitionists Frederick Douglass and Frances E.W. Harper.

CENG 513: American Realism and Naturalism. 3 credits

Studies in American Realism and Naturalism as major novelists from Samuel L. Clemens to Richard Wright (1835-1940).

CENG 514: The American Novel. 3 credits

Studies the intellectual and aesthetic history of the American Novel from Hawthorne to Faulkner and J.D. Salinger.

CENG 515: Contemporary American Literature. 3 credits

Studies in values, themes, styles, and genres in contemporary American literature.

CENG 516: Major Authors. 3 credits

An intensive and inclusive study of preeminent authors writing in English, with emphasis on their uniqueness and debt to the literary environment and traditions in which their works occurred.

CENG 520: Ideas and Forms in African-American Literature. 3 credits

Surveys African-American writings from conceptual and historical perspectives to determine to what extent this literature is uniquely African-American.

CENG 521: African-American Poetry: From Dunbar to the Present. 3 credits

Study of major poets from Dunbar to Lee, including Giovanni, Sanchez and other modern poets, within their cultural, historical, and literary contexts.

CENG 523: Poetry of the Harlem Renaissance. 3 credits

Study of poetry of the period 1919-1934, which considers relevant white poets, and critics, major black poets and critics and some minor black poets.

CENG 524: Comparative Black Literature (or CAAS 530). 3 credits
Comparative study of Afro-Romance and African-American literatures. Prerequisite: A reading knowledge of French and consent of instructor. Reading knowledge of Spanish strongly recommended but not required.

CENG 525: African-American Folklore. 3 credits
Study of the principal characteristics of African and African-American folklore with specific emphasis on folk literature and the oral tradition.

CENG 530: The African Novel. 3 credits
Study of modern African novels written in English with attention to their social contexts.

CENG 531: African Poetry in English. 3 credits
Study of several major poets from West, East and Southern Africa.

CENG 532: Africana Cultural Traditions. 3 credits
Analysis of the concept of a black worldview and culture, including readings in African-American, African and other Eastern aesthetics.

CENG 540: The English Novel. 3 credits
Study of selected English and Irish novels from Defoe and Richardson to James Joyce and Graham Greene.

CENG 541: Victorian Poetry. 3 credits
Study of poetry of the Victorian Age with Tennyson and Browning as major figures, but including also the works of other Victorian poets.

CENG 542: Literature of British Romantics. 3 credits
Studies in the literature of the Romantic Movement in England including major English poets, such as Wordsworth, Coleridge, Keats and selected women writers.

CENG 543: Drama to the Renaissance. 3 credits
Survey of drama traditions preliminary and parallel to English drama of the sixteenth and seventeenth centuries.

CENG 544: Shakespeare. 3 credits
Intensive study of Shakespeare's tragedies, comedies, and histories.

CENG 546: The Renaissance.
Studies major writers of the Renaissance period, major themes, and relevant historical events.

CENG 547: The Enlightenment. 3 credits
Study of literary trends of the 17th and 18th centuries. English writers include Hobbes, Locke, Dryden, Pope, Swift, and Johnson. Readings include some key formative influences from France, such as Descartes and Voltaire.

CENG 548: Modern Drama. 3 credits
Survey of representatives and important European and American plays from Ibsen to dramatists of the post-World War II period.

CENG 560: Literary Theory and Criticism. (Replaces CENG 685, Literary Criticism). 3 credits
Survey of the principles governing the creation, appreciation, and valuation of literatures as they have developed over the centuries, especially as defined and redefined during the contemporary period.

CENG 561: Comparative Literature. 3 credits
Studies in multicultural literatures stemming from Europe, Asia, and Africa. Knowledge of French, Spanish, Chinese or African languages is useful but not required.

CENG 580: Modern Linguistics. 3 credits
Introduction to modern descriptive linguistics and the principles of generative grammar.

CENG 581: History of the English Language. 3 credits
Study of the nature and function of language; the development of English sounds, forms and syntax; modern English grammar, vocabulary, and American speech.

CENG 582: African-American Dialects. 3 credits
Examination of theories and descriptions of African-American speech, especially the hypothesis of decreolization. Prerequisite: ENG 580, 581, or permission of the instructor.

CENG 590: Contemporary Africana Women's Fiction. 3 credits
Examination of the fiction by women throughout the African diaspora with attention given to the roles and status of women in these societies.

CENG 591: African-American Women Writers: Genre. 3 credits
Study of a particular genre of literature by African-American women writers. Genre, i.e., fiction, poetry and drama, will vary each term the course is taught.

CENG 592: Caribbean Women Writers: Genre. 3 credits
Examination of writings by women of the English, French, and Spanish speaking Caribbean. Knowledge of French or Spanish will be useful. Genres (fiction, poetry and drama) may vary each term the course is taught.

CENG 593: Ethnic American Women Writers. 3 credits
Study of writings from women of various American ethnic groups. While the focus will be on women writers of color, attention will be given also to influential Euro-American ethnic writers.

CENG 594: Southern Women Writers.

3 credits

Examination of the texts and the tensions emerging from the literary experiences of women writing in the southern United States. Attention will be given to the prevailing southern themes of race, class, gender, and heritage.

CENG 600: Independent Study.

3 credits

Studies of works in areas not offered in scheduled classes or seminars (offered on demand and supervised by selected faculty).

CENG 601: Thesis Consultation.

1 credit

CENG 605. Thesis Research.

3 credits

Course Descriptions - French

CFRE 056/506: French for Graduate Students. 3 credits
Designed to prepare graduate students for meeting the foreign language reading and translation skills necessary for easy comprehension of scholarly articles in their subject area. The class meets three hours weekly for one semester (may be audited for 0 credit under CFRE 056). One does not need any prior knowledge of French to be enrolled in this course.

CFRE 509/510: Directed Readings in French. 3-6 credits
In-depth study and investigation of a particular period or writer of interest to an individual student. The supervising instructor in consultation with the department chairperson must approve all special study projects in advance. This course may be repeated.

CFRE 511: French Phonetics and Pronunciation. 3 credits
Study of French phonetics, pronunciation and intonation with intensive practice in reading and speaking, and the perfecting of a genuine French diction through the aid of phonetic transcription and authentic French videos and audio texts.

CFRE 513: Advanced French Grammar and Composition. 3 credits
Acquisition of fundamental grammatical principles of French and the most difficult idiomatic and literary expressions of the language, along with extensive oral and written compositions.

CFRE 514: Advanced French Prose. 3 credits
Designed to sharpen the student's sensitivity to stylistic nuances in literary texts, this course complements CFRE 513 by placing emphasis on grammatical structure and stylistics within the framework of literary analysis and criticism.

CFRE 515: French Civilization to 1789. 3 credits
Study of French civilization from its origins through the Revolution of 1789. Special emphasis will be placed on the feudal society, the Renaissance period and the "sicle de Louis XIV," starting with the absolute monarchy and the development of new ideas. Course includes an extensive audiovisual component. Students should be able to work independently on the Internet.

CFRE 516: French Civilization to the Present. 3 credits
Study of French civilization from the Consulate to the present with major emphasis on current political, social and cultural institutions. Course includes an extensive audiovisual component. Students should be able to work independently on the Internet.

CFRE 517: French Poetry. 3 credits
Emphasizes the development of poetic schools from the Middle Ages through the twentieth century.

CFRE 518: French Prose. 3 credits
Traces the development of novelistic trends from Chretien de Troyes through the "nouveau roman."

CFRE 519: French Drama. 3 credits
Studies of the development and evolution of the French theatre in France from the medieval period through the present.

CFRE 559/560: Methods of Teaching Modern Foreign Languages. 3-6 credits
Intensive study of the most recently developed methods and techniques of foreign language instruction.

CFRE 615: Francophone Colonial Civilization. 3 credits
Exploration of Creole cultures of Haiti, Martinique, Guadeloupe, French Guiana, Reunion, and Mauritius, and acculturation in former French West Africa and French Equatorial Africa, along with the impact on European French culture of contact with the peoples indigenous to or imported into these areas.

CFRE 638: Francophone Literature. 3 credits
Historical survey of the literature and literary productions of Haiti, Martinique, Guadeloupe, French Guiana, and Francophone Africa.

CFRE 640: Seminar in Comparative Black Literature. 3 credits
(Cross-referenced with CENG 640, and CSPA 640) Selected research problems comparing and contrasting traditions in Francophone, Afro-Hispanic and African-American literature.

CFRE 650: Applied Linguistics. 3 credits
An in-depth appreciation of the analysis of research in linguistics and its applicability to the teaching of foreign languages and procedures for adapting specific research methodologies.

CFRE 716: Comparative Romance Culture and Civilization. 3 credits
Comparative study of Romance societies from their origins to the present with major emphasis on political, social and cultural institutions. This study will also include points of convergence from linguistic and cultural perspectives.

CFRE 717: Romantic to Modern Poetry. 3-6 credits
This course will treat the development of poetic trends, movements and philosophies in France in the nineteenth and twentieth centuries. Particular attention will be paid to Victor Hugo.

CFRE 718: Modern Prose. 3 credits
This is an in-depth study of the nineteenth and twentieth century novel. The choice of novelists will vary according to the desire of the instructor. Students should expect to read voluminous works of both centuries, and be prepared to critique articles written about the works.

CFRE 719: Classical to Modern Drama. 3 credits
This is a serious study of the French theatre from 1550 to the present. Students should expect to read several plays per week, and be prepared to identify the stylistic nuances of the various literary movements as they relate to this genre.

CFRE 761/762: French Seminar. 3-6 credits
The examination, documentation, resolving and presentation of research problems in a specific field.

CFRE 801/802: Thesis/Dissertation Consultation. 1 credit

CFRE 805/806: Thesis/Dissertation Research. Variable credit

Course Descriptions - Spanish

CSPA 056/506: Spanish for Graduate Students. 3 credits
Designed to prepares graduate students for meeting the foreign language reading and translation skills necessary for easy comprehension of scholarly articles in their subject area. The class meets three hours weekly for one semester (may be audited for 0 credit under CSPA 056). One does not need any prior knowledge of Spanish to be enrolled in this course.

CSPA 509/510: Directed Readings in Spanish. 3-6 credits
In-depth study and investigation of a particular period or writer of interest to an individual student. The supervising instructor in consultation with the department chairperson must approve all special study projects in advance. This course may be repeated.

CSPA 511: Spanish Phonetics and Pronunciation. 3 credits
Study of Peninsular and Latin American pronunciation, intonation and phonetics with intensive practice in reading and speaking, and the perfecting of a genuine Spanish diction through the aid of phonetic transcription and authentic Spanish videos and audio texts.

CSPA 513: Advanced Spanish Grammar and Composition. 3 credits
Acquisition of fundamental grammatical principles of Spanish and the most difficult idiomatic and literary expressions of the language, along with extensive oral and written compositions.

CSPA 514: Advanced Spanish Prose. 3 credits
Designed to sharpen the student's sensitivity to stylistic nuances in literary texts, this course complements CSPA 513 by placing emphasis on grammatical structure and stylistics within the framework of literary analysis and criticism.

CSPA 515: History of Peninsular Civilization. 3 credits
Study of the political, social, economic and cultural history of Spain from the Middle Ages to the present, including the Spanish slave trade and the Golden Age. Course includes an extensive audio-visual component. Students should be able to work independently on the Internet.

CSPA 516: History of Latin American Civilization. 3 credits
Study of the political, social, economic, and cultural history of Latin America from pre-Columbian times to the present, including the contributions of black Latin Americans and the struggle of indigenous groups. Course includes an extensive audiovisual component. Students should be able to work independently on the Internet.

CSPA 517: Spanish Poetry. 3 credits
Emphasizes development of poetic schools from the Middle Ages through the twentieth century.

CSPA 518: Cervantes. 3 credits
Study of the development of Cervantes as a consummate prosaist; linguistic, philosophical, and literary commentary on Don Quixote and significant minor works.

CSPA 559/560: Methods of Teaching Foreign Language. 3-6 credits
Intensive study of the most recently developed methods and techniques of foreign language instruction.

CSPA 620: Afro-Hispanic Literature. 3 credits
Study of the “tema” Negro and of the black writers of Latin American prose and poetry. Particular attention will be paid to Afro-Antillean literature.

CSPA 622: Galdos, The Generation of 1868 and Naturalism. 3 credits
Study of the works of Clarin, Valera, Alarcon, Pereda, Palacio Valdes, Pardo Bazan and Blasco Ibanez.

CSPA 623: The Generation of 1898. 3 credits
Study of the novel, poetry, drama and essays of Ramon del Valle-Inclan, Antonio Azorin, Jacinto Benavente, Miguel de Unamuno, Pio Baroja, and Antonio de Machado.

CSPA 625: The Twentieth-Century Latin American Novel. 3 credits
Examination of the evolution of the Spanish American novel in the twentieth century; special attention to experimentation and innovation in novelistic technique and “magic realism” in recent works of Julio Cortazar, Gabriel Garcia Marquez and Isabel Allende.

CSPA 628: Hispanic Minorities in the United States. 3 credits
Study of the heritage, values, special concerns and the contribution to American culture of Hispanic Americans, and an examination of population growth in Hispanic communities throughout the United States.

CSPA 632: Hispanic Writers of the United States. 3 credits
Literature as group movement, periodicals as forums, as well as the works of individual writers studied.

CSPA 640: Seminar in Comparative Black Literature. 3 credits
(Cross-referenced with CENG 640 and CFRE 640) Selected research problems comparing and contrasting traditions in Francophone, Afro-Hispanic and African-American literature.

CSPA 650: Applied Linguistics. 3 credits
An in-depth appreciation of the analysis of research in linguistics and its applicability to the teaching of foreign languages and procedures for adapting specific research methodologies.

CSPA 716: Comparative Romance Culture and Civilization. 3 credits
Comparative study of Romance societies from their origins to the present with major emphases on political, social, and cultural institutions. This study will also include points of convergence from linguistic and cultural perspectives.

CSPA 717: Romantic to Modern Poetry. 3 credits
Development of poetic trends, movements and philosophies in Spain in the nineteenth and twentieth centuries.

CSPA 718: Modern Prose. 3 credits
This is an in-depth study of the nineteenth- and twentieth-century novel. The choice of novelists will vary according to the desire of the instructor. Students should expect to read voluminous works of both centuries, and be prepared to critique articles written about the works.

CSPA 719: Classical to Modern Drama. 3 credits
This is a serious study of the Spanish theatre from 1550 to the present. Students should expect to read several plays per week, and be prepared to identify the stylistic nuances of the various literary movements as they relate to this genre.

CSPA 761/762: Spanish Seminar. 3-6 credits
The examination, documentation, resolving and presentation of research problems in a specific field.

CSPA 801/802: Thesis/Dissertation Consultation. 1 credit

CSPA 805/806: Thesis/Dissertation Research. Variable credit

COURSE DESCRIPTIONS

CHIS 563: The African-American in the United States to 1877. 3 credits
Study of the social, economic, political and cultural development of African Americans in the United States.

CHIS 564: The African-American in the United States Since 1877. 3 credits
A continuation of CHIS 563.

CHIS 565: African-American History for High School Teachers. 3 credits
Surveys history of African-Americans, explores classroom problems, and assesses teacher-student bibliographic material (offered on demand).

CHIS 566: Contemporary African-American History. 3 credits
Reading and research seminar exploring selected aspects of post-World War II developments among African-Americans (offered on demand).

CHIS 574: Post-Industrial America. 3 credits
Examination of the evolution of American society after World War II.

CHIS 575: Intellectual and Cultural History of the United States. 3 credits
Study of selected aspects of American thought and cultural development with attention to changing racial ideologies.

CHIS 576: Social and Economic History of the United States. 3 credits
Survey of significant social and economic trends and problems with emphasis on the treatment of black people in urban centers.

CHIS 602: Black Metropolis. 3 credits
Reading seminar concerned with the movement of black people to urban centers.

**CHIS 603: Seminar in African-American History:
The Antebellum Period to 1877. 3 credits**
Research seminar on selected pre-Civil War aspects of African-American history.

CHIS 604: Seminar in African-American History: Post-Civil War Period. 3 credits
Research seminar on selected post-Civil War aspects of African-American development.

CHIS 605: Independent Study. 1-3 credits
Designed to give students under the supervision of the instructor an opportunity to pursue in-depth areas not covered in seminars or classes (offered on demand).

CHIS 606: The Black Woman in American History. 3 credits
Research seminar analyzing the role of women in the historical development of the United States with emphasis upon the black woman.

CHIS 607: Community, Family, and Oral History. 3 credits
Seminar emphasizing approaches to study and research in oral history using the community and family as points of entry.

CHIS 680: History of Africa to 1800. 3 credits
Explores themes in African history from the earliest times to the end of the 18th century.

CHIS 681: History of Africa Since 1800. 3 credits
Examination of the European conquest of Africa and the legacy of colonialism to Africa since independence and in an era of unprecedented economic crisis and political instability.

CHIS 682: Seminar in African History. 3 credits
Explores in-depth selected aspects of African history from earliest time to the present.

CHIS 685: Christianity and Colonialism in Africa. 3 credits
This course examines the historical development of Christianity in sub-Saharan Africa during the colonial era, emphasizing Church and State objectives, life in mission communities, mission education and westernized elites, the rise of independent African religious movements, and the interplay of Christianity and African nationalism.

CHIS 795: Advanced Historiography and Methodology. 3 credits
Designed to train students in methods of research, thesis writing and historiography.

CHIS 691: Thesis Consultation-Master of Arts. 1 credit

CHIS 695: Thesis Research-Master of Arts. 1-3 credits

CHIS 801: Dissertation Consultation. 1 credit

CHIS 805: Dissertation Research. 1-3 credits

CHIS 780/781: History Internship. 3 credits
A variety of programs are available that provide a planned, supervised, and practical experience outside the classroom. Typically, students engage in research, museum, library, or archival work for a public agency or a private not-for-profit organization. Approval of the department chair is required for academic credit.

CHIS 801: Dissertation Consultation. 1 credit

CHIS 805: Dissertation Research. 1-3 credits

THE HUMANITIES COMPONENT

CHUM 675: Humanistic Inquiry. **3 credits**
Introduces fundamental concepts and methods of humanistic studies generally and those which are basic to various disciplines in humanities, including literary criticism and historiography.

CHUM 676: The Person in History and Literature. **3 credits**
Examines the concept of "person" as a reflection of the ontological, ethical, and political premises of various cultures and epochs, and how concepts of personhood are embedded in historical and literary texts.

CHUM 677: Literature and Popular Culture. **3 credits**
Addresses fundamental questions about the nature of contemporary culture by examining the structures, myths, and genres of contemporary popular culture, including the role of cultural diversity in defining popular culture.

CHUM 678: Ideas and Exemplars. **3 credits**
Investigates the contexts and processes in which seminal ideas are created in a particular ethos, and the principles determining their transformation in subsequent epochs and diffusion.

CHUM 681: Higher Education in the United States. **3 credits**
Considers the history, present status, curricular models and projections of higher education including significant trends in the operation and development of higher education institutions.

CHUM 682: Teaching and the Humanities. **3 credits**
Examines the principles governing college programs in humanities and various course designs, materials and strategies for achieving the ends of humanistic education.

THE PEDAGOGY COMPONENT

CHUM 683-684: The Internship. **3 credits**
Entails practical experience in applying the pedagogical principles, research, and methods studied in CHUM 681-682. In some cases, the internship requirements may be satisfied by one semester, in which case an additional content course may be taken in lieu of a second semester of internship. Whenever possible, the internship will be based in one of the required undergraduate core curriculum courses in Humanities or in one of the humanities disciplines.

COURSE DESCRIPTIONS

CBIO 501-502: Biology Seminar. **Every Semester, 0 credit**
One weekly meeting to hear research reports from faculty, invited speakers and degree candidates. Required of all students.

CBIO 504: Molecular Genetics. **Fall, 3 credits**
Prokaryotic and bacteriophage gene structure, function and regulation. Molecular details of DNA isomerization, replication, RNA transcription and translation. Also covers genetic code, rRNAs and tRNAs, molecular mechanisms of transposition, mutation, repair and recombination in DNA.

CBIO 505: Microbial Physiology. **Spring, 3 credits**
Studies of living processes in prokaryotic cells. Topics of discussion on recent literature include cell structure and function, metabolism and regulatory networks, membrane transport, stress response, mechanisms of resistance to antibiotics and cellular differentiation.

CBIO 506: Cell Biology. **Spring, 3 credits**
Cellular structure, biosynthesis and function of eukaryotic cells.

CBIO 509: Methods and Techniques in Biology. **Fall, 3 credits**
Laboratory course covering techniques such as absorption and fluorescence spectroscopy, ultracentrifugation, diffusion, sedimentation, electrophoresis, spectrometry, x-ray diffraction, nuclear chemistry and chromatography.

CBIO 511: Protein Biochemistry. **Fall, 3 credits**
Discusses the structure and cellular functions of proteins.

CBIO 512: Intermediary Metabolism. **Spring, 3 credits**
Discusses the function and interaction of metabolic pathways in eukaryotic cells.

CBIO 551: Biostatistics. **Spring, 3 credits**
Course in statistical theory and methods as applied to biological research.

CBIO 589: Laboratory in Molecular Genetics. **Spring, 4 credits**
Laboratory course on recombinant DNA and sequencing methods.

CBIO 631: Advances in Biochemistry. **Fall, Spring, 3 credits**
Discussions on recent literature in a specific area of biochemistry. *Prerequisites: CBIO 511, 512.*

CBIO 633: Advances in Molecular Biology. **Fall, Spring, 3 credits**
Discussions on recent literature in a specific area of molecular biology. *Prerequisites: CBIO 504, 514.*

CBIO 635: Advances in Cellular Biology. **Fall, 3 credits**
Discussions on recent literature in a specific area of cellular biology. *Prerequisite: CBIO 506.*

CBIO 641: Advances in Molecular Genetics. **Fall, Spring, 3 credits**
Lectures, group discussions, assignments and formal presentations of recent literature in molecular genetics. *Prerequisites: CBIO 504, CBIO 491-492 or CBIO 506.*

CBIO 661: Research in Biochemistry. **Variable credit**

CBIO 671: Research in Molecular Biology. **Variable credit**

CBIO 681: Research in Cellular Biology. **Variable credit**

CBIO 801: Thesis Consultation. **1 credit**

CBIO 901: Dissertation Consultation.

COURSE DESCRIPTIONS

CCHE 412: Instrumental Methods. **4 credits**

A lecture and laboratory course covering the theory, design, practical uses and applications of typical spectroscopic and chromatographic instrumentation. Particular focus is on the application of the instrumentation for chemical analysis. (This course is numbered 512 for graduate students). (Three [3] lecture hours and four [4] lab hours per week)

CCHE 421: Advanced Inorganic Chemistry. **3 credits**

This is an introduction to the descriptive chemistry of the elements. The topics covered in this course include: Brønsted and Lewis acids and bases, electronic and molecular structure and coordination chemistry. (Three [3] lecture hours per week)

CCHE 431 AND 432: Advanced Organic Chemistry I and II. **4 credits each**

CCHE 431: Advanced Organic Chemistry I. This course is a study of the advanced topics in carbon chemistry. The topics covered include: Critical evaluation of modern organic theory mechanisms and rearrangements. It also includes a detailed study of important organic reactions and their application to selected laboratory experiments. (Three [3] lecture hours and one [1] laboratory hour per week) *Prerequisites: CCHE 231 and 232.*

CCHE 432: Methods of Structure Determination. This course covers the theory and techniques used in the determination of the structure of organic compounds. The topics covered include separation techniques as well as the use of UV/VIS, IR, NMR, ESR, Raman and mass spectroscopy to elucidate structures of organic compounds. (Three [3] lecture hours and one [1] laboratory hour per week) *Prerequisite: CCHE 431.*

CHE 441: Mathematical Methods in Chemistry. **3 credits**

A study of the mathematical methods used in physical chemistry, including applications of linear algebra and differential equations. (Three [3] lecture hours per week) *Prerequisites: CCHE 341 and 342.*

CCHE 451 and 452: Biochemistry. **3 credits each**

CCHE 451 (dual numbering with **CBIO 491**): Introduction to the structure and function of biological molecules, proteins, carbohydrates, lipids and nucleic acids. (Three [3] lecture hours per week) *Prerequisites: CCHE 231 and 232; CBIO 111 and 112.*

CCHE 452 (dual numbering with **CBIO 492**): Basic metabolic pathways governing the function of cells and tissues (intermediary metabolism). Fundamentals of enzymatic catalysis, including kinetics and mechanism. (Three [3] lecture hours per week) *Prerequisites: CCHE 231 and 232; CBIO 111 and 112.*

CCHE 508: Graduate-level Seminar in Chemistry. **1 credit**

This is a one-hour lecture/seminar course. One year (two semesters) of the course generates one hour of credit. Required of all graduate students.

CCHE 511: Environmental Chemistry. **3 credits**

An examination of the origins, transport, reactions, effects, ultimate fate of hazardous waste in the environment. This course is designed to develop a working level knowledge of: (1) chemistry fundamentals; and (2) the basic principles and concepts of environmental chemistry: including (a) geochemistry; (b) atmospheric chemistry; c) environmental microbiology; and (d) waste treatment. (Three [3] lecture hours per week)

CCHE 512: Instrumental Methods. **4 credits**

A lecture and laboratory course covering the theory, design, practical uses and applications of typical spectroscopic and chromatographic instrumentation. Particular focus will be on the application of the instrumentation for chemical analysis. (This course is numbered 412 for undergraduate students). (Three [3] lecture hours and four [4] lab hours per week)

CCHE 521: Advanced Inorganic Chemistry. **3 credits**

Treatment of bonding and structure, oxidation-reduction and acid-base theory, and correlation with chemical reactivity, and ligand field theory. (Three [3] lecture hours per week)

CCHE 523: Coordination Chemistry. **3 credits**

Ligand field theory, spectral interpretations, stability considerations, synthetic methods, unusual oxidation states, other topics of current interest. (Three [3] lecture hours per week)

CCHE 524: Physical Methods in Inorganic Chemistry. 3 credits
Application of NMR, IR, UV-VIS, Raman spectroscopy to inorganic chemistry. (Three [3] lecture hours per week)

CCHE 531: Mechanistic Organic Chemistry. 3 credits
Treatment of bonding, resonance, inductive and steric effects and discussion of reactive intermediates, nucleophilic substitution and elimination reactions from a mechanistic point of view. (Three [3] lecture hours per week)

CCHE 532: Organic Synthesis. 3 credits
The chemistry of aromatic, heterocyclic and alicyclic compounds with emphasis on mechanisms. This course will teach students the disconnection approach for the synthesis of complex organic molecules. The course will present modern methods for carbon-carbon bond formation and apply these methods to prepare target molecules. (Three [3] lecture hours per week)

CCHE 533: Physical Organic Chemistry. 3 credits
Molecular orbital calculations, frontier molecular orbital theory and organic reaction mechanisms, stereochemistry of organic molecules containing centers, planes and axes of chirality. (Three [3] lecture hours per week)

CCHE 541: Thermodynamics. 3 credits
A rigorous treatment of basic theories and methods in chemical thermodynamics and equilibria including phase equilibria, chemical reactions, real solutions, surface effects, and some applications to macromolecules. (Three [3] lecture hours per week)

CCHE 542: Quantum Chemistry. 3 credits
Concepts and general principles of wave mechanics, with mathematical discussion of the hydrogen atom and harmonic oscillator. Introduction to matrix mechanics, angular momentum operators, and applications to small molecules. Variational and perturbation techniques are discussed. (Three [3] lecture hours per week)

CCHE 545: Statistical Mechanics. 3 credits
Statistical methods as applied to thermodynamics: molar partition function of mono-, di-, and poly-atomic molecules and their applications to the interpretation of chemical phenomena. (Three [3] lecture hours per week)

CCHE 544: Molecular Spectroscopy. 3 credits
Introduction and discussion of the fundamentals of rotational, vibrational, Raman, and electronic spectra. Development of the quantum mechanical treatment of these phenomena. (Three [3] lecture hours per week)

CCHE 546: Kinetics. 3 credits
A rigorous treatment of reactions in the gas phase and in solution. Complex reactions, some reaction mechanisms in solution, analysis of and measurement of rates in fast reactions. (Three [3] lecture hours per week)

CCHE 547: Magnetic Resonance. 3 credits
Treatment of basic theory of NMR and EPR including the Bloch equation, Fourier transform NMR and spin relaxation mechanisms, discussion of theoretical and experimental determination of NMR parameters, applications, and solid state experiments. (Three [3] lecture hours per week)

CCHE 551-552: Advanced Biochemistry I and II. 3 credits each
CHE 551: Advanced Biochemistry I. A study of the chemistry of carbohydrates, lipids, proteins, enzymes, and other compounds of biological significance and their applications to biological systems, enzyme kinetics. (Three [3] lecture hours per week)

CHE 552: Advanced Biochemistry II. Bioenergetics of metabolic reactions, metabolism of carbohydrates, lipids, proteins, nucleotides, Protein synthesis, Membrane transport and Biochemical genetics. (Three [3] lecture hours per week)

CCHE 561: Topics in Industrial Chemistry. 3 credits
Introduction to topics in chemical product development. Laboratory synthesis; scale-up to pilot plant and manufacturing; process control; process and equipment design; quality control and environmental issues; product marketing; and chemical industry management issues. Lectures will be given by personnel from a variety of areas of the chemical industry: energy inorganic chemicals; polymers; pharmaceuticals; surfactants; soaps; and detergents, etc. (Three [3] lecture hours per week)

CHE 562: Scale-up for Chemists. 3 credits
This course is designed to acquaint the student with the principles of chemical production scale-up and manufacture. Topics such as material and energy balance; transport phenomena involving momentum and energy transfer and unit operations of heat and mass transfer; and process and equipment design. (Three [3] lecture hours per week)

CCHE 563: Catalysis. 3 credits
Principles of catalysis, classification of catalyst systems, catalyst characterization, absorption of molecules on catalyst surfaces as prerequisite for catalytic reactions, kinetics of catalytic reactions, catalysis by metals, organometallic and inorganic compounds, selected examples of catalyzed industrial reactions, applications of catalysis to solving environmental problems.

CCHE 571: Introduction to Polymer Chemistry. 3 credits
Synthesis, including radical and ionic polymerization and polycondensation reactions, structure-property relationships, characterization and rheological properties of polymeric materials.

CHE 572: Techniques in Polymer Chemistry. 3 credits
A course designed to introduce students to experimental polymer chemistry, synthesis using ionic, free-radical and condensation polymerizations, molecular weight measurements by viscosity, osmometry, gel permeation and light scattering, spectroscopic characterization of polymers, measurements of thermal transitions. (Two [2] lecture hours and two [2] laboratory hours per week)

CHE 573: Physical Polymer Science. 3 credits
Course deals with interrelationships among polymer structure, physical properties, and useful behavior of polymers. Topics to be covered include chain structure and configuration, solution and phase behavior, glass-rubber transition behavior, rubber elasticity, polymer viscoelasticity and flow, mechanical behavior of polymers, etc. (Three [3] lecture hours per week)

CCHE 618. Topics in Analytical Chemistry – Environmental Monitoring. 3 credits
Advanced topics in analytical and environmental chemistry including separations, spectroscopy and mass spectrometry. Elements and operational principles of ISO 14001 Environmental Management System and ISO 9001/2 Quality Management System and chemical principles and operational characteristics of chemical instruments as applied to environmental monitoring with EPA established protocols. (Three [3] lecture hours per week)

CCHE 621: Topics in Inorganic Chemistry. 3 credits
In-depth treatment of areas of inorganic chemistry of current interest. (Three [3] lecture hours per week.)

CCHE 631: Advanced Organic Synthesis. 3 credits
Chemi-, regio-, and stereo selective methods for the efficient synthesis of multifunctional organic compounds utilizing the concepts of structural and reactivity equivalency. (Three [3] lecture hours per week)

CCHE 632: Stereochemistry. 3 credits
Organic molecules containing centers, planes and axes of chirality in terms of their absolute and relative configurations and such topics of prochirality, conformational analysis, resolution and introductory asymmetric synthesis. (Three [3] lecture hours per week)

CCHE 633: Photochemistry. 3 credits
A course on general theory and concepts in organic photoreactions. The course will cover electronic orbitals, chemical dynamics, potential energy surfaces, photophysical radiation less transitions, mechanistic photochemistry and photo reactions. (Three [3] lecture hours per week)

CCHE 637: Advanced Topics in Organic Chemistry. 3 credits
In-depth treatment of areas of organic chemistry of current interest. (Three [3] lecture hours per week)

CCHE 639: Organometallic Chemistry. 3 credits
An introduction to the synthesis, structure, bonding, and reactivity of organometallic complexes. (Three [3] lecture hours per week)

CCHE 644: Topics in Physical Chemistry. 3 credits
In-depth treatment of areas in physical chemistry of current interest. (Three [3] lecture hours per week)

CCHE 651: Physical Biochemistry. 3 credits
Survey of various spectroscopic techniques and hydrodynamic, non-hydrodynamic and electric charge methods for determination of size, shape, and molecular weight of biomacromolecules with discussion of selected topics such as relaxation spectrometry, solutions of macromolecule, and X-ray diffraction. (Three [3] lecture hours per week)

CCHE 652: Topics in Biochemistry. 3 credits
In-depth treatment of areas of biochemistry of current interest, including immunology, signal transduction, and carcinogenesis. (Three [3] lecture hours per week)

CCHE 653: Protein Biochemistry. 3 credits
In-depth treatment of current topics in protein structure and function. Analytical methods for study of proteins. Conformation and folding of proteins. Allosteric interactions, genetic engineering of proteins.

CCHE 655: Membrane Biochemistry. 3 credits
A consideration of biological membranes, membrane transport, membrane structure, excitable membranes and sensory systems and signal transduction, membrane proteins, lipid metabolism. Other topics may be selected based on mutual interests of students and instructor.

CHE 654: Enzymology. 3 credits
In depth treatment of enzyme regulation, kinetics and formal model of catalysis, the anatomy of enzymes, allosteric enzymes, selected topics may be selected based on mutual interests of students and instructor. (Three [3] lecture hours per week)

CCHE 673: Organic Chemistry of High Polymers. 3 credits
In-depth discussion of the synthesis of polymeric molecules, "living" ionic initiators and organometallic initiators, emphasis on the synthesis of stereoregular, block, cyclic and functional polymers, polymeric reagents and catalysts, macromonomers, synthetic inorganic polymers. (Three [3] lecture hours per week)

CHE 674: Topics in Polymer Chemistry. 3 credits

Course addresses current trends and topics of interest in polymer sciences. Topic may include polymerization mechanism, polymer blends and composites, polymer spectroscopy, engineering properties of polymer, chemistry of materials, polymer processing, etc. materials, polymer processing, etc. (Three [3] lecture hours per week)

CCHE 700: Thesis Consultation. 1 credit

CCHE 710: Research in Analytical Chemistry. Variable credit

CCHE 720: Research in Inorganic Chemistry. Variable credit

CCHE 730: Research in Organic Chemistry. Variable credit

CCHE 731: Research in Physical Biochemistry. Variable credit

CCHE 740: Research in Physical Chemistry. Variable credit

CCHE 750: Research in Biochemistry. Variable credit

CCHE 760: Research in Industrial Chemistry. Variable credit

CCHE 770: Research in Polymer Chemistry. Variable credit

CCHE 790: External Research. Variable credit

CCHE 901: Dissertation Consultation. 1 credit hour

Thesis Requirement

A student writing a graduate thesis must complete CCIS 821 as continuation of the research/design project mentioned in (b) above, leading to a graduate thesis and final examination on its contents.

Course Description

CCIS 500: Applications Software. **3 credits**

For nonmajors, emphasizing hands-on training in the use of Microsoft Office Suites, including application-oriented projects in word processing, spreadsheets, database design, and presentations design. Prerequisite: graduate standing.

CCIS 503: Business Application Tools. **3 credits**

Business tools for data analysis, spreadsheet and elementary database management; programming with SAS, SPSS-X, Lotus 1-2-3, DBASE III+, etc.

CCIS 509: Introduction to Information Systems. **3 credits**

Study of Information Systems at an introductory level. Topics include data structures, hardware concepts, software engineering, programming languages, and operating systems.

CCIS 511: Data Communications. **3 credits**

Introduction to data communication techniques, data link control, multiplexing and communication networking. Prerequisites: CCIS 121, CCIS 227, CCIS 473.

CCIS 513: Local Area Networks. **3 credits**

Study of design and analysis techniques for local area networks. Topics include polling, random access and ring networks and medium access control protocols. Prerequisites: CCIS 121, CCIS 227, CCIS 473, CCIS 511.

CCIS 515: Computer Networks. **3 credits**

Study of computer network design and hardware/software considerations, including layered (OSI) and hierarchical (DOD) approaches. Prerequisites: CCIS 473, CCIS 511, CCIS 513.

CCIS 519: Information Assurance Tools. **3 credits**

Study of commercial off-the-shelf and research tools relevant to information assurance. Topics include: firewalls, password cracking, system administration tools, intrusion detection and prevention, and wireless security. Prerequisites: CCIS 473, CCIS 511, CCIS 513, CCIS 515.

CCIS 521: Introduction to Information Security. **3 credits**

Provides a comprehensive overview of the concepts relevant to information security. Concepts include development of security policy, malicious code, general purpose protection of resources, trusted systems, and cryptography. Prerequisites: CCIS 473, CCIS 474, CCIS 511, CCIS 513, CCIS 515, CCIS 519.

CCIS 523: Human-Computer Interface. 3 credits
Study of human factors involved in interaction with computers. Topics include terminal emulation, split-screen technology, menu-driven input, command-line processing and response-time considerations. *Prerequisite:* Consent of the department.

CCIS 527: Distributed Systems. 3 credits
Study of design, implementation and management of distributed systems, including protocol issues above the network layer of the ISO hierarchy, naming, security, reliability, resource sharing and remote execution. *Prerequisites:* CCIS 473, CCIS 511, CCIS 513, and CCIS 515.

CCIS 571: Introduction to Algorithms. 3 credits
Study of algorithm design, using appropriate data structures. Topics include algorithms for sorting, searching and graph traversal and complexity issues. *Prerequisite:* CCIS 123, or approval of department.

CCIS 572: Introduction to Computer Architecture. 3 credits
Study of logical organization of computer hardware and functional components. *Prerequisites:* CCIS 105, CCIS 106, CCIS 121, CCIS 123, CCIS 200, CCIS 472.

CCIS 573: Introduction to Operating Systems. 3 credits
Study of basic operating system structures and designs, including process management, resource management and implementation. *Prerequisites:* CCIS 121, CCIS 473.

CCIS 574: Introduction to Database Systems. 3 credits
Study of basic concepts of data bases, query processing and other topics of interest. *Prerequisites:* CCIS 123, CCIS 474.

CCIS 575: Introduction to Artificial Intelligence. 3 credits
Introductory study of intelligent problem solving and search algorithms, inference systems, machine intelligence and knowledge organization. *Prerequisite:* CCIS 123.

CCIS 576: Programming Languages and Compilers. 3 credits
Overview of syntactic, semantic and pragmatic principles of programming. Parsing, translation and compiler construction. *Prerequisites:* CCIS 221, CCIS 123.

CCIS 671: Algorithm Design and Analysis. 3 credits
Study of algorithm design and analysis techniques. Topics include designing algorithms for sorting, order statistics, set manipulation, graphs, fast Fourier transforms and mathematical manipulations. An introduction to NP completeness theory. *Prerequisites:* CCIS 471, CCIS 571.

CCIS 672: Computer Organization. 3 credits
Advanced study of logical organization of functional components of computers, including processors, control units and memory. Topics also include interconnection networks, memory hierarchies, array and pipeline machines. *Prerequisites:* CCIS 472, CCIS 572.

CCIS 673: Operating Systems Design. 3 credits
Advanced study of major issues in operating systems including resource management, concurrent programs and duality of operating systems. *Prerequisite:* CCIS 473, CCIS 573.

CCIS 674: Database Design. 3 credits
Advanced study of database design including data models, relational interfaces, relational database design, query optimization, crash recovery and concurrency control. Concepts are reinforced via design projects. *Prerequisite:* CCIS 474, CCIS 574.

CCIS 675: Artificial Intelligence. 3 credits
Advanced study of problem solving, theorem proving, knowledge representation, expert systems, learning and natural language processing. *Prerequisite:* CCIS 475, CCIS 575.

CCIS 676: Theory of Programming Languages Design. 3 credits
Study of features of modern programming languages and issues of modular, concurrent, functional, logic and object programming. Topics also include exception handling and software reuse. *Prerequisite:* CCIS 476, CCIS 576.

CCIS 681: Computability Theory. 3 credits
Introduction to computability theory including recursive function theory, Turing machines and self-modifying programs. *Prerequisites:* CCIS 1123, CCIS 471, CCIS 571.

CCIS 683: Algorithms for Parallel Computers. 3 credits
Study of parallel algorithms and architecture. Topics include design and analysis of parallel algorithms for sorting, searching, graphs, mathematical manipulations and numerical problems. *Prerequisites:* CCIS 671 and CCIS 672.

CCIS 687: Intelligent Machines/Robotics. 3 credits
Cohesive study of intelligent machines involving computers, robots and sensor systems and experiments with robots and computers. *Prerequisite:* CCIS 675.

CCIS 689: Knowledge-Based Systems. 3 credits
Study of expert systems development and rule-based programming. Topics include knowledge representation, utilization and acquisition. *Prerequisite:* CCIS 675.

CCIS 691: Software Engineering. **3 credits**
Study of the concept of software process as a framework for developing large software systems with emphasis on various management issues. Topics include alternative models for the software process. Prerequisite: CCIS 321 or graduate standing.

CCIS 701: Logic Circuit Design. **3 credits**
Study of the design of switching and sequential circuits, including timing, structure, realization and modular logic design and related problems of physical design and modeling. Prerequisite: CCIS 121, CCIS 472, CCIS 572.

CCIS 702: VLSI Design. **3 credits**
Study of VLSI systems design, emphasizing quantitative characterization, analysis and computer techniques. Prerequisite: CCIS 701.

CCIS 703: Microprocessor Design. **3 credits**
Introductory study of the concept, design and operation of microprocessors. Topics include architecture, programming, comparative microprocessor evaluation, system design techniques and applications. Prerequisite: CCIS 472, CCIS 572, CCIS 701, CCIS 702.

CCIS 709: Signal Processing. **3 credits**
Study of digital signal theory, including modulation, sampling, coding and filtering. Topics include the application of digital signal processing to communications, process control and voice and image recognition. Prerequisite: consent of the department.

CCIS 711: Image Processing. **3 credits**
Study of image-processing fundamentals; major topics include digitization and processing of gray scale images, and image compression, enhancement, restoration and segmentation. Prerequisites: CCIS 709 and CMAT 321.

CCIS 725: Pattern Recognition. **3 credits**
Introduction to theory and application of decision-theoretic and syntactic methods of pattern recognition. Topics include deterministic and statistical algorithms, cluster seeking and automatic learning of decision functions and grammars. Prerequisite: CMAT 321.

CCIS 800: Practical Training. **3 credits**
Advanced practical training with government laboratories and industry via cooperative education and internship programs. To receive credit for this course, a student must register prior to undertaking the proposed work. Prerequisite: consent of the department.

CCIS 801: Topics in Computer Science. **3 credits**
Advanced study of a topic of current interest in the department, leading to a publishable technical report. Note: May be repeated for credit. Prerequisite: consent of the department.

CCIS 803: Research/Design Project in Systems Software/Hardware. **3 credits**
Prerequisites: CCIS 672 and 673.

CCIS 805: Research/Design Project in Data Base. **3 credits**
Prerequisite: CCIS 674.

CCIS 807: Research/Design Project in Distributed Systems/Networking. **3 credits**
Prerequisite: consent of instructor.

CCIS 809: Research/Design Project in Software Engineering. **3 credits**
Prerequisite: CCIS 691.

CCIS 811: Research/Design Project in Artificial Intelligence. **3 credits**
Prerequisite: CCIS 675.

CCIS 815: Research/Design Project in Information Systems. **3 credits**
Prerequisite: CCIS 521.

CCIS 821: Thesis Research. **3 credits**

COURSE DESCRIPTIONS

CMAT 501: Calculus and Linear Algebra.

3 credits

For nonmathematics students who are deficient in the tools of calculus and linear algebra.

CMAT 521-522: Real Analysis I, II.

6 credits

Theory of Lebesgue measure and integration, Banach and Hilbert spaces, product measure and product integration.

CMAT 523-524: Complex Variables I, II. **6 credits**
Theory and applications of functions of a complex variable; topics include analytic functions, contour integration, harmonic functions, conformal mapping and analytic continuation.

CMAT 525-526: Algebra I, II. **6 credits**
Abstract algebra covering the basic theory of groups, fields, rings and modules; advanced topics include Sylow theorems, Galois theory and category theory.

CMAT 527-528: Topology I, II. **6 credits**
Study of topological concepts including metric and topological spaces, continuity, connectedness, completeness, compactness and product spaces.

CMAT 541-542: Principles of Applied Mathematics I, II. **6 credits**
Study of various techniques of applied mathematics including Green's functions, string vibration, integral and differential operators in Hilbert spaces, spectral analysis and Laplace transform.

CMAT 601-602: Probability Theory and Stochastic Processes I, II. **6 credits**
Probability theory including central limit theorem and ergodic theory. Also included is study of stationary processes, independent increment processes and Gaussian processes.

CMAT 605: Partial Differential Equations. **3 credits**
Study of techniques for solving partial differential equations, including distributions, Sobolev spaces and Hilbert space methods.

CMAT 607: Introduction to Numerical Methods. **3 credits**
Study of numerical algorithms for the solution of algebraic, differential and integral equations including error analysis.

CMAT 608: Advanced Numerical Methods. **3 credits**
Study of advanced techniques of numerical analysis including finite difference and finite element approximations for elliptic and parabolic equations. Also included are various functional analytic techniques.

CMAT 609: Introduction to Control Theory. **3 credits**
Control theory including the calculus of variations, Hamilton-Jacobi theory and Pontryagin's maximum principle; topics include stochastic control depending on interest.

CMAT 610: Foundations of Mathematics. **3 credits**
Study of basic concepts and ideas in the philosophy and foundations of mathematical sciences, topics varying with the needs of students.

CMAT 675 – 676: Thesis Seminar I, II. **6 credits**
Study of a research topic leading to the completion of a graduate thesis.

COURSE DESCRIPTIONS

CPHY 501: Classical Mechanics. **3 credits**
Dynamics of particles and rigid bodies; the Lagrangian and Hamiltonian formulation; Poisson brackets, Hamilton-Jacobi Theory, classical scattering theory, theory of small oscillation.

CPHY 503: Electrodynamics. **3 credits**
Maxwell's equations and applications; electrostatics, dielectrics, magnetostatics, scalar and vector potentials; conservation laws; multiple moments and multiple radiation; dispersion; special relativity.

CPHY 504: Modern Optics. **3 credits**
Concepts of Modern Optics starting with Maxwell's equations including topics such as reflection and refraction, wave propagation in anisotropic media diffraction, interference, lasers, holography, and the theory of optical wave-guides. Prerequisite: CPHY 322 (Electromagnetic Theory).

CPHY 515-516: Quantum Mechanics I and II. **6 credits**
Nonrelativistic quantum mechanics; representation of dynamical variables as operators or matrices; theory of angular momentum; motion in a centrally symmetric field; perturbation theory; identical particles and spin; theory of classic collisions; semiclassical treatment of radiation.

CPHY 520: Thermodynamics and Statistical Mechanics. **3 credits**
Review of first, second, and third laws; irreversible processes; microcanonical, canonical and grand canonical ensembles; the density matrix; Bose and Fermi systems. Kinetic theory and the Boltzmann transport equation.

CPHY 531-532: Mathematical Methods I and II. **6 credits**
Vector analysis, orthogonal curvilinear coordinates; the calculus of variations; functions of a complex variable; ordinary and partial differential equations, hypergeometric functions; orthogonal functions; integral transform methods; Green's functions and integral equations.

CPHY 540: Solid State Physics. **3 credits**
Brillouin zone treatment of metals, semiconductors and insulators; approximation methods of determining properties of real solids; comparison between theory and experiment for selected solid state phenomena.

CPHY 545: Atomic and Nuclear Physics. **3 credits**
Quantum theory of atomic and nuclear processes. Hartee-Fock approximation, fine and hyperfine structure, atomic collision; nucleon-nucleon potentials and scattering, shell and collective models, correlation in nuclear matter.

CPHY 550: Physics of Fluids. **3 credits**
Basic processes in liquids, gases, magneto-fluids and plasmas; Navier-Stokes equation, non-Newtonian fluids, compressible and incompressible flow, shock structure, kinetic theory, classical transport, turbulence.

CPHY 565: Physics of Surfaces. 3 credits
Fundamentals of physical methods for studying the structures, composition, vibrational and electronic properties of solid surfaces, including the verification of principles in laboratory experiments.

CPHY 570: Radiation Physics. 3 credits
Radioactivity, interaction of electromagnetic radiation with matter, radiation quantities and units; x-rays, gamma rays, neutron activation, interaction of charged particles with matter, stopping power, range-energy relations, counting statistics shielding, dosimetry, waste disposal, critical prevention, radiation biology and ecology.

CPHY 585-586: Applied Quantum Mechanics I and II. 6 credits
Application of quantum mechanical principles to the solution of selected problems in atomic, molecular, nuclear and solid-state physics.

CPHY 601-602: Departmental Seminar. No credit
Required of all graduate students in the Department.

CPHY 603: Thesis or Non-Thesis Research. Variable credits
Designed to assist students in the development and writing of the thesis or the non-thesis research project.

CPHY 604: Thesis or Non-Thesis Research Project Consultation. 1 credit
Designed for students who are in the final stage of thesis writing or non-thesis research project writing, which requires minimal supervision and assistance.

CPHY 605: Optical Fiber Measurements I. 3 credits
Introduction to the hands-on experience needed to master the basic concepts and laboratory techniques of optical fiber technology; includes a wide range of applications in both optical communications and sensors, using both multimode and single-mode fibers.

CPHY 606: Modern Optical Measurements II. 3 credits
Continuation of Optical Fiber Measurements I with emphasis on more complex measurements and calibration on topics such as polarization-maintaining fibers, communication sources and detectors and communication systems.

CPHY 607: Advanced Optics. 3 credits
Surveys topics in advanced optics such as electromagnetic wave scattering and propagation in unperturbed, perturbed and nonlinear dielectric media. Prerequisite: CPHY 504 (Modern Optics).

CPHY 610: Philosophy of Science. 3 credits
Treatment of ontological, epistemological, and methodological presuppositions underlying physical theory and experiment; problems of demarcation, verification and evolution of scientific knowledge; social implications of scientific research.

CPHY 615: Special Topics in Physics. 3 credits
Special topics of current interest such as general relativity, quantum field theory, scattering theory, elementary particle theory, astrophysics, etc.

CPHY 620: Introduction to Atmospheric Sciences. 3 credits
Dynamics of atmospheric processes; spectroscopy of atomic and molecular species; photodynamics and photokinetics of photochemical processes; instrumental techniques, including infrared, atomic emissions, and atomic absorption.

CORE COURSE DESCRIPTIONS

CSYS 701: Overview of Systems Sciences. 4 credits

Qualitative and quantitative concepts of systems science; introduction to the analysis of large systems with applications; study of modeling and dynamics of systems; identification, and controllability, operational methods; and optimization.

CSYS 702: Scientific Computing and Database Management. 4 credits

Introduction to general scientific computing; numerical methods with applications; study of basic and advanced database concepts as they apply to object-oriented database systems.

CSYS 703: System Optimization. 4 credits

Advanced modeling with networks and graphs; linear and nonlinear programming with applications; integer programming; combinatorial optimization; and applications of perturbation methods.

CSYS 704: Statistical Methods and Design of Experiments. 4 credits

Distribution theory, estimation, data reduction and best estimation, tests of hypothesis, regression and analysis of variance, aspects of multivariate analysis, and statistical experimental design and analysis.

COURSE DESCRIPTIONS: COMPUTER SCIENCE CONCENTRATION

CCIS 507: Computer Graphics. 3 credits

Hardware and software organizations for graphics; special databases, multidimensional transformations and introduction to vector graphics. Prerequisites: CCIS 123 and 572.

CCIS 509: Information Systems Simulation and Modeling. 3 credits

Discrete event simulation using simulation tools. Topics include simulation of queuing and inventory systems and modeling of time-sharing and other systems. Prerequisite: consent of the department.

CCIS 511: Data Communications. 3 credits

Introduction to data communications techniques, data link control, multiplexing and communication networking. Prerequisite: CCIS 225.

CCIS 513: Local Area Networks. 3 credits

Study of design and analysis techniques for local area networks. Topics include polling, random access and ring networks and medium access control protocols. Prerequisites: CCIS 572 and CMAT 321.

CCIS 515: Computer Networks. 3 credits

Study of computer networks design and hardware/software considerations, including layered (OSI) and hierarchical (DOD) approaches. Prerequisites: CCIS 511, 472 and 473.

CCIS 517: Graph Theory and Algorithms. 3 credits

Introduction to graph theory and graph algorithms, including concepts in trees, circuits, connectedness, planarity, network flows, and assignment and transportation problems. Prerequisite: CCIS 471.

CCIS 523: Human-Computer Interface. 3 credits

Study of human factors involved in interaction with computers. Topics include terminal emulation, split-screen technology, menu-driven input, command-line processing and response-time considerations. Prerequisite: Consent of the department.

CCIS 527: Distributed Systems. 3 credits

Study of design, implementation and management of distributed systems, including protocol issues above the network layer of the ISO hierarchy, naming, security, reliability, resource sharing and remote execution. Prerequisite CCIS 515 and 473.

CCIS 671: Algorithm Design and Analysis. **3 credits**
Study of algorithm design and analysis techniques. Topics include designing algorithms for sorting, order statistics, set manipulation, graphs, fast Fourier transforms and mathematical manipulations. An introduction to NP completeness theory. Prerequisite: CCIS 471.

CCIS 672: Computer Organization. **3 credits**
Advanced study of logical organization of functional components of computers, including processors, control units and memory. Topics also include interconnection networks, memory hierarchies, array and pipeline machines. Prerequisite: CCIS 472.

CCIS 673: Operating Systems Design. **3 credits**
Advanced study of major issues in operating systems including resource management, concurrent programs and duality of operating systems. Prerequisite: CCIS 473.

CCIS 674: Database Design. **3 credits**
Advanced study of database design including data models, relational interfaces, relational database design, query optimization, crash recovery and concurrency control. Concepts are reinforced via design projects. Prerequisite: CCIS 474.

CCIS 675: Artificial Intelligence. **3 credits**
Advanced study of problem solving, theorem proving, knowledge representation, expert systems, learning and natural language processing. Prerequisite: CCIS 475.

CCIS 676: Theory of Programming Languages Design. **3 credits**
Study of features of modern programming languages and issues of modular, concurrent, functional, logic and object programming. Topics also include exception handling and software reuse. Prerequisite: CCIS 476.

CCIS 681: Computability Theory. **3 credits**
Introduction to computability theory including recursive function theory, Turing machines and self-modifying programs. Prerequisites: CCIS 221 and 471.

CCIS 683: Algorithms for Parallel Computers. **3 credits**
Study of parallel algorithms and architecture. Topics include design and analysis of parallel algorithms for sorting, searching, graphs, mathematical manipulations and numerical problems. Prerequisites: CCIS 671 and 672.

CCIS 687: Intelligent Machines/Robotics. **3 credits**
Cohesive study of intelligent machines involving computers, robots and sensor systems and experiments with robots and computers. Prerequisite: CCIS 675.

CCIS 689: Knowledge-Based Systems. **3 credits**
Study of expert systems development and rule-based programming. Topics include knowledge representation, utilization and acquisition. Prerequisite: CCIS 675.

CCIS 702: VLSI Design. **3 credits**
Study of VLSI systems design, emphasizing quantitative characterization, analysis and computer techniques. Prerequisite: CCIS 701 or graduate standing.

CCIS 600: Ph.D. **18 credits**
Qualifying Examination. Dissertation. Final Comprehensive Examination.

COURSE DESCRIPTIONS: ENGINEERING CONCENTRATION

CEGR 690: Experimental Methods. **3 credits**
Experimental methods and techniques, uncertainty analysis, data acquisition from models. Presentation of experimental methodology and basic instrumentation used in science and its calibration and use, accuracy, error, and uncertainty in experimental measurements.

CEGR 691: Materials for Design. **3 credits**
Properties, behavior, and selection of materials for practical design applications. Topics include the behavior of metals, ceramics, polymers, and composites. In this class, fundamentals of the design process are applied to analyze, design and/or select materials/components which are commonly used in the design of systems. Understanding and practicing how to design and use such materials/components for more complex design and system integration tasks.

CEGR 692: Teaching Practicum. **3 credits**
Supervised teaching for doctoral students in science. Discussion of teaching techniques, course and curriculum design, and student evaluation methods and criteria. Students may, in some instances, prepare and present lectures under the supervision of a faculty member.

CEGR 630: Communication Systems. **3 credits**
This course covers issues related to the design of tethered and wireless communication systems. These issues include the design of the transmitter and receiver, evaluation of the channel capacity, source and channel coding techniques and modulation techniques.

CEGR 631: Signal Processing. **3 credits**
The course begins with a review of basic signal processing techniques such as convolutional filters, fast Fourier transforms and analysis of random signals. The course then focuses on applications such as signal detection, array processing, pattern recognition and speech processing. Advanced and emerging signal processing techniques such as spectral analysis, wavelets and hidden Markov models that support these applications will be discussed.

CEGR 632: Image Processing.**3 credits**

This course begins with a discussion of multidimensional signal processing such as convolution and fast Fourier transforms. The course will then cover image processing applications such as enhancement, restoration, pattern analysis and compression. Applications using advanced techniques such as wavelets, super-resolution, neural networks and fuzzy logic will be discussed.

CEGR 633: Adaptive Systems.**3 credits**

This course begins with a review of random stochastic processes. The second part of the course covers linear FIR adaptive filtering techniques such as the least mean square (LMS) algorithm, the method of least squares, subspace methods and recursive least-squares estimation. The final part of the course will touch on estimation theory and Kalman filtering.

CEGR 730: Control Systems.**3 credits**

This course will cover the analysis and design of control systems. The course will begin with a review of Laplace and z-transforms and state-space equations. The rest of the course will investigate using feedback system responses, stability analysis, root locus behavior and frequency response analysis for control applications.

CEGR 731: Advanced VLSI Design.**3 credits**

The course will provide an advanced treatment for the design, analysis and testing of VLSI systems. The course begins with a review of MOS, nMOS and CMOS gate technologies. The second part of the course will cover software tools to aid in development. Issues relating to circuit characterization, fan-out, optimization and clocking constraints will be discussed.

CEGR 733: Parallel System Design.**3 credits**

This course covers the implementation of algorithms using either distributed memory or shared memory models. Examples of these models include the message passing interface (MPI) and OpenMP libraries. The design of specific parallel systems for different applications will be discussed. These applications include computational fluid dynamics, computational structural mechanics, computational chemistry and materials science and signal and image processing.

CEGR 734: Sensor Technology.**3 credits**

The course will cover the characterization of the behavior of sensors and the interpretation of their responses. Sensors of interest include radar, infra-red, electro-optic and acoustical sensors. The first half of the course will survey the physics behind the operation of these devices. The second half of the course will focus on processing techniques to extract information from the sensors. Medical, remote sensing, robotic and military applications will be discussed.

CEGR 791: Computational Fluid Dynamics (CFD).**3 credits**

In this course, the governing equations of fluid flow will be derived from conservation laws. Both, the compressible and incompressible fluids will be considered.

The Finite Difference (FD), Finite Volume (FV) and Finite Element (EM) methods will be introduced and applied to solve the governing equations. Emphasis will be given to the Finite Element Method (FEM). Students will be responsible for developing and applying various CFD tools to solve 3D real-world applications. Prerequisite: Differential Equations, Fluid Mechanics, and C or Fortran Programming language.

CEGR 732: Robotics.**3 credits**

Aspects of robotics design and engineering including overview of robotic manipulators and intelligent systems design are covered. The kinematics, dynamics, and control of robots are considered. Topics covered include homogeneous transformations, forward and inverse kinematics, Lagrange's equations of motion, Newton's equations of motion, linear feedback control (PID controllers), and nonlinear controllers. Other topics include electronic realization of control elements and compensations, ideal and real PID, elements of digital control theory: sampling theorem, z-transform and digital filters. Review of computer interfacing, power amplifiers, sequential logic, encoders, and motor control is provided. The latter part of the course deals with the integration of robotic elements into a system through the use of simulation and modeling techniques.

CEGR 602: Finite Element Analysis.**3 credits**

The fundamentals involved in conventional finite element method with applications in fluid flow, mass transport, solid mechanics and structures are covered. Topics include domain discretization, interpolation and shape functions, element derivation and types, element stiffness or property equations, assembly procedure, boundary conditions, solution methods for the algebraic equation system, applications in heat transfer, fluid flow, and stress analysis. The interpretation of results of finite element analysis and its visualization will be covered. Element type selection and validity of FEM models will also be covered. Students will write and test their own finite element code through individual subroutine construction.

CEGR 701: Modeling and Simulation.**3 credits**

Modeling and analysis of deterministic and probabilistic systems, as well as discrete and distributed parameter systems, are covered. Topics include review of continuous (time driven) and discrete (event driven) system simulation methods, simulation languages and their design, man-machine interface considerations, object-oriented methods, visual data representations, front-end and back-end processors, and computer animation of simulation output. Linear graph theory is used to model the topology of 2-d and 3-d systems of rigid bodies connected by mechanical joints, springs, dampers, and actuators. Other topics include: review of kinematics, dynamics and graph theoretic (GT) methods; GT representation of two-dimensional components and systems; formulation and solution of governing system equations; extension to three-dimensional mechanical systems with flexible bodies and mechatronic components; application to kinematic and dynamic analysis of mechanisms, robotic manipulators, vehicles and satellites. Coverage includes complex nonlinear systems, systems with uncertainty and robust systems design issues.

CEGR 792: Systems Design Clinic. 3 credits

Course encompasses the theory, methods and mathematics of engineering systems design. Topics include systems modeling and analysis, graph theoretic models, state space formulations, time and frequency domain solutions, applications to engineering systems including coverage of theoretical constructs such as: transformers, transducers and amplifiers and nonlinear components from a variety of disciplines. Examples will include electro-mechanical, thermo-hydraulic, and mechanical-hydraulic systems. Course covers finite difference methods as they are applied to boundary value problems in solid mechanics, heat transfer analysis, solutions of systems of higher order differential equations, and structural and thermal analysis. Fundamentals of intelligent systems design using tools of computational intelligence and soft computing are covered. These include fuzzy logic, neural networks, genetic algorithms and other hybrid techniques such as neuro fuzzy systems and fuzzy-generated algorithms.

CEGR 610: Failure Theories of Engineering Systems. 3 credits

Several failure concepts and theories of failure are introduced. Analysis of failure of engineering systems and the characteristics of failure surfaces and failure modes are covered. Fracture, yielding, buckling; creep, low stiffness and failure due to durability issues of moisture and temperature are presented.

CEGR 620: Engineering Economics. 3 credits

Presentation of a clear concept of the economics principles and methods applied in engineering processes and operations. Emphasis is placed on economics in the process industries and design work. The various costs involved in industrial processes, capital investments and investment returns, cost estimation, cost accounting, optimum economic design methods, and other economics topics are covered qualitatively and quantitatively.

CEGR 670: Chemical Reaction Engineering. 3 credits

Advanced study of chemical kinetics and mechanisms in complex homogeneous and heterogeneous reaction systems. Design of chemical reactors for such systems. Examples drawn from different applications, including heterogeneous catalysis, polymerization, combustion, biochemical systems and materials processing.

CEGR 671: Chemical Engineering Thermodynamics & Fluid Properties. 3 credits

The laws of thermodynamics with applications to pure substances and mixtures. Calculation of thermodynamic properties. Equations of state for pure components and mixtures, supercritical fluids, solution models for mixtures of electrolyte and nonelectrolytes. Thermodynamics of ideal and nonideal solutions. Phase and chemical equilibria involving multicomponent, multiphase systems.

CEGR 770: Transport Phenomena and Applications. 3 credits

Advanced theory and applications of momentum, mass and energy transport. Unified treatment of heat transfer, mass transfer and fluid mechanics emphasizing scaling concepts in formulating models and analytical methods for obtaining

solutions. Topics include conduction and diffusion, laminar flow regimes, convective heat and mass transfer, and simultaneous heat and mass transfer with chemical reaction and phase change.

CEGR 771: Advanced Materials Engineering. 3 credits

Advanced concepts in materials engineering and the application of these principles directed towards materials used in various engineering systems such as electronics, magnetic, electro-optic, chemical, nuclear, structural and thermal systems.

CEGR 750: Environmental Systems Engineering. 3 credits

Advanced environmental engineering issues associated with water, air and land pollution. Topics include air and water quality issues, hazardous wastes, risk assessment, groundwater contamination, global climate change, ozone depletion, acid deposition, and sustainable technologies.

CEGR 701: Departmental Seminar. 3 credits

Research seminars presented by students engaged in thesis work in the systems science program with concentration in engineering. Other speakers may include departmental faculty and invited guests.

CEGR 751. Structural System Stability. 3 credits

Stability problems in beams, columns, frames and arches designed with traditional and advanced composite materials. Cyclic buckling and impact strength. Stability design applications to buildings, bridges and offshore platforms.

CEGR 750. Intelligent Material Systems. 3 credits

Integration of microsensors and actuators into engineering systems for in-situ monitoring of structural integrity are introduced. The concepts of intelligent material systems are fully covered, and advantages and limitations of various smart materials are discussed. Applications include integrity monitoring of military and civil infrastructure.

CEGR 651. Transportation Systems. 3 credits

Transportation planning; highway traffic operations; intelligent transportation systems; transportation infrastructure management; environmental considerations during transportation planning.

COURSE DESCRIPTIONS – PHYSICS CONCENTRATION

CPHY 501: Classical Mechanics. 3 credits

Dynamics of particles and rigid bodies; the Lagrangian and Hamiltonian formulation; Poisson brackets, Hamilton-Jacobi Theory, classical scattering theory, and theory of small oscillation.

CPHY 503: Electrodynamics. 3 credits
Maxwell's equations and applications; electrostatics, dielectrics, magnetostatics, scalar and vector potentials; conservation laws; multiple moments and multiple radiation; dispersion; special relativity.

CPHY 515-516: Quantum Mechanics I and II. 6 credits
Nonrelativistic quantum mechanics; representation of dynamical variables as operators or matrices; theory of angular momentum; motion in a centrally symmetric field; perturbation theory; identical particles and spin; theory of classic collisions; semiclassical treatment of radiation.

CPHY 520: Thermodynamics and Statistical Mechanics. 3 credits
Reviews of first, second and third laws; irreversible processes; microcanonical, canonical and grand canonical ensembles; the density matrix; Bose and Fermi systems. Kinetic theory and the Boltzmann transport equation.

CPHY 531-532: Mathematical Methods I and II. 6 credits
Vector analysis, orthogonal curvilinear coordinates; the calculus of variations; functions of a complex variable; ordinary and partial differential equations hypergeometric functions; orthogonal functions; integral transform methods; Green's functions and integral equations.

CPHY 545: Atomic and Nuclear Physics. 3 credits
Quantum theory of atomic and nuclear processes. Hartee-Fock approximation, fine and hyperfine structure, atomic collision; nucleon-nucleon potentials and scattering, shell and collective models, correlation in nuclear matter.

CMAT 523: Complex Variable I. 3 credits
Theory and applications of functions of a complex variable; topics include analytic functions, contour integration, harmonic functions, conformal mapping, and analytic continuation.

CMAT 601: Probability Theory and Stochastic Processes I. 3 credits
Probability theory, including central limit theorem and ergodic theory. Also included is the study of stationary processes, independent increment processes, and Gaussian processes.

CMAT 607: Introduction to Numerical Methods. 3 credits
Study of numerical algorithms for the solution of algebraic, differential and integral equations, including error analysis.

CMAT 608. Advanced to Numerical Methods. 3 credits
Study of advanced techniques of numerical analysis, including finite difference and finite element approximations for elliptic and parabolic equations. Also included are various functional analytic techniques.

CMAT 643-644 : Operations Research I and II. 3 credits
Techniques for analytical formulation of decision problems, including linear programming, convex programming, dynamic programming, queuing models, replacement models, and stochastic processes.

CPHY 651: Advanced Condensed Matter Physics I. 3 credits
Diffraction and the structure of condensed matter, crystals and reciprocal lattice, electrons in a periodic potential, phonons, thermal and electrical properties. Effects of the electron-electron interaction, superconductivity, magnetism, and effects of disorder on electrons and phonons, localization.

CPHY 652: Advanced Condensed Matter Physics II. 3 credits
This course is designed for graduate students interested in learning the language, techniques, and problematics of modern quantum many-body theory as applied to condensed matter physics. First, some formal tools will be introduced, including second quantization, coherent states, functional integrals and diagrammatic method. Next, various physical phenomena of interest will be discussed: superfluidity, superconductivity, magnetism, quantum Hall effect, etc.

CPHY 653: Advanced Mathematical Methods I. 3 credits
This course emphasizes advanced numerical analysis of continuous and discrete systems. Various methods will be introduced, including those based on complex analysis, and asymptotic analysis. The study of transform methods is included. The Finite Element Method and the spline function theory are also covered, with application to linear and nonlinear differential systems. Special topics in Wavelet analysis, and Spectral theory will be covered as well. There will be a computer-based laboratory associated with the course.

CPHY 654: Advanced Mathematical Methods II. 3 credits
The study of nonlinear systems, both continuous and discrete. Fractal based methods are introduced. Dynamical systems research, including chaotic and turbulent behavior in fluids, and other mediums, will be emphasized. Great emphasis on computational tools will be made.

CPHY 655: Advanced Quantum Mechanics I. 3 credits
Formulation of nonlinear relativistic quantum mechanics, theory of angular momentum, perturbation theory, symmetry in quantum mechanics, applications to atomic and nuclear physics, scattering theory.

CPHY 656: Advanced Quantum Mechanics II. 3 credits
Formulation of relativistic quantum mechanics, Dirac theory, relativistic Hamiltonian, Quantum Electrodynamics, Quantum theory of radiation.

COURSE DESCRIPTIONS: MATHEMATICAL CONCENTRATION

CMAT615/6: Nonlinear Optimization. 3 credits
Analytical and numerical treatment of finite dimensional nonlinear programming; Computational aspects of constrained extremum problems; current developments.

CMAT643: Operations Research. 3 credits
Mathematical programming, gaming, complexity, polynomial algorithms: transportation and network problems, theory of inventory, application to engineering and finance problems, nondeterministic problems.

CMAT 605: Partial Differential Equations. 3 credits
First order equations and the method of characteristics. Classification of second order equations, Laplace's equation, the heat and wave equations and their solutions.

CMAT 607/608: Numerical Methods. 3 credits
Approximation, quadrature, Newton's method, roots of polynomials, finite difference methods for partial differential equations including elliptic, parabolic, and hyperbolic equations.

CMAT609: Introduction to Control Theory. 3 credits
The calculus of variations, Hamilton Jacobi Theory and the Ponryagin Maximum Principle, sufficiency theory.

CMAT 621/2: Real Analysis. 3 credits
Measure theory and Lebesgue integration, Banach spaces, linear operators, Hahn Banach Theorem, open mapping and closed graph theorems.

CMAT 523/4: Complex Variables I, II. 3 credits
Theory and applications of functions of a complex variable; topics include analytic functions, contour integration, harmonic functions, conformal mapping, and analytic continuation.

CMAT 541/2: Applied Mathematics I, II. 3 credits
Study of various techniques of applied mathematics, integral and differential operators, spectral methods, basic equations of mathematical physics, Poisson, heat and wave equations.

CMAT 601/602: Probability and Stochastic Processes I & II. 3 credits
Measure-theoretic probability, conditioning, notions of convergence, characteristic function, central limit theorem, Markov chain, ergodic theory, stationary processes, independent increment processes, Gaussian processes.

COURSE DESCRIPTIONS

SCJ 500: Administration of Criminal Justice. 3 credits

The course examines the decision-making guidelines of police, juvenile justice, court and correctional agencies. Issues and problems in regard to the application of these guidelines are also reviewed.

SCJ 501: Classical Theories in Sociology and Criminology. 3 credits

The course covers classical contributions of August Comte, Herbert Spencer, Emile Durkheim, Karl Marx, and Max Weber among others, and examines classical, neoclassical, and psychological theories of crime.

SCJ 502: Contemporary Theories in Sociology and Criminology. 3 credits

The course covers contemporary contributions of Talcott Parsons, W.E.B. DuBois, Vilfredo Pareto, Hans Gerth and C. Wright Mills, and examines social disorganization, differential association, labeling, conflict, and social control theories of crime among others.

SCJ 503: Research Methods I. 3 credits

Covers the general field of research methodology including an overview of the research techniques and procedures used in surveys, comparative studies, field studies, and experiments.

SCJ 504: Research Methods II. 3 credits

Covers sociological application of specific research methods: conceptualization, designing, measurement, construction of scales, testing for validity and reliability of responses, and other measures. (Prerequisites: SCJ 503)

SCJ 505: Statistics I. 3 credits

A survey of descriptive statistical methods and tools used to analyze data and to quantify the data into usable information; designed as a general review as well as an introductory course in social statistics.

SCJ 514: Law Enforcement Administration. 3 credits

A survey of the role of law enforcement agencies, resource allocations, law enforcement policies, and its relation to the total criminal justice system.

SCJ 516: Judicial Process: Court Systems. 3 credits

An overview and analysis of the legal transactions involved in the accusation, arrest, adjudication, and disposition of criminal offenders.

SCJ 517: Correctional Systems. 3 credits

A study and analysis of correctional institutions, including historical development, trends, alternatives and changes in the field of corrections.

SCJ 518: Delinquency and Juvenile Justice System. 3 credits
A study of analysis of the nature, extent, patterns and causes of juvenile delinquency; and the accusation, arrest, adjudication, and disposition of juvenile offenders.

SCJ 519: Practicum. 3 credits
A planned, supervised program of research, observations, study and work in selected criminal justice and other social agencies.

SCJ 520: Urban Society and Culture. 3 credits
Examines the relationships among environmental justice, violence, and environmental crime in cities. Case studies will be used to describe, explain, and analyze the impact of these relationships on urban life. Connections between city and culture provide the base for discussions on the social and cultural environment.

SCJ 521: Population and Society. 3 credits
Introduction to the study of population and its interactions with other aspects of society. Examines demographics, resources and environment, population trends, family structure and the status of women, and the future of population growth.

SCJ 526: Selected Topics Seminar in Sociology & Criminal Justice. 3 credits
Discussion of major topics in the administration of justice, including protests in contemporary society, theories of prejudice and discrimination, social justice in a planned society, police corruption, police labor management problems, and prison survival.

SCJ 531: Social Psychology. 3 credits
Examination of data, theory, and methodology currently utilized in a focus on the systematic study of the nature and causes of human social behavior.

SCJ 547: Sociology of Development. 3 credits
Historical and theoretical perspectives on development and underdevelopment, the global economic order and the challenge for today's underdeveloped countries; technology, agriculture and industry, education, public administration, role of women, and population growth.

SCJ 553: Criminology and the Criminal Justice System. 3 credits
Presentation of current data, theory, methodology, and practice relevant to study of criminal behavior and administration of justice.

SCJ 555: Medical Sociology I: Health, Illness and Intervention Systems. 3 credits
Examines health, illness, intervention systems and the contributions of social and behavioral sciences to understanding these systems. Also examines issues of disease and ethnicity, health disparities, social demography of health, epidemiology, alternative medicine, health care deliver, and international health among other topics.

SCJ 557: Medical Sociology II: Aging and Dying. 3 credits
Seminar focused on contributions of social and behavioral science studies of aging and dying. (SCJ 555 is NOT a prerequisite for this course.)

SCJ 559: Deviant Behavior. 3 credits
Attention to studies of mental disorder, addictive disorders, crime and delinquency, and other social anomalies in contemporary society.

SCJ 562: Social Stratification. 3 credits
Presentation of data, theory, and methodology of social mobility and internal division of societies based on race, class, gender, and age.

SCJ 563: The Family. 3 credits
A review of the American family; its heritage, contemporary forms, functions, challenges, and future projections.

SCJ 564: Comparative Gender Roles. 3 credits
A review of the significance of gender in social stratification, particularly as an intersection with race/ethnicity and class.

SCJ 565: Sociology of Education. 3 credits
Presentation of data, theory, and methodology of systems in education; includes analyses of formal and informal systems of learning throughout the lifespan.

SCJ 571: International Criminality, National Security & Terrorism. 3 credits
A study of the various forms of international crime with an emphasis on terrorism, focuses on the policies and methods used by governments to protect their national interests.

SCJ 575: Cultural and Social Anthropology. 3 credits
Presentation of data, theory, and methodology on human diversity and the role of anthropology. Focus on social institutions across the world including family, education, religion, and the economic/political sector. Also examines language, kinship, gender, ethnic conflict, and global relations in the context of culture, socialization, and social organization.

SCJ 579: Cultural and Ethnic Relations. 3 credits
Presentation of data, theory, and methodology in the study of relations between groups which differ in race/ethnicity and/or culture as seen in international as well as domestic perspective.

SCJ 580: Environmental Racism. 3 credits
Examines the impact of institutional racism and health polices, industrial practices, governmental regulation and rule-making, enforcement, and overall quality of life in communities of people of color. Also examines the nexus between environmental protection and civil rights, the impact of the environmental justice

movement on the dominant environmental paradigm and on national environmental groups.

SCJ 582: Comparative Criminal Justice Systems. 3 credits
Draws students' attention to the existence of four major world legal families – the civil law, common law, socialist law, and Islamic law using the sociology of law perspective.

SCJ 587: Urban Ethnography. 3 credits
An examination of qualitative research methods in studying social behavior; focuses on conducting field studies as a scientific method of inquiry.

SCJ 589: Selected Topics Seminar I. 3 credits
Varying topics related to social, environmental, and criminal justice issues. Topics vary with new developments in research, theory, and policy issues.

SCJ 590: Selected Topics Seminar II. 3 credits
This course is the same as SCJ 589. It affords the student an opportunity to further study a given topic or examine a different topic while earning additional credit hours.

SCJ 603: Statistics II. 3 credits
This course is designed to provide skills to graduate students in inferential statistics. Students learn testing of scientific hypotheses utilizing correlation analysis, analysis of variance, regression analysis and factor analysis. Detecting defective data and interpolation will also be covered during the semester. (Prerequisites: SCJ 503 and SCJ 505)

SCJ 613: Independent Study. 3 credits
Designed to give students in selected fields an opportunity to more intensely pursue research and/or engage in other learning experiences consistent with the completion of their program of study. (Prior approval of the instructor is required.)

SCJ 698: Thesis Consultation. 1 credit
Direct advisement with faculty in the completion of the thesis and research writing process.

SCJ 699: Thesis Research. 3 credits
Same as SCJ 801, but can serve as an option to meet financial aid and other "minimal load" requirements.

CPSC 500: Departmental Seminar.**Noncredits**

A weekly meeting of all members of the Department set aside for exchange of ideas among the participants; guest lecturers are frequently invited. Required of all majors.

AFRICAN POLITICS**CPSC 572: International Relations of African States. 3 credits**

Examination of relations among African states and their role in Third World and International politics.

CPSC 590: African Political Institutions. 3 credits

Comparative study of central, regional and local institutions of government and administration in contemporary Africa. Prerequisite: CPSC 591.

CPSC 591: Government and Politics of Modern Africa. 3 credits

Contemporary government and politics of the states of Africa, providing exposure to African political culture and its historical background, and to political trends and ideologies.

CPSC 595: Seminar in African Politics. 3 credits

In-depth study of one or more important issues in contemporary African political analysis, with either a one-country focus or a comparative perspective; topics vary from semester to semester. Prerequisites: CPSC 591 and consent of instructor; may be taken twice for academic credit.

CPSC 596: Politics in Southern Africa. 3 credits

Analysis of the struggle of black people of Southern Africa against imperialism and settler colonialism and for liberation; examination of the South African state's internal and external strategies of apartheid maintenance together with relations of the neighboring black states with the white minority rulers and the liberation movements. Prerequisites: CPSC 591, or consent of instructor.

CPSC 598: African Political Economy. 3 credits

Analysis of the social basis and the orientation of the politics and administration of economic and social change in postcolonial Africa, with emphasis on the ideologies of socialism and the realities of neocolonialism, dependence, and capitalist development. Prerequisite: CPSC 591.

CPSC 599: Social Cleavages and Political Conflict in Africa. 3 credits

Sociological analysis of the cleavages in African social structure and their impact on political conflict and change, with particular emphasis on the role of ethno-regional groups and social classes. Prerequisite: CPSC 591.

COMPARATIVE POLITICS**CPSC 529: Comparative Political Systems. 3 credits**

Survey of political structures, institutions, ideologies, interest groups and governmental systems; analysis of decision-making processes, political conflicts and change, and group interaction; examination of models of political systems.

CPSC 530: Government and Politics of Latin America. 3 credits

Examination of Latin American political institutions and political forces, with special attention to role of the military and the church and the legacy of European and U.S. exploitation.

CPSC 531: Politics in Developing States. 3 credits

Examination of political processes in developing countries; problems arising in transition from traditional societies to modern industrial states examined to describe typical patterns of political change.

CPSC 532: Political Institutions of China. 3 credits

Examination of contemporary politics in the People's Republic of China pre-1949 political history, socialist goals and Chinese society, structure and function of political institutions and organizations.

CPSC 534: Comparative European Government. 3 credits

Cross-national analysis of political institutions and political behavior in Eastern and Western European nations.

CPSC 535: The Politics of Revolutionary Change. 3 credits

Analysis of ideas which generate fundamental change, leadership and movements which organize change and examination of their successes and/or failures.

CPSC 536: Comparative Political Parties. 3 credits

Examination of selected party systems, including single and multiparty systems, Marxist and non-Marxist systems, and systems in industrial and nonindustrial states.

CPSC 537: Government and Politics of the Caribbean. 3 credits

Examination of political processes in Caribbean states with special emphasis on political problems arising in transition from colonial status to independence.

CPSC 538: Seminar on Asian Politics. 3 credits

Survey of political processes within and interrelationships between major nations of Asia; focus on China, India, and Japan.

CPSC 539: Third-World Women and Development. 3 credits

History, status and role of Third-World women in development, governmental policies and practices toward women as well as movements and activities of Third-World women examined.

CPSC 540: The Politics of the Multinational Corporation. 3 credits
Study of impact of MNCs on the international system and national politics and economics, particularly in the Third-World; special emphasis on the issues of development, dependency, sovereignty and control.

CPSC 541: Politics and Education. 3 credits
Examination of role of education in creation and maintenance of a political culture and role of politics in the creation and philosophy of education structures; the relationship between political education and political participation.

CPSC 542: Seminar on Comparative Politics. 3 credits
Designed for advanced students concentrating in Comparative Politics; focus on readings and research on selected topics and problems in comparative politics.

INTERNATIONAL POLITICS

CPSC 533: Chinese Foreign Policy. 3 credits
Analysis of Chinese capabilities, intentions and strategies in world affairs since 1949; examination of institutions in foreign policy making and implementation; use of instruments of foreign policy in achieving Chinese goals.

CPSC 570: International Relations. 3 credits
Analysis of interlocking factors of geography, population, race, nationalism, and economics as fundamental forces in national power; study of diplomatic, ideological, imperialistic and military rivalries in the contest for world power.

CPSC 571: Japanese Politics and Foreign Policy. 3 credits
Survey of contemporary Japanese politics, government and foreign relations; focus on post-World War II period.

CPSC 573: United States Foreign Policy. 3 credits
Analysis of formation and execution of foreign policy; focus on role of domestic forces and governmental institutions in policy making and contrasting interpretations of U.S. foreign relations.

CPSC 574: Third-World Nations and International Politics. 3 credits
Role of policies, actions and techniques of Third-World nations in the international area analyzed for trends and continuities.

CPSC 575: European Foreign Policies. 3 credits
Analysis of foreign policies of nations of Eastern and Western Europe with special attention to past and present colonial policies toward Third World nations.

CPSC 576: Military Power in International Relations. 3 credits
Military power as a technique to achieve goals in the international arena; special attention to contemporary warfare and wars of liberation.

CPSC 577: International Organizations. 3 credits
General development of world organizations; principles, structures, methods, and operation of international governmental institutions; special attention to the United Nations and related agencies.

CPSC 578: Colloquium on International Politics of Asia. 3 credits
Analysis of Asian politics, comparative foreign policies, and international relations; focus on foreign relations of indigenous nations and role played by great powers.

CPSC 579: Politics of International Trade. 3 credits
Identification and analysis of the political forces, which influence commerce among nations; special attention to trade relations between industrial and non-industrial nations.

THEORY AND METHODOLOGY

CPSC 543: Political Theory. 3 credits
In-depth analysis of major schools of thought in the field of political theory from the classical period to the present.

CPSC 560: African-American Political Thought. 3 credits
Analysis of categories of black political thought; emphasis on meaning of theory related to black political thinking.

CPSC 600: African Political Ideas. 3 credits
Survey course and resource mechanism designed to (1) identify political thinkers on the African continent and research their ideas, and (2) analyze works of major continental political thinkers of the contemporary era.

CPSC 601: Philosophy of Science. 3 credits
Problems involved in scientific study of political society; epistemological consideration of "approaches" to the study of politics, and consideration of outstanding problems confronted by political scientists in their efforts to explain and predict.

CPSC 602: Scope and Method of Political Inquiry. 3 credits
Study of concepts and methods of social science, especially of political science; philosophy of science; presuppositions, aims and history of procedures and methods; research techniques, sources, bibliography and presentation and publication of investigative results; required of all majors.

CPSC 603: European Political Philosophy. 3 credits
Survey of major ideologies of liberalism, socialism, conservatism that have developed in European political thinking in the modern era, with emphasis on the relationship of these ideas to European writings on colonialism and imperialism.

CPSC 605: Seminar in Political Theory. 3 credits
Problems of black political theory that have developed since the end of the civil rights era; evaluation of new concepts in black political theory and links between these concepts and historical problems considered in African-American political theory.

CPSC 606: Feminist Theory. 3 credits
Examines and analyzes various theoretical, strategic and political positions which characterize the literature and study of women, related issues; special emphasis on study of black feminist theory.

CPSC 608: Problems in Political Science Research. 3 credits
Intensive examination of problems of conceptualization, design and experimentation in political science research.

CPSC 609: American Political Thought. 3 credits
Survey of ideas, personalities and relevant ideologies that have evolved out of American political culture and practice.

U.S. GOVERNMENT AND POLITICS

CPSC 502: Government and Business. 3 credits
Critical analysis of the relationship between group pressures on government and public policy affecting business; role of administration in formation of policy problems, and experiences of federal agencies operating in business fields.

CPSC 503: Public Opinion and Propaganda. 3 credits
A study to identify and explain public opinion; to describe how and why people react in social situations, and to consider the role of public opinion and propaganda in contemporary society.

CPSC 504: Techniques of Political Control. 3 credits
Examination of the tools used by power holders to control society, with special attention to the condition of African-Americans in the United States.

CPSC 505: Political Parties. 3 credits
Explores the types, the nature and the different structures of political parties in America and abroad; theories about political parties are also explored.

CPSC 506: Black Political Parties. 3 credits
The rise and development of separate black political entities examined historically and contemporarily; attention is focused on types of black parties and the rationale for their organization and development.

CPSC 507: Politics of Rural United States. 3 credits
Analysis of political trends and movements in rural America.

CPSC 508: Seminar in Southern Politics. 3 credits
Examination of Southern politics in state, nation, and the international arena; the approach is systematic and comprehensive, with focus on blacks in the region.

CPSC 509: The United States Presidency. 3 credits
Analysis of the powers and organization of the U.S. presidency, with attention to power-gathering, domination of the legislative branch, and manipulation of the people.

CPSC 510: The Congressional Process. 3 credits
Analysis of the U.S. Congress, especially the internal structure, power uses, pressure politics, executive relations, constituency relations and intra-Congress conflicts.

CPSC 511: American Federalism. 3 credits
Survey of the origins, institutions and operation of federalism in the United States; the nature of this structure and its consequences are examined in relationship to minorities.

CPSC 513: American Political Process. 3 credits
Analysis of factors, institutions and actors in the American political arena; study of access to various structures and political organizations from the view of all groups within a pluralistic society.

CPSC 514: Seminar in Judicial Process. 3 credits
Studies of court systems at each level, jury process, substantive judicial issues, with emphasis on the role of African-American participants.

CPSC 515: Legislative Process. 3 credits
Examination of theories, roles, structures, committee systems, procedures and politics of legislatures, and of the involvement of interest groups, executive, bureaucracy, and judiciary in the legislative process.

CCPSC 516: Seminar/Internship on the Georgia Assembly. 3 credits
During the annual legislative sessions, students serve as interns and participant-observers of the Georgia legislature; research papers required.

CPSC 517: Women in Politics Seminar. 3 credits
Survey of the role of women as political activists and office holders on the international, national and local levels, with emphasis on the participation of minority women in U.S. politics.

CPSC 548: U.S. Constitutional Law. 3 credits
Study of the law of the United States Constitution through an analysis of lower federal court cases, Supreme Court cases, and other primary and secondary material.

CPSC 550: The Judicial Process. 3 credits
Introduction to the function of the judicial process in the U.S. political system, with special attention to the politics of the judicial process.

CCPSC 551: The Constitution and Civil Liberties. 3 credits
Study of the judicial protection of rights and liberties under the Bill of Rights, and the Thirteenth, Fourteenth and Fifteenth Amendments.

CPSC 552: Seminar in U.S. Government and Politics. 3 credits
Explores contemporary issues and problems in American government and politics.

CPSC 553: Blacks and the American Political System. 3 credits
Assessment of the position of blacks in the political system of the United States, with special attention to alternative political strategies for the present political epoch.

CPSC 554: State and Local Politics. 3 credits
Examination of state and local political institutions; tools of political participation thoroughly analyzed; entrance of blacks into state and local politics assessed.

URBAN POLITICS

CPSC 512: Black City Politics. 3 credits
Comparative assessment of the impact of the ascendancy of black elected officials in specified American cities; analyses of the mechanics which brought blacks to power, problems blacks experience in exercising power, and impact of black leadership on the delivery and quality of city services.

CPSC 518: Seminar in Urban Problems. 3 credits
A rotating topic seminar involving in-depth exploration of problems common to major urban centers; topic will be announced each semester.

CPSC 519: Urban Politics. 3 credits
Survey of dilemmas, limitations and potentialities of urban political activity in America exposes students to various approaches to the study of urban politics

and assessment of impact of blacks upon political activity of contemporary urban centers.

CPSC 520: Politics of Public Finance. 3 credits
Basic concepts and modes of government financing, especially those of local government, with attention to implications for units of government under black political authority.

CPSC 522: Urban Political Movements. 3 credits
Examination of political organizations seeking to create basic changes in public policy of various urban centers and review of goals, strategies and methods of these organizations and their impact upon the urban landscape.

CPSC 523: Atlanta City Politics. 3 credits
Survey of the political system in Atlanta with focus on resources, strategies and tactics of black and white actors in shaping Atlanta's politics, programs and developing political institutions.

CPSC 525: Political Demography and Urban Change. 3 credits
Analysis of impact of population shifts and other demographic factors upon urban change; special emphasis upon black migration patterns and resulting public policy.

CPSC 526: Approaches to the Study of Urban Politics. 3 credits
Examination and critique of various conceptual schemes as tools for analyzing urban political development and review of major theoretical works purporting to explain urban political phenomena.

CPSC 640: Independent Research. 3 credits
Designed to give students opportunity for advanced research in such fields and on such topics as may be agreed upon between the individual and the instructor. Students are permitted to take only one (1) Independent Research.

CPSC 701: Thesis Consultation. 1 credit

CPSC 705: M.A. Thesis Research. 3 credits

CPSC 801: Dissertation Consultation. 1 credit

CPSC 805: Dissertation Research. 3 credits

COURSE DESCRIPTIONS

CPAD 501: Public Administration - Survey of the Field. 3 credits
Study of basic principles and practices of public administration in the U.S.; focuses on organizational issues, administrative processes, administrative ethics, decision-making and problem solving.

CPAD 502: Organization Theory and Bureaucratic Behavior. 3 credits
Emphasis on organizational dynamics in modern public organizations; classic and contemporary organizational theory; organizational linkages, human behavior in organizational settings.

CPAD 503: Research Methods. 3 credits
Traditional research techniques introduced; research design and preliminary analysis presented; also research ethics and methods of formal preparation and presentation of reports.

CPAD 504: Research Data Analysis. 3 credits
Provides an understanding of quantitative as well as qualitative techniques for analyzing research data on public programs and administrative problems. Explores the relevancy of quantitative and qualitative analysis to problems administrators face in public agencies. Students will learn to make appropriate use of applied research in decision-making and will utilize computer programming in support of statistical analyses.

CPAD 505/CECO 520: Economics for Public Administrators. 3 credits
Designed to provide public administrators with fundamental economics background necessary to understand and implement policy; topics include fiscal and monetary policy, government regulation of the private sector, the federal budget and local fiscal problems.

CPAD 506: Public Budgeting and Finance. 3 credits
Examination of public sector budgeting; special emphasis on federal budget practices and procedures; unified budgets; national income accounts; budget cycle; executive and legislative roles in the budget process.

CPAD 507: Formulation of Public Policy. 3 credits
Emphasizes the moral, ethical and competitive nature of policy formulation. Contemporary models of policy analysis explored; students required to analyze development of selected public laws from inception to enactment.

CPAD 508: Human Resource Management. 3 credits
Develops understanding of and competencies in strategic human resource policies, methods and techniques as organizational management functions.

CPAD 509: State and Local Government Finance. 3 credits
Detailed study of activities and approaches to public fiscal management at state and local levels; examination of capital budgeting, debt management, cash flow, taxation and forecasting.

CPAD 510: Program Design, Implementation and Evaluation. 3 credits
Techniques for designing programs and implementing new programs within existing organizations are explored; methods of evaluation of program operations and achievement of primary and secondary objectives are introduced.

CPAD 511: Applied Urban Management. 3 credits
Application of management concepts to operations of urban units of governments; emphasis on performing management tasks and use of techniques for interacting with diverse interest groups in the urban setting.

CPAD 512: Internship. 3 credits
A minimum of twelve (12) weeks in an approved, supervised internship is required.

CPAD 513: Independent Study. 3 credits
Offered by special arrangement with faculty in areas approved by the Department.

CPAD 514: Public Management. 3 credits
Focuses on managerial practices in government at all levels. Cases are used to study public management.

CPAD 515: Comparative Administration. 3 credits
Cross-national examination of selected public bureaucracies, analysis of concepts, issues and problems of development administration in Third-World countries.

CPAD 516: Fundamentals of Social Policy. 3 credits
Focuses on the basics of social policy in the U.S. with discussions on the role of government and contributions of policy sciences to social policy development.

CPAD 517: Labor-Management Relations. 3 credits
History and current state of collective bargaining in the public sector explored; laws and practices affecting collective bargaining in the public sector are examined. Critical labor-management relations issues are analyzed in the context of work-force development and organizational effectiveness.

CPAD 518: Strategic Human Resource Planning. 3 credits
Emphasis is on depth analysis of human resource planning and development for organizational needs, planning tools, techniques and methods are presented; particular focus on succession planning and strategic human resource planning.

CPAD 519: Development Administration. 3 credits
Explores evolution of theories and principles of development administration from initial focus of institution-building in the 1960s to basic human needs approaches of the 1970s to current emphasis on capacity-building within the context of international development organizations.

CPAD 520: International Administration. 3 credits
Examines the proliferating number of governmental and nongovernmental organizations in the international system with emphasis on the United Nations organizations and United States Overseas programs. Issue areas such as personnel and staffing policies, as well as the role and impact of development administration and international organizations in today's interdependent global village are covered.

CPAD 521: Principles of Community and Economic Development. 3 credits
Introduction to national planning and decision-making process as well as methods and techniques frequently employed in developing plans, projects and programs to achieve community and economic development goals in urban areas.

CPAD 523: Development Finance. 3 credits
Focuses on the centrality of government-initiated financial/budgetary activities and instruments commonly used to finance infra-structural development; also examines existing problems of financial management practices and budget approaches to overall financial capacity of less developed countries.

CPAD 524: Seminar: Contemporary Problems in Urban Management. 3 credits
Current trends and new concepts in solving problems in managing the urban environment; alternative modes of service delivery are explored.

CPAD 525: Seminar: Public Policy Formulation and Analysis. 3 credits
Discussion and analysis of selected issues and policies; impact of selected policies a central focus.

CPAD 526: Seminar: Topics in International Administration and Development Management. 3 credits
Examines selected topics in international and development administration; emphasis on developing conceptual tools for analysis and resolution of problems relating to administration and management of societal changes and development.

CPAD 527: Compensation Management. 3 credits
Concepts theories, developments and practical applications in the compensation management field are presented. Characteristics and design of compensation plans are evaluated based on their cost and effectiveness, as well as the return on the organizations' investment.

CPAD 528: Seminar: Human Resources Management. **3 credits**
Modern practices and techniques in management of human resources are presented for discussion and analysis. The expanded functions of human resource management are highlighted.

CPAD 529: Paper Research. **3 credits**

CPAD 530: Paper Consultation. **1 credit**

Course Descriptions

CIAD 500: International Politics.

3 credits

Studies the origin, nature, and structure of the world system, as well as the interaction of states and nonstate actors in terms of conflict and cooperation within that system. Reviews theories of international politics developed to understand the dynamics of these interactions.

CIAD 503: Diplomatic History. 3 credits
Examines the political and diplomatic interactions among states in various regions of the world since the Congress of Vienna of 1815 until the end of World War II in 1945.

CIAD 504: Critical Issues in International Affairs and Development. 3 credits
Surveys the current international system with a focus on critical issues relating to international affairs and development. Topics include, but are not limited to, security, conflict, health, environment, communications and technology.

CIAD 505: International Law and Organization. 3 credits
Studies the general principles and practice of international law (law of Treaties, Diplomatic practice) and provides an overview of selected areas of international law, human rights law, environmental law, economic/trade law, and law of the seas. Also examines the origins, principles, theory, structure, and function of international organizations.

CIAD 506: International Perspectives on Gender, Race, and Class. 3 credits
Explores the issues of gender, race, and class across time and cultures. Concentrates on their intersection and the role of the state in exacerbating or alleviating inequities.

CIAD 514: Research Methods. 3 credits
Explores theories and methods of scientific research in the social sciences, incorporating statistical analysis, computer databases, and graphs. Topics covered include the development of problem identification, formulation of testable hypotheses, and use of empirical techniques.

CIAD 520: International Economics. 3 credits
Introduction to the theories of international trade using the theory of supply and demand. Topics include the theory of comparative advantage, the gains from trade and the impact of trade on income distribution.

CIAD 521: International Trade and Development. 3 credits
Examines relevant development theories/models, and tools for analyzing and gaining an understanding of development issues and trade strategies. Specific areas include the impact of fiscal and monetary policies on trade and development, trade and price policies on economic welfare, and international cartels on domestic and world prices.

INTERNATIONAL POLITICS AND DIPLOMACY

Course Descriptions

CIAD 601: Theories of International Relations. 3 credits
Studies the various theoretical approaches used to explain inter-state relations and the interaction between states and nonstate actors in the global system. Emphasis on balance of power, pluralism, game theories, and regime analysis.

CIAD 607: United States in World Affairs. 3 credits
Examines the role of the United States in international affairs from 1945 to the present, focusing on the cold war and its aftermath as well as American inter-state relations around the world.

CIAD 619: Turbulence in World Politics and Conflict Resolution. 3 credits
Studies the range of international tensions from prewar turbulence through low intensity conflicts to full scale war and the strategies aimed at the avoidance of or the peaceful settlement of disputes through the use of early warning, preventative diplomacy, good offices, mediation, arbitration, and the use of interpositional forces.

CIAD 700: Multilateral Diplomacy. 3 credits
Studies the structure of selected multilateral organizations and the politics of negotiation and decision-making in the United Nations and other such institutions. Examines the role of regional and political groups in this process. Case studies will be used to demonstrate the parliamentary nature of multilateral diplomacy.

CIAD 701: Peacekeeping and Humanitarian Intervention. 3 credits
Examines the legal and political framework for the use of peacekeeping forces by the United Nations since 1945 using case studies. Focuses on the recent role of peacekeeping forces, peace making, and peace building for international affairs.

CIAD 702: Global Communications and Technology. 3 credits
Analyzes the impact of rapid technological change for international affairs with an emphasis on communications technology. Considers the repercussions for financial markets, commercial transactions, and also discusses innovations in other fields.

CIAD 703: International Environmental Policy. 3 credits
Studies the environmental impact of fossil fuels and the policies pursued by governments to reduce pollution. Discusses the role of nonstate actors in raising awareness on a range of environmental issues, from deforestation to global warming to the reduction in plant and animal species.

CIAD 704: Ethnicity and Political Conflict. 3 credits
Studies the rise of ethnic particularism, particularly in the post cold war period and the resulting internal and inter-state conflicts. Examines irredentist and secessionist movements such as have occurred in Somalia and Zaire, as well as the "ethnic cleansing" practices in Bosnia-Herzegovina.

CIAD 705: International Strategic Arms Limitation. 3 credits
Studies nuclear weapons and the effort to end nuclear proliferation, the development of strategic arms doctrines, as well as the power of the US and the former Soviet Union. The earlier debate over disarmament and arms control and the SALT treaty will be examined, as well as current efforts to stem the flow of arms and reduce military expenditures in developing countries.

CIAD 706: Science and Technology in International Affairs. 3 credits
Analyzes the impact of science and technology on the conduct of international affairs. Emphasis on telecommunications technology, the emergence of the electronic war and the implications of biotechnology on agricultural development.

CIAD 707: Human Rights and International Law. 3 credits
Surveys the functions and techniques of international human rights organizations, such as the relevant bodies in the United Nations, the Organization of American States and the European union, as well as standards setting activities. Examines civil, political, economic and social rights, as well as the rights of minorities and indigenous peoples.

CIAD 708: Ethics in International Politics. 3 credits
Examines the evolution of morality in international affairs with a special focus on such issues as behavior during military conflict, actions of intelligence agencies, corruption in international economic transactions and other issues of social justice.

CIAD 800: Advanced Seminar in International Politics and Diplomacy. 3 credits
Studies special topics in international politics and diplomacy. Permission of the instructor is required.

International Economics and Business

Course Descriptions

CIAD 622: International Trade Theory and Policy. 3 credits
Studies the theory of comparative advantage, the gains from trade, trade and income distribution, international factor mobility and the relationship between growth and trade.

CIAD 623: International Monetary Theory and Policy. 3 credits
Covers international monetary policy and its implications for macroeconomics. Investigates balance of payment adjustment mechanisms including fiscal and monetary exchange rate policy.

CIAD 624: Regional Economic Integration: Theory and Practice. 3 credits
Covers theories of integration and the emergence of regional trading blocs. Analyzes several cases of regional economic integration across the globe. Topics

include: regional institutional arrangements; prospects for regional organizations; cross-border effects of national economics and political policies.

CIAD 709: International Financial Institutions. 3 credits
Covers international cooperation in the financial and monetary sphere a la Bretton Woods' model. Analyzes the structure and functioning of international financial institutions, including the regional development banks.

CIAD 710: The Political Economy of North-South Relations. 3 credits
Covers theories of north-south political economic and trade relations. Includes the topics geopolitical trade patterns of the cold war, and the dynamic and fluid trade and development challenges of the post cold war era (WTO, UNCTAD, etc.).

CIAD 711: Multinational Corporations in the World Economy. 3 credits
Covers the emergence of multinational corporations and their expansion after World War II and their current impact on development and world trade. Studies the factors that create a favorable investment climate, as well as investment codes, export processing zones and free trade areas. Examines efforts to establish codes of conduct for multinational corporations.

CIAD 712: International Financial Transactions. 3 credits
Studies the international flow of capital, international payments mechanisms and the impact of stock markets. Discusses the implications of fluctuating exchange rates, currency speculation and swaps.

CIAD 801: Advanced Seminar in International Economics and Business. 3 credits
Studies special topics in international economics and business. Permission of the instructor is required.

International Development and Social Change

Course Descriptions

CIAD 641: Theories of Economic Development and Social Change. 3 credits
Explores theories about economic development, social change, modernization and dependency. These range from the classics (Marxism, Protestant ethic, and stages of growth) to modern theories.

CIAD 642: Gender Issues in Development. 3 credits
Studies the importance of gender, especially the contribution of women, to the development process. Analyzes constraints to the economic empowerment of women and strategies to include women more equitably in the development process.

CIAD 643: Financing International Development. 3 credits
Studies the methods (aid, trade and investment) of financing development with a special emphasis on the evolution of priorities and modalities of international development assistance policies. Examines the impact of conditionality and the use of debt swaps.

CIAD 714: Environment, Energy Resources and Sustainable Development. 3 credits
Explores the relationships among the environment, energy resources and development in developing countries. Reviews the evolution of international concern about environmental protection, the pollution resulting from both poverty and industrialization, the role of the International Commission on Environment and Development and the issues outlined in Agenda 21 of the UN Conference on Environment and Development.

CIAD 715: Rural Development. 3 credits
Analyzes rural communities, the quality of rural life, the intersectoral complexity of poverty and hunger, and the importance of improving food security in the Third World. Emphasizes the dynamism and contributions of rural men and women and the importance of local involvement in all phases of the development process.

CIAD 716: International Health and Population Policies. 3 credits
Studies the evolution of international health and population policies and the role of the World Health Organization and other institutional actors. Reviews programs for chronic and epidemic maladies.

CIAD 717: Democracy and Development. 3 credits
Studies the theoretical and empirical relationship between democracy and development and the evolution of recent democratization movements around the world.

CIAD 718: Education, Manpower Policies and Development. 3 credits
Explores the relationship between education policies, manpower development and economic growth. Examines issues such as technical and vocational education, mother tongue instruction and sectoral manpower development through a comparative analysis of education policies in developing countries.

CIAD 719: Refugees, Displaced Persons & International Migration. 3 credits
Analyzes the differences between forced and voluntary migration and the situation of refugees and other displaced persons. Reviews current debates about international immigration and immigration policies, and examines how humanitarian assistance is (and should be) provided to people in times of disaster.

CIAD 720: Humanitarian and Disaster Assistance. 3 credits
Explores the evolution of the international community's response to disasters and humanitarian crises since World War II. Studies the mandates and functioning

of the institutions involved, particularly, the International Red Cross, the United Nations Disaster Relief Organization (UNDRO) the UN machinery for coordinating relief operations, as well as the program of the United States Agency for International Development. Discusses questions concerning new norms of intervention following the humanitarian intervention in Somalia.

CIAD 721: United States Foreign Assistance Policies. 3 credits
Studies the evolution of foreign assistance policies and programs after 1945 with an emphasis on the role of the United States. Examines Congress, special interest groups, and others participating in the process. Compares U.S. programs with those of other nations as well as the United Nations system.

CIAD 722: United Nations Development System. 3 credits
Studies the evolution of the United Nations system programs of technical assistance from the Expanded Program of Technical Assistance (EPTA) through the creation of the United Nations Development Program (UNDP) and the changes in the tripartite system involving UNDP, the specialized agencies and recipient countries in the 1990s. Discusses the initial decision to accord capital investment functions to the Bretton Woods institutions and authorize only technical assistance activities for the UN system.

CIAD 723: Managing Development Programs. 3 credits
Studies the administration of development programs in donor and recipient countries. Reviews issues of coordination, efficiency and accountability, as well as the evolution of development priorities from the focus on major infrastructure in the late fifties, to basic human needs in the 70s, to the present emphasis on human development and capacity building.

CIAD 724: Project Planning, Management and Implementation. 3 credits
Studies the project cycle of problem identification, appraisal, design, implementation, monitoring, and evaluation. Examines case studies of projects.

CIAD 802: Advanced Seminar in Development and Social Change. 3 credits
Studies special topics in development and social change. Permission of the instructor is required.

Area Studies

A. Africa

Course Descriptions

CIAD 660: Peoples and Cultures of Africa. 3 credits
Studies the peoples and cultures of the African continent, early migration patterns, belief systems, lineage and descent systems, patterns of social interaction, traditional political systems, and literary and artistic expressions.

CIAD 661: Africa in World Politics.**3 credits**

Examines the role of African states in the global system. Assesses the impact of African states in multinational organizations such as the EU-ACP, the United Nations, Bretton Woods institutions and the GATT. Focuses on a select number of African issues that have had international implications, such as apartheid in South Africa, the Congo crisis of 1960, Sahelian droughts, Unilateral declaration of independence in Southern Rhodesia and the humanitarian intervention in Somalia.

CIAD 662: Economic Development in Africa.**3 credits**

Studies the challenges of economic development in Africa, the impact of colonial rule on the economies of African states, intra-African trade, investment in Africa and the development of the informal sector. The impact of debt and structural adjustment programs, as well as the emergence of regional economic cooperation, will also be examined.

CIAD 725: Conflict and Mediation in Africa.**3 credits**

Studies the complex emergence of conflicts in Africa. Assesses the role of agents and agencies in mediation, military intervention and peacekeeping. Examines policies and prospects for enduring conflict management and mediation strategies in Africa.

CIAD 726: Regional Integration in Africa.**3 credits**

Studies the evolution of integration efforts in Africa since Kwame Nkrumah's call for a united Africa in the late fifties. Among the groups to be discussed are the Council of the Entente, East African Community, SADC, South African Customs Union, Preferential Trade Area and ECOWAS.

CIAD 727: Modern African History.**3 credits**

Examines the historical development in the diverse regions of Africa since the eighteenth century through the period of colonial rule to the beginning of the nationalist period after World War II.

CIAD 729: Francophone Africa.**3 credits**

Studies French penetration and colonial policy and nationalist movements in former French territories. Examines the postindependence period and France's evolving political, economic, and military relations with Francophone Africa.

CIAD 730: Lusophone Africa.**3 credits**

Focuses on Luso-African history and politics before and after the liberation wars. Analyzes the realities of continuing internal conflicts, peace and mediation, and the emergent social and political governance processes in the region.

CIAD 803: Advanced Seminar in African Affairs.**3 credits**

Examines special topics in African affairs. Permission of the instructor is required.

B. Caribbean**Course Descriptions****CIAD 680: Peoples and Cultures of the Caribbean.****3 credits**

Studies the people and cultures of the islands in the Caribbean and the impact of the diverse colonial heritage of the Caribbean on belief systems, patterns of social interaction, literary and artistic expression and migration.

CIAD 681: Political Economy of the Caribbean.**3 credits**

Examines the economic development of the Caribbean from slavery through the period of colonialism and mercantilism to the postindependence economies. Studies contemporary economic issues such as tourism, transportation and linkages with the European Union.

CIAD 682: Regional Integration in the Caribbean.**3 credits**

Explores the various attempts to forge closer economic cooperation among Caribbean states. Studies the special ties among the Organization of Eastern Caribbean States (OECS) and the structure and functioning of the Caribbean Community (CARICOM).

CIAD 732: The Caribbean in the Inter-American System.**3 credits**

Reviews the interaction between Caribbean and Latin American States, as well as the role of the Caribbean in the Organization of American States (OAS). Comparative analysis of issues such as human rights, political systems and social structures.

CIAD 733: Politics of Haiti.**3 credits**

Studies the formation of the second "new nation" in the western hemisphere, the political evolution of Haiti through the Duvalier period to the present efforts to establish democracy under President Aristide. Examines the impact of the U.S. occupation of Haiti and its special relationship, as well as the historic social divisions within Haitian society.

CIAD 734: Cuba and the Inter-American System.**3 credits**

Examines the political evolution of Cuba since 1898, the period of U.S. occupation, the transformation of Cuba under President Castro, and impact on Cuba of the dissolution of the Soviet empire. Studies Cuba's expulsion from the OAS and isolation in the region.

CIAD 735: French Overseas Departments in the Caribbean.**3 credits**

Studies the political and economic evolution of Martinique, Guadeloupe and Guyana since the imposition of French colonial rule. Examines the special status of these three territories as external states (Departments) of France and the implication of this status for their relations with the rest of their Caribbean.

CIAD 736: Political Economy of the English-Speaking Caribbean. 3 credits

Explores the evolution of the economies of the English-speaking Caribbean from the slavery period to the contemporary ties of Caribbean States to the British Commonwealth and the European Union. Discusses the special role the English-speaking Caribbean played in African nationalist and pan-Africanist movements.

CIAD 737: Labor and Migration in the Caribbean. 3 credits

Examines the problems of labor, employment and migration in the Caribbean. Covers the political activism of labor unions and their role in the nationalist movement.

CIAD 738: History of the Caribbean. 3 credits

Covers the history of the Caribbean from 1942 to 1945. Examines the shifting territorial linkages with European countries resulting from continental wars, the period of slavery, slave rebellions and the involvement of the Caribbean islands in the two world wars.

CIAD 804: Advanced Seminar in Caribbean Affairs. 3 credits

Examines selected topics in Caribbean affairs. Permission of the instructor is required.

C. China**Course Descriptions****CIAD 439/539: Political Economy of the Pacific Rim. 3 credits**

Studies the evolution of the economies of the countries of the Pacific Rim since 1945. Special focus on factors contributing to the phenomenal economic development in Japan, Taiwan, Singapore, South Korea, and Hong Kong.

CIAD 443/553: Political and Economic Development of Modern China. 3 credits

Studies the internal political and economic development and the foreign contacts of China from the nineteenth century, through the period of the Republic in 1911, and the revolution in 1949 to the present.

CIAD 452/552: Inter-State Relations in Asia. 3 credits

Examines the inter-state relations in the Asian political system during the twentieth century, taking into account the emergence of Japanese power, the end of colonial rule, as well as the impact of East-West tensions and the nonaligned movement on the region.

Other World Regions**Course Descriptions****CIAD 740: Japanese Politics and Foreign Policy. 3 credits**

Studies the political development of Japan from 1868 to the present. Considers Japan's emergence as a regional power and its rise to economic preeminence since 1970.

CIAD 741: Politics of the ASEAN States. 3 credits

Explores the political development and inter-state relations of the Association of Southern Asian Nations (ASEAN) countries since 1945, as well as their changing policy priorities from military security to sustained economic growth.

CIAD 742: Politics of South Asia Since 1945 - India, Pakistan and Bangladesh. 3 credits

Examines the emergence of the nationalist movement in India, the partition and the creation of Pakistan, as well as the subsequent emergence of Bangladesh as a separate nation. Discusses the political, social, and economic problems of independent India, Pakistan and Bangladesh, as well as the ongoing conflict over Kashmir.

CIAD 744: From the European Community to the European Union. 3 credits

Examines the evolution of European integration after World War II to the present. Discusses the intellectual and political contributions of Jean Monnet, the European Coal and Steel Community, the Rome Treaty and the emergence of the EEC and its transformation after Maastricht into the European Union. Examines the implications of the dissolution of the Soviet Empire in 1989 on the EEC.

CIAD 745: Human Rights in the Global System. 3 credits

Studies the legal, political and social dimensions of the modern human rights movement and its implications from international affairs. Case studies will illustrate contemporary debates over the hierarchy of rights, the linkage between individual rights and national interests and the role of non-governmental organizations working in the human rights field.

CIAD 746: East-West Relations Before and After the Cold War: 1945 - Present. 3 credits

Studies the end of cohesion of the allied powers after World War II, the emergence of the cold war, and the regional and global competition between the US and the Soviet Union through 1990. Case studies will illustrate the dynamics of east-west competition. Covers the close economic and political cooperation between the U.S. and the Soviet Union beginning in 1990.

CIAD 747: From the Soviet Union to the Community of Independent States.

3 credits

Covers the political development of the former Soviet Union from the 1917 revolution to Perestroika and Glasnost and the resulting dissolution of the USSR into a series of independent states. Special attention will be paid to the recent challenges of the transition to democracy and a free market economy.

CIAD 748: Political and Economic Transition in Eastern Europe.

3 credits

Studies political and economic developments in eastern Europe since 1945. The differential responses to Soviet hegemony will be discussed as well as the challenges facing the transitions to democracy and free market economies after 1989.

CIAD 749: Politics of the Middle East.

3 credits

Examines the background and the protracted conflict in the Middle East from the time of the Balfour Declaration to the present. Studies the creation of Israel in 1946, the successive Arab-Israeli wars, the efforts to resolve the Middle East conflict prior to and after the Camp David Accords and relations among pivotal Arab states.

CIAD 750: Government and Politics in Latin America.

3 credits

Studies the political development of Latin American states from 1850 to present. Analyzes the transitions from military rule to democratic governance. Discusses the impact of the Monroe Doctrine on U.S. hemispheric politics.

CIAD 751: Regional Security Organizations.

3 credits

Assesses the development of regional security organizations (OAS, OAU, and the Arab League) and military alliances (NATO, SEATO, and the Warsaw Pact) in the twentieth century. Examines the relationship between United Nations peace and security functions and those of regional organizations through selective case studies.

GENERAL

Course Descriptions

CIAD 525: Internship.

3 credits

An approved and supervised position with an international orientation. Minimal requirement of 240 hours of work.

CIAD 640: Independent Research.

3 credits

Opportunity for student to conduct individual research. The field and topic of research must be mutually agreed upon by the student and instructor. A student is permitted to take this course only once during the Master's program.

CIAD 705: Thesis Consultation.

1 credit

Opportunity for students to receive minimal advice, guidance, and assistance from faculty during the final stages of writing and editing the Master's thesis.

CIAD 706: Thesis Research.

3 credits

Opportunity for students to receive advice, guidance, and assistance from faculty during the stages of designing and conducting research for the Master's thesis.

CIAD 805: Dissertation Consultation.

1 credit

Opportunity for students to receive minimal advice, guidance, and assistance from faculty during the final stages of writing and editing the Ph.D. dissertation.

CIAD 806: Dissertation Research.

3 credits

Opportunity for students to receive advice, guidance, and assistance from faculty during the stages of designing and conducting research for the Ph.D. dissertation.

DESCRIPTIONS OF GRADUATE ACCOUNTING COURSES

CSB 5606: Advanced Auditing. **3 credits**
A one-semester course introducing theoretical, conceptual, practical, and traditional elements for conducting attestation engagements, internal auditing, operational auditing and compliance auditing. Prerequisite: CBUS 465: Advanced Accounting with a minimum grade of "C."

CSB 5690: Fund Accounting. **3 credits**
A one-semester course introducing basic concepts and techniques of fund accounting with reporting and management problems of not-for-profit organizations and governmental bodies. This course is not open to undergraduates majoring in Accounting who have not been accepted to the Dual-Degree Program in Accounting. Prerequisite: CBUS 304: Intermediate Accounting II with a minimum grade of "C."

CSB 6600: Financial Accounting. **3 credits**
A one-semester course involving intensive study of financial accounting principles and concepts to provide quantitative information, primarily financial in nature, about economic entities useful in making business decisions. Prerequisites: None. Not open to Dual-Degree in Accounting and Master of Accounting students.

CSB 6610: Managerial Accounting. **3 credits**
A one-semester course involving intensive study of management accounting principles and concepts to provide information, primarily financial in nature, about economic entities useful in making business decisions. Prerequisite: CSB 6600: Financial Accounting with a minimum grade of "C." Not open to Dual-Degree in Accounting and Master of Accounting students.

CSB 6611: Intermediate Accounting I. 3 credits

A one-semester course introducing the conceptual framework of accounting, financial statements, current assets, fixed assets, long-term investments, liabilities, owners' equity, and special problems in income determination and reporting. *Prerequisite: CSB 6610, Managerial Accounting with a minimum grade of "C."*

CSB 6612: Intermediate Accounting II. 3 credits

A one-semester course introducing the conceptual framework of accounting, financial statements, current assets, fixed assets, long-term investments, liabilities, owners' equity, and special problems in income determination and reporting. *Prerequisite: CSB 6611, Intermediate Accounting I with a minimum grade of "C."*

CSB 6618: International Accounting. 3 credits

A one-semester course introducing major issues in International Accounting with reference to influences of different environments and their impact on the setting of international accounting standards. This course includes comparison of GAAP in selected major economies and a review of harmonization efforts of international accounting standards by the IASC, EC, OECD and the UN. *Prerequisite: CBUS 465: Advanced Accounting with a minimum grade of "C."*

CSB 6620: Cost Management Systems. 3 credits

A one-semester course introducing principles of cost-systems design. Using a case-study approach, cost management systems from actual businesses are described in detail. Students analyze, discuss and present cost-management issues for measuring business performance and for strategic decision making on pricing, product mix, process technology and product design. Students also learn how to identify the symptoms and root causes of cost-system failures. *Prerequisite: CBUS 305, Cost Accounting or CSB 6610: Managerial Accounting with a minimum grade of "C."*

CSB 6621: Current Accounting Theory and Practice. 3 credits

A one-semester course including an intensive study of current accounting theory and practice as embodied in current literature and in the official pronouncements of the American Institute of Certified Public Accountants (AICPA), the Financial Accounting Standards Board (FACSB) and the Securities and Exchange Commission. *Prerequisite: CBUS 465: Advanced Accounting with a minimum grade of "C."*

CSB 6623: Advanced Accounting Information Systems. 3 credits

A one-semester course including an intensive study of the design, development, implementation, operation, and maintenance of accounting information systems as a subset of business' management information systems. *Prerequisite: CBUS 308, Accounting Information Systems with a minimum grade of "C."*

CSB 7600: Special Problems in Accounting. 3 credits

A one-semester course including discussions of selected issues in Accounting. *Prerequisite: Permission of the instructor.*

MBA for Working Professionals (MBAWP) Accounting Courses

CSB 8610: Financial Accounting. 1.7 credits

A one-trimester course involving intensive study of financial accounting principles and concepts to provide quantitative information, primarily financial in nature, about economic entities useful in making business decisions. *Prerequisites: Acceptance to the Working Professionals Master of Business Administration degree program.*

CSB 8621: Financial/Managerial Accounting. 2.3 credits

A one-trimester course involving intensive study of financial and management accounting principles and concepts to provide information, primarily financial in nature, about economic entities useful in making business decisions. *Prerequisite: Acceptance to the Working Professionals Master of Business Administration degree program and CSB 8610, Financial Accounting with a minimum grade of "C."*

CSB 8632: Managerial Accounting. 1.7 credits

A one-trimester course involving intensive study of management accounting principles and concepts to provide information, primarily financial in nature, about economic entities useful in making business decisions. *Prerequisite: Acceptance to the Working Professionals Master of Business Administration degree program. and CSB 8621, Financial/Managerial Accounting with a minimum grade of "C."*

CSB 5510: Introduction to Information Systems. 3 credits
Overview of information processing techniques and equipment and their impact on the organization; exposes software consideration and provides opportunity for learning a programming language.

CSB 5512: Macroeconomics. 3 credits
Focuses on aggregative economics, magnitudes of output, employment, investment, savings and money supply aspects of the economy.

CSB 5513: Microeconomics. 3 credits
Focuses on the decision processes of consumers and firms and examines their interaction in the marketplace.

CSB 6510: Statistical Analysis for Business and Economics (Same as CECO 600). 4 credits
Studies use and application of descriptive statistics, probability, statistical inference, analysis of variance, simple regression, multiple regression and design of experiments.

CSB 6512: Production and Operations Management. 3 credits
Develop ability to recognize, analyze, and solve typical problems of production and operations in manufacturing and service sectors. Topics include forecasting, TQM, JIT, allocation of scarce resources, strategic capacity planning, facility location, facility layout, CPM, PERT, inventory control for independent demand, MRP, and supply chain management. *Prerequisite: CSB 6510.*

Elective Courses. (Four courses required for Decision Sciences area of concentration in MBA Program. Open to other MBA students as electives.)

CSB 6515: Systems Analysis and Design. 3 credits
The design and specification of computer-based management information systems; analysis of various systems evaluation techniques, examination of existing systems, new or modified designs, comparisons of software features and problems of computer security; emphasis on management usage of systems, including examination of overall organizational impact of system installation. *Prerequisite: CSB 5510*

CSB 6517: Computer Applications in Decision Sciences. 3 credits
Designed to introduce the students to theories and applications on optimization and simulation as tools for solving business problems, using software packages which are widely used in industry. *Prerequisite: CSB 6510.*

CSB 6519: Database Management. 3 credits
Examines the basic features of data management, systems; definition and overview, design considerations, data description and data manipulation, physical storage of a database, security and query languages. *Prerequisite: CSB 5510.*

CSB 6523: Business Forecasting Methods. 3 credits
Develops a conceptual framework of business forecasting methods. Students have hands-on experience with applications of a wide range of forecasting techniques to real-world business problems, using software packages.

CSB 7500: Special Problems in Decision Sciences. 3 credits
Prerequisite: permission of instructor.

MBA courses for Working Professionals (WPMBA)

CSB 8510: Statistical Analysis I. 1.5 credits
Use and application of descriptive statistics, probability, statistical inference, and analysis of variance.

CSB 8514: Information Systems I. 1 credit
This course is an intensive survey of technologies used to support selected aspects of electronic commerce and enterprise resource planning.

SB 8520: Statistical Analysis II. 1 credit
Studies use and application of simple regression, multiple regression, and design of experiments.

CSB 8524: Information Systems II. 1 credit
The purpose of this course is to illustrate the importance of determining information system requirements for all management levels by developing an understanding of the differences between various types of computer based information systems (CBIS). Emphasis is on information systems support for management decision-making and competitive advantage.

CSB 8531: Production and Total Quality Management. 1 credit
Define the terms Quality, SQC (SPC), and TQM. Provide an overview of continuous process improvement (Kaizen) and various tools designed to control and monitor the process. Discuss process control chart, Deming's PDCA cycle, cost of quality, process capability, six sigma standard, Taguchi method, Pareto diagram, and Ishikawa diagram. Compare and contrast the criteria for Deming Prize, Malcolm Baldrige Quality Award, and ISO 9000 series and ISO 14000 series.

CSB 8540: Accounting Information Systems Analysis and Design. 1.7 credits
The design and specification of computer-based management information systems; analysis of various systems evaluation techniques, examination of existing systems new or modified designs, comparisons of software features and problems of computer security; emphasis on management usage of systems, including examination of overall organizational impact of systems installation.

CSB 8541: Operations Management.**1.5 credits**

Develop ability to recognize, analyze, and solve typical problems of production and operations in manufacturing and service sectors. Topics include forecasting, allocation of scarce resources, strategic capacity planning, facility location, facility layout, CPM, PERT, inventory control for independent demand, MRP, ERP, and supply chain management.

CSB 8544: Information Systems III.**1.3 credits**

Overview of information processing techniques and equipment and their impact on the organization; exposes software consideration and provides opportunity for learning a programming language.

CSB 8550: Optimization and Simulation.**1.3 credits**

Introduce the students to the broad array of concepts, methodologies, and applications of optimization and simulation, which are extensively used in academic and business environments. In addition to Microsoft® Excel, two major software Lindo for optimization modeling and Crystal Ball for simulation modeling will provide the students with hands-on experiences of dealing with real-world business problems. Students are given latitude to pursue topics in a wide range of the areas of the decision sciences in which they have a special interest.

CSB 8561: Database Management.**1.3 credits**

The course examines the basic features of database management systems. Definitions and overview, design considerations, data description and data manipulation, physical storage of data, controls, etc.

CSB 8562: Business Forecasting.**1 credit**

Forecasting is an important part of business management. No rational decision can be made without taking some view of the future. A wide range of forecasting methods and major issues in forecasting are addressed to improve forecast accuracy and enhance quality in decision making.

Course Descriptions

CECO 500: Advanced Macroeconomic Theory. **Fall, 3 credits**
An advanced treatment of theories of aggregate economic analysis; addresses critical questions such as determination of national income, employment, distribution of income, inflation, and cyclical behavior. *Prerequisite: CECO 315, or consent.*

CECO 501: Advanced Microeconomic Theory. **Spring, 3 credits**
Analyzes the theory of consumer behavior and production and the pricing mechanism in competitive and noncompetitive markets. *Prerequisite: CECO 316, or consent.*

CECO 504: African-American Political Economy. **3 credits**
Investigates the economic history on African-Americans; analyzes historical and contemporary impact of economic policies on African-American people. *Prerequisite: Principles of Economics or consent.*

CECO 505: Public Finance. **3 credits**
Analyzes the effect of government expenditure and taxation on resource allocation, economic stabilization, and income distribution at national, state and local levels. *Prerequisite: CECO 315 or consent.*

CECO 509: Monetary Theory and Policy. **3 credits**
Studies monetary and fiscal policies as mechanisms of aggregate demand management; primary considerations involve the level of prices, interest rate, and aggregate money supply. *Prerequisites: CECO 500, consent.*

CECO 510: Urban Economics. **3 credits**
Explores in detail the structure and growth of urban economy and examines the city as part of the national economy; analyzes theories of decision-making which explain the location of businesses and households within and between urban areas. *Prerequisites: CECO 316, 369, or consent.*

CECO 511: Seminar/Topics in Urban Economics. **3 credits**
Explores topics such as economic determinants of urban spatial structure, public and private decisions on firms and consumers location choices, and transportation. *Prerequisite: CECO 510.*

CECO 512: Economic Development. **3 credits**
Studies theories of economic development and investigates relevant economic models and analytical tools for analyzing and gaining understanding of development issues; also discusses policies and contemporary problems of developing countries. *Prerequisite: CECO 324, or consent.*

CECO 513: International Economics. **3 credits**
An analysis of theories of international trade, balance of payment problems and current issues in commercial policy. *Prerequisites: CECO 315, CECO 316, or consent.*

CECO 517: International and Regional Economic Order. **Fall, 3 credits**
Analyzes global economic and political relations between developed and developing countries. Topics include theories of integration, economic and political cooperation, regional trade and development, and the level of activity within a region. *Prerequisite: CECO 512, CECO 513, or consent.*

CECO 518: Seminar/Topics in Economic Development. **3 credits**
Investigates specific issues and approaches to economic development. Analyze international, regional and county-specific research reports utilizing current theoretical and analytical tools. *Prerequisite: CECO 512 or CECO 517.*

CECO 520: Economics for Nonmajors. **3 credits**
Designed to provide students with the fundamental economics background necessary to understand and implement policy. Macro and Micro theories are developed in examining the impacts of markets and government policy on the economy.

CECO 530: Seminar in Labor Economics. **Fall, 3 credits**
Discusses formal models of labor demand and supply; investigates wage and labor market discrimination, segmented markets, labor processes, and trade union theories. *Prerequisites: CECO 315 and 316, or CECO 365.*

CECO 531: Seminar/Topics in Labor Economics.
Explores labor-related topics including the theoretical and empirical investigations of equalizing differences in the labor market, investment in human capital, and the problem of imperfect markets. *Prerequisite: CECO 530.*

CECO 550: Mathematical Analysis for Economists I. **Fall, 3 credits**
Develops skills that translate economic and business problems and relationships into mathematical terms. *Prerequisite: CECO 308, or consent.*

CECO 555: Mathematical Analysis for Economists II. **3 credits**
Objective is twofold: 1) to render a systematic exposition of certain basic mathematical methods, and 2) to relate these to various types of economics analysis in such way that the mutual relevance of the two disciplines is exposed. *Prerequisite: CECO 550.*

CECO 570: Research Methodology. **3 credits**
Explores theories and methods of scientific research in economics and related social sciences. Steps for problem identification, formulation of testable and meaningful hypotheses and empirical techniques of analysis are studied. *Prerequisite: consent.*

CECO 600: Statistical Analysis for Business and Economists. **Fall, 3 credits**
(Same as CSB 6510). Studies the use and application of descriptive statistics and statistical inference, including probability, sample survey, and simple linear regression models and violations of the basic assumptions. *Prerequisite: undergraduate statistics.*

CECO 601: Econometrics I. **Spring, 3 credits**
Develops concepts and applications of statistical methods to economic and managerial problems, including multiple regression and forecasting, and simultaneous equations. *Prerequisite: CECO 600 or consent.*

CECO 602: Econometrics II. **3 credits**
Studies the construction, estimation and testing of economic models. *Prerequisite: CECO 601.*

CECO 801: Thesis Research. **Fall, Spring, Summer, 3 credits**
Designed to assist students in the development and writing of the thesis.

CECO 805: Thesis Consultation. **Fall, Spring, Summer, 1 credit**
For students who are in the final stage of their thesis writing, which requires minimal supervision and assistance.

NOTE: Seminar/Topic courses require permission of the student's advisor and the instructor, and may be taken as an independent study provided the prerequisites are fulfilled.

CSB 5410: Financial Management.**4 credits**

Provides broad exposure to financial issues useful to general management in an increasingly global multidisciplinary environment; enables students to develop useful approaches in analyzing risks and financial returns in a variety of business situations, and the process of reaching the optimum decision from their analysis. Topics include financial forecasting, working capital management, valuation, short-term financing, capital structure planning, and capital investment decisions. *Prerequisite: SB 6600*

Elective Courses in Finance**CSB 6411: International Financial Management.****3 credits**

Introduces the process of financial management in the international context; extends analysis of the financial management course to include effect of inter-

national forces on foreign investment and cash flows and develop strategies which the financial manager can use for effective management. Topics include study of International capital markets, Country Risk Analysis, Foreign exchange market, derivative instruments and risk management, financing international trade and capital budgeting in an international context. *Prerequisite: SB 5410.*

CSB 6413: Capital Markets and Investment Banking.**3 credits**

Examines role of investment banking firms in the capital acquisition process, from the points of view of security issuing firms and institutional and individual investors active in capital markets. Topics include the security issuance by both corporate and not-for-profit organizations, and the role of the investment bank in corporate restructuring and corporate control contests. *Prerequisite: SB 5410.*

CSB 6414: Management of Financial Institutions.**3 credits**

Examines the role of financial institutions in the financial system; with special emphasis on depository financial institutions. Study of the different types of financial institutions that include Investment Banks, Insurance companies, Pension Funds, Commercial Banks and Savings and Loans. Analysis and discussion of the changing regulatory environment, the performance of financial institutions in this environment, asset-allocation decisions, asset-liability management, international operations and the international financial system, asset securitization and other contemporary topics in financial services. Teaching method include lectures, cases and problem solving. *Prerequisite: SB 5410.*

CSB 6415: Real Estate Finance.**3 credits**

Focuses on techniques of analyzing and financing real estate investments. Topics include sources of funds, financing instruments, role of various financial institutions and the regulatory environment. *Prerequisite: SB 5410.* Students with a concentration in Finance may only take one real estate course to satisfy the Finance concentration requirement. Any other real estate course will be counted as a general MBA elective.

CSB 6416: Corporate Finance (Formerly Management of Financial Resources).**3 credits**

Examines the long-term asset selection and allocation policies of corporations. Coverage includes advanced topics in Capital Budgeting, Leasing, Valuation of corporate assets, applications of options in Corporate Finance and interaction of investment and financing decisions. Teaching methods include case analysis, lectures and a term project. Computer usage required. *Prerequisite: SB 5410.* This is a required course for all MBA students with a concentration in Finance.

CSB 6417: Security Analysis and Portfolio Management.**3 credits**

Development and implementation of evaluative techniques of security analysis and portfolio management utilizing case analysis, lectures and problem solving. Securities analyzed include stocks, bonds, convertibles, asset-backed bonds, options and mutual funds. Examines risk and return characteristics in a portfo-

lio management context. Emphasis on performance measurement, equilibrium pricing and valuation models, anomalies and other strategies. Teaching method include case analysis and discussion. *Prerequisite: SB 5410.*

CSB 6419: Commercial Lending. **3 credits**
Focuses on development of skills necessary in designing loan contracts and other issues in credit analysis. Topics include loan pricing, syndication, private placements, project finance and loan workout situations. Lending to a variety of industries and businesses will be examined. *Prerequisite: SB 5410.*

CSB 6420: Real Estate Investments. **3 credits**
Advanced treatment of materials in SB 6415; looks at theory and practice of equity investments in real estate assets, with emphasis on commercial properties. Topics include impact of leverage, taxes, securities regulation, REITS, joint ventures and public underwriting of real estate investments. *Prerequisite: SB 5410.* Students with a concentration in Finance may only take one real estate course to satisfy the Finance concentration requirement. Any other real estate course will be counted as a general MBA elective.

CSB 7400: Special Problems in Finance. **3 credits**
This special topics course provides an opportunity for an in-depth study of selected contemporary topics in finance, outside of the regular finance curriculum. The course can be repeated for course credit for different topics. *Prerequisite: permission of the instructor or SB 5410.*

MBA for Working Professionals (MBAWP) Finance Courses

CSB 8420: Financial Management I. **1.7 credits**
This course is the first of a two-part required (core) Financial Management course for the MBAWP program. Consequently, the course is designed to provide all MBA students (regardless of intended concentration) the basic finance skills required for them to function effectively as general managers in an increasingly global multidisciplinary environment. The course introduces students to the different areas of corporate finance and in particular those topics that are essential and indispensable to all business students. The treatment of all areas is based on ensuring that students have a conceptual understanding of the theory and the application of these concepts to realistic situations for the purpose of decision-making in the major areas of business. This first part covers the following topics: financial statement analysis, financial forecasting and working capital management.

CSB 8431: Financial Management II. **1.7 credits**
This course is the second of a two-part required (core) Financial Management course for the MBAWP program. Consequently, the course is designed to provide all MBA students (regardless of intended concentration) the basic finance skills required for them to function effectively as general managers in an increasingly global multidisciplinary environment. The course introduces students to the different areas of corporate finance and in particular those topics that are

essential and indispensable to all business students. The treatment of all areas is based on ensuring that students have a conceptual understanding of the theory and the application of these concepts to realistic situations for the purpose of decision-making in the major areas of business. This second part covers topics in valuation, the trade-off between risk and return (including the CAPM), capital budgeting and cost of capital estimation.

CSB 8440: Financial Markets. **1.7 credits**
This course primarily prepares students for an understanding of the financial markets, instruments and institutions that exist around the world. The course provides an in-depth study of money and capital markets and the management of financial institutions. Topics include an introduction to the various types of Financial assets, Financial markets and Financial Institutions; Regulation of the Financial Markets; Financial Innovations: Derivative Markets: Futures, Options and Swaps; and Interest Rate Determination. This MBAWP elective course requires that enrolled students have completed the First-Year Accounting course and Financial Management course with passing grades, in addition to all first year MBAWP core courses.

CSB 8451: Corporate Finance I. **1.7 credits**
This course is the first part of a two-module series on Corporate Finance. The objective is to study the major decision-making areas of Corporate Finance. Emphasis will be placed on the long-term asset selection policies of non-financial corporations under conditions of certainty and uncertainty. The first module focuses on advanced topics and applications in cost of capital, capital expenditure analysis, leasing, and valuation analysis.

CSB 8461: Corporate Finance II. **1.7 credits**
This course is the second part of a two-module series on Corporate Finance. The objective is to study the major decision-making areas of Corporate Finance. Emphasis will be placed on the long-term asset selection policies of nonfinancial corporations under conditions of certainty and uncertainty. The second module topics include applications of options in Corporate Finance, corporate restructuring, capital structure, long-term financing tactics and methods of cash distributions. This second module requires a comprehensive valuation project.

CSB 8452: Portfolio Management. **1.7 credits**
Development and implementation of evaluative techniques of security analysis and portfolio management utilizing case analysis. Securities analyzed include stocks, bonds, convertibles, asset-backed bonds, derivative securities and mutual funds. Examines risk and return characteristics in a portfolio management context. Emphasis on equilibrium pricing models, performance measurement, valuation models, and investment strategies. Teaching methods include case analysis and discussion.

CSB 8462: Financial Strategy and Policy.**1.7 credits**

This course is an advanced, though brief, treatment of corporate financial strategy and policy. This course is an integral part of the Finance curriculum in the MBA for Working Professionals; it is the final module in a sequence of finance electives. In that respect, it is the capstone course in Finance. The objective of this course is to integrate the knowledge and skills from the different subdisciplines of finance (investments, corporate, markets and banking) in the context of financial policy and strategy in financial and nonfinancial corporations. Topics include corporate restructuring and the formulation and implementation of corporate financial strategy. The case method is used throughout this module. A term project is required. *Prerequisite: Financial Management 1 and 2, Corporate Finance- Module 1 and 2.*

CSB 8463: Competitive Strategy.**1.3 credits**

This is a course in competitive economics – a combination of economics and strategy. The course provides a basic understanding of the concepts, language and analytical tools in order to enhance decision-making in business in a competitive global environment. We will focus on decisions that firms should make and the factors that constrain and determine these choices. The course develops the tools of microeconomic analysis using the concepts of business policy, industrial organization, organizational behavior, strategic management, marketing, accounting and finance to achieve the goals set by the management in a macro economic environment.

CSB 8465: Global Business and Finance.**1.3 credits**

This course in covers the financial systems and processes used by multinational corporations, international companies and all businesses engaged in cross-border trading, and foreign business activities, including foreign units engaged in manufacturing. The course investigates and analyzes global transactions and the flow of funds from global commerce. In addition, students learn the use of hedging strategies to minimize the risks associated with global business operations.

CSB 8515: Economic Analysis.**1.5 credits**

An introduction to microeconomic analysis from a practical business perspective. Topics covered include supply and demand equilibrium, the principles of consumer choice, profit maximization, the effects of subsidies, price discrimination, price ceilings and floors and government regulation. The course provides a context for subsequent study of industry and corporate strategy.

CSB 5709: Managerial Communications.**3 credits**

Designed to increase knowledge of verbal, nonverbal and written communications that take place in an organization; grammar applications; effective letter writing, memoranda construction; preparation of executive summaries and proposals; individual and group oral presentations; and related office cases and exercises are emphasized. *Prerequisite: first year's core courses.*

CSB 5710: Organizational Behavior.**3 credits**

Emphasis on developing understanding and knowledge of organizational behavior and human performance in the organization setting.

CSB 5712: Legal, Social and Ethical Aspects of Business.**3 credits**

Study of basic legal concepts and procedures as well as basic principles pertaining to fundamental business transactions; cases used to identify the effect of laws on business policy decisions; social and ethical aspects of business are also described.

CSB 6710: Business Policy.**3 credits**

Development of students' ability to integrate their knowledge of various functional fields of business; it approaches the field of policy-making and administration from a top-management point of view. *Prerequisite: first year's core courses.*

Elective Courses (Open to all MBA students)

CSB 5711: Management of Organizations. **3 credits**
Fosters student's ability to analyze, understand, and design organizational systems; focus on organizational design as a managerial tool for influencing individual behavior; special attention on structure, the selection process, performance, appraisal, control systems, and reward practices as means for affecting human behavior in organizations. *Prerequisite: CSB 5710.*

CSB 6711: Research and Reports. **3 credits**
Designed to increase knowledge of analyzing business problems and preparing and reporting solutions to them through formal and informal reports and oral representations. Identifies business research problems; reviewing the literature; collecting data; investigating and analyzing practical cases in business and industry; applying proper statistical treatment to data; writing reports; and making formal presentations.

CSB 6712: Industrial and Labor Relations. **3 credits**
Study of the history and development of organized labor, collective bargaining, and government's role in management-labor relations; consideration of the interaction of management and labor in relation to the bargaining process.

CSB 6718: Personnel Management. **3 credits**
Aids students in understanding current theories and emerging practices in developing a sound personnel program in today's organizations. *Prerequisite: CSB 5710.*

CSB 6715: Theories of Organizations. **3 credits**
Covers major theories relevant to the structures and functions of organizations and the behavior of individuals and groups within them. *Prerequisite: CSB 5710.*

MBA Courses for Working Professionals (WPMBA)

CSB 8731: Organizational Behavior/Leadership. **1.3 credits**
Topics include motivation, values, attitudes and job satisfaction, group dynamics, personality, conflict, managing diversity, decision, perception, etc. The overall objective of this course is to improve the skills you need to become a more effective manager. Organizational behavior, commonly referred to as OB, is an interdisciplinary field dedicated to better understanding and managing people at work. The three basic levels of analysis in OB are individual, group, and organizational. To be an effective manager, it is essential that you have practical knowledge that spans all three levels of organizational behavior.

CSB 8741: Leadership. **4 credits**
Students will investigate the leadership tasks, which face managers in companies with worldwide operations. Initially, students will identify the forces of global change and the strategic challenges, which they present to managers. Subsequently, students will examine the leadership characteristics required to manage global operations in a changing environment.

CSB 8745: Business Legal Issues/Business Ethics. **1.3 credits**
Study of basic legal concepts and procedures as well as basic principles pertaining to fundamental business transactions; cases used to identify the effect of laws on business policy decisions; social and ethical aspects of business are also described.

CSB 5210: Marketing Management. **3 credits**
From the perspective of the marketing manager, texts, readings, actual cases, and marketing-plan developments used by the student to approach problems of planning and competitive analysis, policies and strategies, decision making, and social responsibility in marketing. Producing an actual marketing plan.

CSB 6219: International Business. **2 credits**
Survey course concerned with study of global business environments as they affect the competitive advantage of international companies. Students are exposed to the diversity and complexity of international business relations. The emphasis will be on providing tools necessary to evaluate and take advantage of international business opportunities—digitization, ethical, and environmental emphases.

Elective Courses (Four required for marketing area of concentration in the MBA Program. Open to other MBA students as electives)

CSB 6200: Marketing Strategy. 3 credits
Case and literature studies employed to provide the basis for the understanding of marketing strategy, its implementation, and control functions. Preparation of a marketing plan is required; emphasis is on the application of controllable variables in marketing; (required for marketing concentration). *Prerequisite: SB 5210.*

CSB 6210: Marketing Research and Information Systems. 3 credits
Behavioral sciences provide framework for understanding descriptive and analytical marketing research procedures. Basic orientation to use of statistical techniques and structure and uses of marketing information systems by business and industry included. *Prerequisite: SB 5210. Experience writing research paper using SPSS to analyze database.*

CSB 6211: Distributive Systems in Marketing. 3 credits
Examines the evolution, development, and dynamics of strategic distribution channel utilization and competition; logistical methods from product to consumer are included. *Prerequisite: SB 5210.*

CSB 6212: Advertising and Promotion Management. 3 credits
Focus on building advertising campaigns in a global setting that reflect integration of advertising management philosophy and current industry trends. Development and execution of a comprehensive advertising campaign reflecting a comprehensive plan of personnel organization, creativity, media, research, budget; coordination is required. *Prerequisite: SB 5210.*

CSB 6213: Consumer Behavior. 3 credits
Treatment of consumer buying behavior as a decision-making process involving perceptions, attitudes and behavioral characteristics; by understanding the buyer's environment, shows how marketing effort may influence and alter purchase behavior. *Prerequisite: SB 5210.*

CSB 6214: Industrial Marketing. 3 credits
Study of activities specifically related to industrial and commercial goods and services, which supply a derived-demand market from a managerial perspective; forecasting, planning and strategy are included. *Prerequisite: SB 5210. Digitization, ethical, and environmental emphases.*

CSB 6215: International Marketing. 3 credits
From the standpoint of international managers, texts, cases, and research papers used to present the international process of planning and executing marketing programs worldwide. International trade theories are critically examined. Digitization, ethical, and environmental emphases.

CSB 6216: Dynamic Cases in Marketing. 3 credits
Seminar employ current complex cases for analysis and integration of the various marketing functions. *Prerequisite: SB 5210.*

CSB 6217: Sales Management. 3 credits
Covers recruiting, training, motivating, compensating and evaluating sales personnel; it reflects target marketing to territorial allocations, control functions, setting of personal sales targets, and feedback process. *Prerequisite: SB 5210.*

CSB 6218: Brand and Product Management. 3 credits
Study of management of existing products and development of new ones; considers new product strategy, concept generation and screening, launch and post-launch controls, and abandonment. *Prerequisite: SB 5210.*

CSB 7200: Special Problems in Marketing. 3 credits
Independent-study course requiring pragmatic research. *Prerequisite: permission of instructor.*

MBA Program for Working Professionals
(Required for all MBA students)

CSB 8210: Marketing Management. 1.7 credits
From the perspective of the marketing manager, texts, readings, actual cases, and marketing-plan developments used by the student to approach problems of planning and competitive analysis, policies and strategies, decision making, and social responsibility in marketing. Producing an actual marketing plan.

Elective Courses (Four required for marketing area of concentration in the MBA Program. Open to other MBA students as electives)

CSB 8252: Marketing Strategy. 1.7 credits
Case and literature studies employed to provide the basis for the understanding of marketing strategy, its implementation, and control functions. Preparation of a marketing plan is required; emphasis is on the application of controllable variables in marketing (required for marketing concentration). *Prerequisite: SB 5210.*

SB 8240: Marketing Research and Information Systems. 1.7 credits
Behavioral sciences provide framework for understanding descriptive and analytical marketing research procedures. Basic orientation to use of statistical techniques and structure and uses of marketing information systems by business and industry included.

CSB 6212: Advertising and Promotion Management. 1.7 credits
Focus on building advertising campaigns that in a global setting reflect integration of advertising management philosophy and current industry trends. Development and execution of a comprehensive advertising campaign reflecting a comprehensive plan of personnel organization, creativity, media, research, budget, coordination is required.

CSB 8230: Consumer Behavior.

1.7 credits

Treatment of consumer buying behavior as a decision-making process involving perceptions, attitudes and behavioral characteristics; by understanding the buyer's environment, shows how marketing effort may influence and alter purchase behavior.

CSB 8261: Global Marketing.

1.7 credits

From the standpoint of international managers, texts, cases, and research papers used to present the international process of planning and executing marketing programs worldwide. International trade theories are critically examined. Digitization ethical, and environmental emphases.

CSB 8262: Sales Strategy.

1.7 credits

Covers recruiting, training, motivating, compensating and evaluating sales personnel; it reflects target marketing to territorial allocations, control functions, setting of personal sales targets, and feedback process.

CSB 8251: Brand and Product Management.

1.7 credits

Study of management of existing products and development of new ones; considers new product strategy, concept generation and screening, launch and post-launch controls, and abandonment.

CCPS 501: Introduction to Counseling. **Fall, Spring, 3 credits**

Provides a philosophical orientation to the counseling profession. Addresses the characteristics of effective counselors, nature of the therapeutic relationship, and processes of counseling. Activities are both didactic and experiential in nature.

CCPS 502: Helping Relationship Skills. **Spring, 3 credits**

Provides a broad understanding of the philosophic foundations of the helping processes necessary for building therapeutic relationships, including cross-cultural counseling theories and their applications. Students will develop intrapersonal and interpersonal relationships through practice as well as counseling skills and techniques essential for fostering effective helping relationships. *Prerequisite: CCPS 501 and CCPS 504.*

CCPS 503: Human Growth and Development. **Fall, Spring, 3 credits**

Provides an overview of the biological, psychosocial, and cognitive aspects of human growth and development across the life span.

CCPS 504: Theories of Counseling. **Fall, 3 credits**

Examines major theories of counseling with respect to the major assumptions and the therapeutic relationship. Emphasis on points of convergence and divergence, strength and weakness, as well as the applicability of theories to all populations. *Prerequisite: CCPS 501.*

CCPS 505: Group Counseling. **Fall, 3 credits**

Examines the meaning, function, types, and principles of the group approach to counseling, including the dynamics of group interaction, leadership, role-playing, personal development in groups, and the influences of the group processes on individual development. *Prerequisites: CCPS 501, 502*

CCPS 506: Career Counseling. **Spring, 3 credits**

Trains students to obtain, organize, integrate, utilize and evaluate the relevance, quality, and reliability of educational and occupational information. *Prerequisites: CCPS 501.*

CCPS 507: Research and Measurement. **Fall, Spring, 3 credits**

Covers the fundamentals of the research tools employed by scholars when they conduct education research. Subject matter includes library resources, types of research, review of research methodologies, measurement instruments, data collection and analysis procedures, proposal preparation and report writing.

CCPS 508: Individual and Group Appraisal. **Spring, Summer, 3 credits**

Provides a broad understanding of group and individual educational and psychometric theories and approaches to appraisal, data and information gathering methods, validity and reliability, psychometric statistics, factors influencing appraisals, and the use of appraisal results in counseling and consulting.

CCPS 509: Counseling Diverse Populations. **Fall, 3 credits**

Examines the psychological, sociological, and anthropological principles and research in the understanding of cultural diversity in American society. Emphasis is on knowledge, skills, and self-awareness of the counselor in providing mental health services to a diverse population.

CCPS 510: Professional, Ethical and Legal Applications. **Fall, 3 credits**

Emphasis on professional, ethical and legal issues associated with human services. Analyzes the function of ethics in the profession and the study of legal rights, duties, and liabilities of human service practitioners. *Prerequisite: 501.*

CCPS 512 Behavioral Statistics. **Spring, 3 credits**

Emphasizes use of statistical techniques to describe, compare and predict probable trends in large and small samplings of data.

CCPS 520: Organization and Administration of Guidance and Counseling Services. **Fall, Spring, 3 credits**

Focuses on the role of the school counselor in the development, implementation, and evaluation of a comprehensive developmental guidance program, as well as the counselor's involvement in leadership within the school setting with respect to the school's curriculum, system goals, and equity issues. *Prerequisites: 501, 502, 503, 504, 505, and 506.*

CCPS 521: Elementary/Middle School Counseling. **Fall, 3 credits**

Focuses on counseling theory and practice; developing, implementing, and evaluating guidance and counseling services; the referral process; developing, implementing, and evaluating intervention strategies; and parental involvement and other community resources related to the academic success of elementary and middle school learners. *Prerequisites: 501, 502, 503, 504, 505, and 506.*

CCPS 522 Secondary School Counseling. **Spring, 3 credits**

Focuses on counseling theory and practice; developing, and implementing, and evaluating guidance and counseling services; the referral process; developing, implementing, and evaluating intervention strategies; and parental involvement and other community resources related to the academic success of secondary school learners. *Prerequisites: 501, 502, 503, 504, 505, and 506.*

CCPS 530: Community Counseling. **Fall, 3 credits**

Provides a theoretical framework that focuses on meeting the counseling needs of identified target populations in a programmatic fashion. Prevention, crisis intervention, consultation and community-based interventions will be presented as well as needs assessments, goal formulation, intervention design and program evaluation. *Prerequisites: 501, 502, 503, 504, 505 and 506*

CCPS 532: Counseling Couples and Families. **Fall, 3 credits**
An advanced counseling course designed to increase knowledge of family systems, theory, and structure in order to effectively assess, conceptualize and treat family issues. *Prerequisites: 501, 502, 503, 504, 505 and 506*

CCPS 533: Counseling Children and Adolescents. **Spring, 3 credits**
Provides an overview of childhood and adolescent development from various theoretical perspectives, as well as the assessment and treatment of emotional disorders prominent in childhood and adolescence.

CCPS 535: Abnormal Psychology and Diagnostic Systems. **Fall, 3 credits**
Provides an overview of abnormal psychology and trains students to assess psychological conditions according to the Diagnostic and Statistical Manual of Mental Disorders.

CCPS 537: Employee Assistance Program Counseling. **Summer, 3 credits**
Focuses on the role and function of counselors in the workplace in providing helping services for employees and their families.

CCPS 540: School Counseling Internship I. **Fall, Spring, 3 credits**
Supervised field placement of students. *Prerequisites: 520, 521, 522*

CCPS 541: School Counseling Internship II. **Fall, Spring, 3 credits**
Continuation of supervised field placement. *Prerequisite: 540.*

CCPS 542: Community Counseling Internship I. **Fall, Spring, 3 credits**
Supervised field placement of students. *Prerequisite: 530*

CCPS 543: Community Counseling Internship II. **Fall, Spring, 3 credits**
Continuation of supervised field placement. *Prerequisite: 543.*

CCPS 585: Thesis. **Fall, Spring, 3 credits**
Research-oriented project for students electing to write a thesis. *Prerequisite: Approval of department chairperson.*

CCPS 590: Master's Advisement. **Fall, Spring, 1 credit**
Maintains status of students for preparation and administration of comprehensive examination. *Prerequisite: Approval of department chairperson.*

CCPS 677: Independent Study in Counseling. **Fall, Spring 1 credit**
Independent study of a specific topic of interest to the student in the area of counseling under the guidance of a departmental faculty member. *Prerequisite: Approval of both the faculty member and the department chairperson.*

COURSE DESCRIPTIONS

CEDS 425: Introduction to Exceptional Education. **Spring, Summer, Fall, 3 credits**
This course is designed to introduce undergraduate students to problems of children with intellectual, physical disabilities or emotional limitations and to diverse programs to meet their needs. Emphasis is given to definitions and characteristics of exceptional children and youth with particular attention to the educational service delivery systems that infuse technology designed to meet the special learning needs of exceptional children. Special permission is required to take a distance learning course.

**CEDS 571: Nature and Characteristics of
Preschool Children with Disabilities.** **Summer Workshop, 3 credits**
The content of this course includes the following: Nature and characteristics of preschool children with disabilities, working with families in culturally diverse environments providing parent training, consolation, collaboration, and communication, etc., with other professionals and agencies. *Prerequisites: CEDS 580, 578, 579, or equivalent certification in Early Childhood Education/Elementary Education.*

CEDS 572: Curriculum and Methods of Teaching Children with Preschool Disabilities. Summer Workshop, 3 credits

Innovated curricula, technologies and appropriate instructional planning of pre-school children with disabilities, behavior management, assessment, intervention strategies for children 0-5 years and program evaluation. *Prerequisite: CEDS 578, 579, 580 or prior teaching experiences.*

CEDS 573: Internship in Preschool Disabilities. Summer (150 Contact Hours), 3 credits

Directed observation and participation with young children in PK-primary programs. Course may be repeated (3-6 semester hours). Completion of CEDS 571/572 (Students must register for their area of concentration plus weekly seminar CEDS 606.)

CEDS 575: Student Teaching in Exceptional Education. Spring, Summer, Fall (9 weeks field experience, 360 clock hours), 9 credits

Provides competence and performance-based experience in working with children and youth with disabilities in an approved exceptional education site. This course, or its equivalent, is required of all students seeking degrees and/or endorsements. This is the initial field experience in exceptional education. Prerequisites: satisfactory completion of all prerequisite course work (Students must register for their area of concentration plus weekly seminar CEDS 606.)

CEDS 576: Cultural Diversity. Spring, 3 credits

Focuses on issues pertinent to cultural diversity (race, ethnicity, gender, religion, etc.) and the ramifications of diversity for education.

CEDS 578: Behavior Management. Spring, Summer, 3 credits

Studies treatment of behavior problems related to adjustment and instructional management of children and youth in home, school, and community settings.

CEDS 579: Psycho-Educational Evaluation. Fall, 3 credits

Examines issues (nonbiased assessment, reliability, validity, etc.) related to the assessment of individuals with disabilities. Students will also conduct assessments of students with learning difficulties.

CEDS 580: Psychology of Exceptional Children. Spring, Summer, Fall, 3 credits

Studies characteristics, development, and education of exceptional children.

CEDS 581: Nature and Characteristics for the Intellectually Disabled. Summer, Fall, 3 credits

Considers types, nature and causes of intellectual disabilities; examines the educational and psychological implications of the intellectually disabled and the impact on the family. *Prerequisites: CEDS 578, 579 and 580.*

CEDS 582: Methods and Materials for the Intellectually Disabled. Summer, Fall, 3 credits

Studies acquisition of skills in the identification, selection and preparation of materials for teaching intellectually disabled children review, demonstration and preparation of programs and examines appropriate curriculum content for Pre-K-12/Adulthood. *Prerequisites: CEDS 578, 579, 580 and 581.*

CEDS 583: Career and Vocational Assessment. Spring, 3 credits

Examines and utilizes specific career and vocational assessment techniques with individuals and groups. Examines tests for assessing job and career preferences of exceptional students as related to IDEA, ADA, transition to adulthood, and collaboration.

CEDS 584: Diagnosis and Assessment in Exceptional Education. Spring, 3 credits

Provides a review of a variety of assessment techniques and standardized evaluation tools for program planning purposes and applied 20th-century approaches. Examines and utilizes specific Diagnostic/Remedial and Writing education evaluations techniques with individuals and groups. *Prerequisites: CEDS 580 (one Nature and one Methods course or provisional certification).*

CEDS 585: Development Problems in Speech and Language. Spring, 3 credits

Studies the nature and causes of deviations from normal speech and language development. Provides instruction and demonstration in area of speech and language instruction for children/youth with disabilities.

CEDS 586: Practicum for Teachers of the Intellectually Disabled. Fall (160 clock hours, 8-week field experience), 3 credits

Supervised teaching experience with intellectually disabled. *Prerequisite: CEDS 579, 580, 581 and 582 (Students must register for their area of concentration plus weekly seminar CEDS 606.).*

CEDS 587: Methods, Materials and Curriculum for Learning Disabilities. Summer, (workshop), Fall, 3 credits

Provides experiences in developing, selecting, and evaluating curriculum, methods and materials for children with learning disabilities .

CEDS 588: Nature, Needs and Characteristics for Learning Disabilities. Summer, Fall, 3 credits

Examines the possible etiologies, theories, and academic and social-emotional characteristics regarding individuals with learning disabilities

CEDS 589: Practicum for Learning Disabilities.

Fall (160 clock hours, 8-week field experience), 3 credits

Supervised practicum with learning-disabled children emphasizing identification, testing and writing prescriptive programs for LD children. *Prerequisites: CEDS 579, 580, 587 and 588 (Students must register for their area of concentration plus weekly seminar CEDS 606.).*

CEDS 590: Internship for Learning Disabilities.

Summer & Fall (400 clock hours, 10-week field experience), 3 credits

Final demonstration of competencies and performances in supervised internship settings with learning disabled children. *Prerequisites: CEDS 579, 580, 587, 588 and 589 (Emphasis on performance/competence-based accountability).* Students must register for their area of concentration plus weekly seminar CEDS 606.

CEDS 591: Nature, Needs and Characteristics of Interrelated Education.

Summer, Fall, 3 credits

Provides and in-depth examination of characteristics, similarities, and differences among BD, LD, and MID children; seminar for interrelated teachers (Approval of Department of CEEPS).

CEDS 592: Methods, Materials and Curriculum for Interrelated Learners.

Summer, Fall, 3 credits

Helps teachers develop skills in developing and implementing writing a variety of multiteaching techniques for individuals and groups manifesting academic problems in general settings. *Prerequisites: CEDS 579, 580 and 591 (Approval of Department of CEEPS).*

CEDS 593: Practicum for Interrelated Teachers.

Fall (160 clock hours, 8-week field experience), 3 credits

Supervised practicum with behavioral disordered, learning disabled, and mild intellectual-disabled children. *Prerequisites: CEDS 579, 580, 591 and 592 (Students must register for their area of concentration plus weekly seminar CEDS 606.).* (See Handbook.)

CEDS 594: Internship for Interrelated Teachers.

Summer, Fall (400-clock hours, 10-week field experience), 3 credits

Supervised internship as instructional facilitator in divers classroom settings. *Prerequisites: CEDS 579, 580, 592 and 593. (Students must register for their area of concentration plus weekly seminar CEDS 606.).* (See Handbook)

CEDS 595: Nature, Needs and Characteristics of Children with Behavioral Disorders.

Summer, Fall, 3 credits

Studies etiology, diagnosis and treatment and characteristics of emotional and behavioral disorders of children and youth.

CEDS 596: Practicum for Teachers of Children with Behavioral Disorders.

Fall (160-clock hours, 8-week field experience), 3 credits

Supervised practicum with children with emotional behavioral disorders. *Prerequisites: CEDS 579, 580, 598 and 595. (Students must register for their area of concentration plus weekly seminar CEDS 606).*

CEDS 597: Internship for Teachers of Children with Behavioral Disorders.

Spring, Summer (400-clock hours, 10-week field experience), 3 credits

Supervised internship in programs for children with behavioral disorders. *Prerequisites: CEDS 579, 580, 595 and 596. (See Handbook.)* Emphasis on accountability/competence and performance based education. (Students must register for their area of concentration plus weekly seminar CEDS 606).

CEDS 598: Methods, Material and Curriculum for Behavioral Disorders.

Summer, Fall, 3 credits

Provides experience in developing, analyzing, evaluating, and implementing methods and materials used with students diagnosed as Behavioral Disorders. *Prerequisites: CEDS 579, 580 and 595.*

CEDS 599: Internship for Teachers of the Intellectually Disabled.

Fall (400-clock hours, 10-week field experience), 3 credits

Supervised internship in programs for students with intellectual disabilities (MID, MOID, SID, PID) *Prerequisites: 579, 580, 581, 582 and 598. (Students must register for their area of concentration plus weekly seminar CEDS 606.).* (See Handbook.)

CEDS 600: Curriculum for Exceptional Children. Spring, 3 credits

Experiences in evaluating curriculum for exceptional children, with an emphasis on examining effective teaching strategies and materials for use in the inclusive classroom.

CEDS 601: Nature and Identification of the Gifted/Talented. Summer, 3 credits

Provides understanding of the psychology and characteristics of the gifted; also provides understanding of the gifted who are culturally different or atypically handicapped within the overview of exceptionality (Summer Workshop or Staff Development Workshop).

CEDS 602: Curriculum and Methods of Teaching the Gifted.

Summer Workshop, 3 credits

Provides experiences in developing, analyzing and evaluating the curriculum, methods and materials used with the gifted. *Prerequisites: CEDS 601 (Summer Workshop/Staff Development Workshop).*

CEDS 603: Practicum for Teachers of Gifted Children and Youth.

Summer Workshop, 3 credits

Supervised practicum with gifted children emphasizing identification, testing and writing prescriptive programs for the gifted. *Prerequisites: CEDS 601 and 602.*

CEDS 604: Internship for Teachers of Gifted Education.

Summer Workshop, 3 credits

Supervised teaching experience with gifted children. *Prerequisites: CEDS 601, 602 and 603.*

CEDS 605: Diagnostic Reading for Teaching Reading. Summer, Fall, 3 credits

Principles, strategies, causes and methods of teaching and diagnosis of reading problems/difficulties for exceptional students (K-12). Provides a balance between inclusive theories and practices. Satisfies Georgia special requirements. *Prerequisites: CEDS 578, 579, and 580.*

CEDS: 606 Seminar for All Students Enrolled in Practicum, Internship and Student Teaching. Spring, Summer, Fall, 0 credits

Students discuss issues, trends and challenges related to teaching exceptional students. Emphasis is placed on the application and comparison of theory with actual field experiences at various levels.

CEDS 637: Current Issues and Trends in Exceptional Education. Fall, 3 credits

Reports and analyzes literature and research in exceptional education; application and comparison of theory with actual field experiences and selected topics in exceptional education.

CEDS 639: Organization, Administration and Supervision of Exceptional Classes.

Spring, 3 credits

Explores establishing and maintaining exceptional education programs from a problem-solving and analysis viewpoint; advanced seminar for school personnel with emphasis on instructional and organization techniques for the 21st century.

CEDS 642: Career Development for Exceptional Children and Youth.

Spring, 3 credits

Studies career programs and transitional issues for individuals with disabilities.

CEDS 643: Counseling Families of Exceptional Children and Youth.

Spring, 3 credits

Examines collaborative counseling role of special educators and the techniques for facilitating intellectual, emotional and social growth of individuals with disabilities.

CEDS 666: Thesis/Project Writing. Summer, Fall, 1 or 3 credits

Preparation and presentation of the thesis outline and completion of a thesis or project under the supervision of a faculty advisor.

CEDS 667: Thesis Advisement/Project Writing.

Summer, Fall, Spring, 1 or 3 credits

Prerequisites: CEDS 666 and satisfactory completion of the comprehensive examination (may be repeated).

CEDS 677: Independent Study. Spring, Summer, Fall, 1 or 3 credits

Independent research under the direction of an advisor; advanced registration only with Departmental approval in an identified course of study (may be repeated only twice).

CEDS 694: Directed Research. Spring, Summer, Fall, 1 or 3 credits

Studies and projects solution for major operational problems. Provides guidance in the preparation and completion of the proposal for the Ed.S. thesis or project. Students must propose, implement and infuse human technological changes. Students must adhere to APA standards and guidelines.

CEDS 695: Internship for Education Specialist in Exceptional Education.

Summer (150-clock hours), 3 credits

Supervised internship to develop and strengthen competencies as supervisory personnel.

CEDS 698: Legislative and Legal Aspects in Exceptional Education.

Fall, 3 credits

Examines legislation, federal regulations, constitutional law, and litigation which impact on the lives of individuals with disabilities.

COURSE DESCRIPTIONS

CEDC 501: Psychology of Early Childhood. **Fall, 3 credits**
Examines theories of behavior and development in young children.

CEDC 502: Curriculum Planning for Early Childhood Education. **Fall, 3 credits**
Curriculum development for preschool and primary grades. Attention given to the role of child development theories as a basis for curriculum planning.

CEDC 503: Methods of Teaching in Early Childhood. **Spring, 3 credits**
Exploration and demonstration of methods of teaching young children.

CEDC 504: Curriculum Planning for the Middle Grades. **Fall, 3 credits**
Explores basic principles and practices in curriculum planning and their application in the middle grades. *CEDC 505 may be taken concurrently.*

CEDC 505: Methods of Teaching in Middle Grades. **Fall, 3 credits**
Facilitates creative approaches to teaching in grades 4-8. Builds upon and extends middle level educators' instructional knowledge and experiences to improve students' learning in urban settings. *CEDC 504 may be taken concurrently.*

CEDC 506: Teaching Science: P-4. **Fall, 3 credits**
Explores the science curriculum and content, National Science Education Standards and instructional strategies appropriate for early childhood grades. Focuses on science process skills for the young child and on the major scientific concepts appropriate for this level. Laboratory and technology activities are included.

CEDC 507: Teaching Science: 4-8. **Fall, 3 credits**
Explores the science curriculum and content, National Science Education Standards and instructional strategies appropriate for development of scientific concepts and principles for children in the middle grades. Laboratory and technology activities are included.

CEDC 508: Physical Science for the Middle Grades. **Fall, 3 credits**
Advanced concepts about physical systems, atomic theory, periodicity, energy, electricity, heat, sound and light. Laboratory and technology activities are included.

CEDC 509: Biology for Middle Grades. **Spring, 3 credits**
Explores common topics at the advanced level for middle grades including living matter, genetics and heredity and evolution. Laboratory and technology experiences are included.

CEDC 510: Earth Systems Science. **Spring, 3 credits**
The study of earth systems and changes in relation to astronomy, physical geology, meteorology and oceanography. Laboratory and technology experiences are included.

CEDC 512: Teaching Mathematics: P-4. **Fall, 3 credits**
Study of the mathematics curriculum, techniques and resources for teaching mathematics in the early grades; focuses on readiness skills in number sense and structure, operations, estimation, computation, and equivalent representations.

CEDC 513: Teaching Mathematics: 4-8. **Fall, 3 credits**
Examines the mathematics curriculum and teaching methods appropriate for development of mathematics competency in number systems, properties of numbers, patterns, relations, geometric figures, measurement, probability, and data analysis.

CEDC 515: Algebra for the Middle Grades. **Spring, 3 credits**
Focuses on the curriculum, teaching and assessment methods and materials for middle grades; emphasizes symbolic rules, variables, intercept and slope, graphing and solving linear equations, and functions.

CEDC 516: Geometry for the Middle Grades. **Spring, 3 credits**
Emphasizes methodologies and materials for teaching coordinate and transformational geometry using a technology framework. *Prerequisite: CEDC 515 (Algebra).*

CEDC 517: Mathematics Problem Solving with Microcomputers for the Middle Grades. **Summer, 3 credits**
Investigates mathematics topics for microcomputer application and study in the middle grades. *Prerequisite: General competence in mathematics and algebra; however, no previous computer experience is necessary.*

CEDC 521: Teaching Social Studies: P-4. **Spring, 3 credits**
Studies various techniques and strategies for teaching social studies concepts; curricula for the early grades are explored.

CEDC 522: Teaching Social Studies: 4-8. **Spring, 3 credits**
Covers a variety of social studies curricula for the middle grades and stresses methods for teaching of content.

CEDC 523: Social Studies: Cultural Diversity. **Fall, 3 credits**
Explores content and concepts for teaching cultural diversity in social studies.

CEDC 525: Health and Physical Education in Early Childhood. **Spring, 3 credits**
Emphasizes methods and materials appropriate for teaching health habits and physical education activities.

CEDC 526: Curricular Integration of Creative Experiences for Young Children. **Spring, 3 credits**
Emphasizes integrating music, movement, creative writing, dramatics, and art into the curriculum.

CEDC 530: Foundations of Culturally Responsive and Relevant Pedagogical Practices. **Spring, 3 credits**
Explores concepts of culturally responsive and culturally relevant pedagogy and

analyzes research and theoretical frameworks upon which the concepts are based. Practices which support these concepts are observed and examined, and activities engaging students in the application of these practices are undertaken in the field. *Corequisite: CEDC 530P.*

CEDC 530P: Clinical Observation and Evaluation. **Spring, 0 credits**
Two hundred (200) hours clinical observations of instructional strategies as practiced in the field. *Corequisite: CEDC 530.*

CEDC 532: Trends, Issues and Approaches in Early Childhood Education. **Fall, 3 credits**
Takes reading/language arts content for early childhood and places it in a curriculum framework of developmentally appropriate teaching/learning activities for the young child. Assessment strategies recommended for determining young children's performance are explored. *Corequisite: CEDC 532P.*

CEDC 532P: Practicum in Pedagogy and Content. **Fall, 0 credits**
Two hundred (200) hours observing and assessing pedagogy and content in the Early Childhood classroom. *Corequisite: CEDC 532.*

CEDC 534: Critical Advanced Reading/Language Arts for Early Childhood. **Fall, 3 credits**
Focuses on content and concepts for reading and language arts P-5 emergent literacy; the comprehensive process in beginning reading; thinking and reading; vocabulary acquisition and word analysis strategies; and writing conventions, concepts and processes.

CEDC 535: Critical Advanced Integrated Science and Mathematics for Early Childhood. **Fall, 3 credits**
Effective instructional approaches and implementation strategies for the integration of elementary content standards that are culturally responsive and developmentally appropriate for the active involvement of elementary students in problem solving, mathematical reasoning, computation and communication. The course will present the integrated application of instructional strategies and technology that create and sustain successful learners.

CEDC 536: Capstone Content for Early Childhood Education. **Fall, 3 credits**
Student will participate in the advanced study of reading, math, science, social science, the arts, and physical education. A literature review and analysis of a selected philosophical or practical aspect of curriculum, assessment, or instructional technique relating to grades P-5 will be required. The relevant research in the capstone will be merged with the action research course. A videotape and computer-generated pictures that demonstrate the implementation of the action research may become a part of the portfolio to demonstrate the students' understanding of the selected content area and problem.

CEDC 538: Trends and Issues in Middle and Secondary School Curriculum.

Fall, 3 credits

This course is designed to explore the past decade of reform and major curricular dilemmas in middle and secondary education; the effects of ethnic and culturally diverse curriculum content on student achievement; and creating new curricular paradigms for high achievement for all developmental levels. Technology resources are used for research and documenting results. *Corequisite: CEDC 538P.*

CEDC 538P: Clinical Observation and Evaluation.

Fall, 0 credits

Two hundred (200) hours observing and assessing instructional practices in Middle Grades and Secondary classrooms. *Corequisite: CEDC 538.*

CEDC 540: Integrated Language Arts/Reading and Social Studies for Middle Grades.

Spring, 3 credits

An integrated multidisciplinary curriculum must be able to expand the learner's potential for inquiry through a variety of sign systems such as languages, arts, music, dance, drama, architecture, etc., which humans created to mediate the world. The goal of this integration is to activate learners' multiple intelligences and to make learners readers, critical thinkers, and problems solvers for the increasingly diverse multicultural society.

CEDC 546: Middle Grades Integrated Standards-Based Content Capstone Course.

Spring, 3 credits

A study of middle-level content that focuses on a variety of models for integrating the curriculum. Emphasis will be placed on various models for integrating the curriculum in order to be responsive to the transitional needs of the early adolescent. *Corequisite: CEDC 546.*

CEDC 546P: Practicum.

Spring, 3 credits

Two hundred (200) hours analyzing, evaluating, and reflecting on instructional practices in Middle Grades classrooms. *Corequisite: CEDC 546P.*

CEDC 551: Research, Design and Evaluation in Education.

Spring, 3 credits

The introduction of concepts, ideas, methodology, and issues related to the research process. It will include both qualitative and quantitative research design and the evaluation processes in education (Web-enhanced).

CEDC 552: Action Research Seminar.

Spring, 0 credits

In-field observations of teaching and learning and the identification of a research problem. Periodic on-site meetings for reflection and feedback (Web-enhanced). *Corequisite: CEDC 551.*

CEDC 553: Educational Research Practitioner's Paper.

Fall, 3 credits

This course is the continuation of CEDC 552 Action Research Seminar. The Action Research Plan developed in EDC552 is implemented at the field school site, analyzed, and a publishable manuscript is written to be sent to a refereed

educational journal. Analysis of the data collected through qualitative/quantitative measures is performed. An Action Research thesis is a requirement for fulfillment of this course.

CEDC 561: Secondary/Postsecondary Curriculum Planning.

Spring, 3 credits

Presents tasks involved in design and implementation of curricula for the high school and postsecondary institutions.

CEDC 562: Methods of Teaching in the High School and College.

Spring, 3 credits

Addresses major instructional approaches, techniques and strategies used in senior high school and college. Students apply these approaches in the respective content area.

CEDC 563: Social Science in the Secondary School and College.

Fall, 3 credits

Focuses on the function of social science in secondary education and on methods and materials for teaching.

CEDC 564: English in the Secondary School and College.

Spring, 3 credits

Involves study of the materials and modern methods in teaching English.

CEDC 567: Calculus for Secondary Schools.

Spring, 3 credits

A comprehensive study of instructional strategies, materials, and modes for teaching/learning limits, differentiation, and integration. The focus is on instructional media and technologies for teaching concepts through real-world applications based on computer and calculator problem-solving platforms.

CEDC 568: Geometry for the Secondary School Teacher.

Spring, 3 credits

Involves methods, materials, and technology for teaching Euclidean and Non-Euclidean geometry. *Prerequisite: College algebra content knowledge or departmental approval.*

CEDC 569: Mathematics in the Secondary School and College.

Fall, 3 credits

Involves overall curriculum objectives, structure, and materials for mathematics in secondary schools and colleges; examines standards-based techniques for instruction, assessment and technology for teaching algebra, geometry, calculus, statistics and probability in diverse student environments. *Prerequisite: Completion of all mathematics courses in the program or departmental approval.*

CEDC 570: Science in the Secondary School and College.

Fall, 3 credits

Examines standards-based science secondary and college level curriculum. Investigates philosophy, issues and trends in science education. Learning theories and methods are explored, as they relate to science teaching in biology, physics, chemistry and earth systems science. Technology activities are included.

CEDC 571: Physics for Secondary School Teachers. Fall, 3 credits
Focuses on the physics of real solids, liquids, surfaces, and classical mechanics. Laboratory experiences are included.

CEDC 572: Chemistry for Secondary School Teachers. Spring, 3 credits
Study of chemistry concepts, theories and principles at an advanced level appropriate for teaching Advanced Placement Chemistry. Lab and technology activities are included.

CEDC 573: Biology for Secondary School Teachers. Spring, 3 credits
Study of biological theories, principles and concepts at the advanced level appropriate for teaching Advanced Placement Biology; molecules and cells, heredity and evolution, organisms and populations. Laboratory, multimedia and other technology activities are included.

CEDC 574: Integrated Mathematics and Science Instruction Using Technology. Spring, 3 credits
The study of standards-based instructional approaches and materials for mathematics using concepts and principles in general science, biology, chemistry, and physics as the platform for teaching; incorporates the use of graphing calculators, personal computers, and access to the World Wide Web. *Prerequisite: Completion of all mathematics and science courses.*

CEDC 580: Language Acquisition and Development: Birth to Age Twelve. Fall, 3 credits
Surveys receptive and expressive language processing; attention to techniques of developing and evaluating communication skills of children from birth to age 12 (grades P-8).

CEDC 581: Reading Instruction: P-4. Spring, 3 credits
Concentrates on the techniques and approaches for developing reading skills in an elementary school developmental reading program; emphasis is on reading readiness, beginning reading skills and the content of the curriculum in the early grades.

CEDC 583: Reading Instruction: 4-8. Spring, 3 credits
Concentrates on the techniques and approaches for developing reading skills in the middle school developmental reading program; emphasis on reading readiness, beginning reading skills and the content of the curriculum in the middle grades.

CEDC 584: Reading in the Secondary School and College. Fall, 3 credits
Presents scope and sequence of concepts and skills developed in developmental reading programs on the secondary/college level. Focuses on all levels of comprehension, models of comprehension and cognitive behavior in the comprehension process; major attention given to facilitating learners' comprehension through effective instructional strategies.

CEDC 586: Reading Instruction for Content Area Teachers.
Focuses upon selection and application of appropriate reading skills to reading material used in content areas and considers techniques of evaluating comprehensibility and comprehension of materials used in school subjects.

CEDC 591: Internship – P-12 Education. Fall, Spring, Summer, 9 credits
Provides cooperative guidance and supervision by University and local educational agency personnel for students as they assume the responsibilities of instructor in an educational setting.

CEDC 595: Internship - Early Childhood Education. Fall, Spring, Summer, 9 credits
Provides cooperative guidance and supervision by University and local educational agency personnel for students as they assume the responsibilities of instructor in an educational setting.

CEDC 596: Internship - Middle Grade Education. Fall, Spring, Summer, 9 credits
Provides cooperative guidance and supervision by University and local educational agency personnel for students as they assume the responsibilities of instructor in an educational setting.

CEDC 597: Internship - Secondary Education. Fall, Spring, Summer, 9 credits
Provides cooperative guidance and supervision by University and local educational agency personnel for students as they assume the responsibilities of instructor in an educational setting.

CEDC 598: Independent Study. Fall, Spring, Summer, 3 credits
Directs student inquiry into theoretical and practical interests of students; contractual arrangement with professor. *Prerequisite: Permission of professor.*

CEDC 599: Thesis Writing. Fall, Spring, Summer, 3 credits
Directs student preparation and presentation of a thesis proposal and completion of a thesis.

CATALOG COURSE DESCRIPTIONS

CEDA 500: Introduction to Educational Administration and Supervision.
Surveys the field(s) of educational administration and supervision, introduces basic theories and principles of administration and supervision.

CEDA 510: Curriculum Planning for Educational Leaders.
Focuses on the comprehensive curriculum development process and emphasizes leadership skills required for implementation and evaluation of the curriculum. Field-based activities are integral parts of the course.

CEDA 520: Educational Resource Management.
This course provides an overview of the school system business administration. The course helps the student of educational leadership in urban schools to explore and understand the issues of efficiency and equity in educational resources management.

CEDA 525: Technology and Information Systems.
Through this course, students will advance their knowledge of the personal computer and software utilization tailored for management of school data. Prerequisite: Computer Literacy.

CEDA 530: School/Community Relations.
Examines principles and practices for improving urban school and community relationships with emphasis on the local school site.

CEDA 535: Educational Policy and the Law.
Provides a comprehensive review of legal structures and foundations of the American public school system. Students will understand the policy context governing the administration of public schools.

CEDA 560: Practicum for the Master's Degree.
Provides opportunities at local school sites to synthesize and apply knowledge over two semesters in diverse educational settings. The field experience requires 218 contact hours including scheduled reflective seminars.

CEDA 590: Educational Tests and Measurements.
This course examines methods used to measure and evaluate student progress

and how the information gathered through these processes can be used to inform decisions about students, programs and activities.

CEDA 599: Research for School Improvement.
This course will guide students through basic research skills needed to locate and evaluate educational research and the utilization of their skills to solve problems that arise in the school setting through the application of action research.

CEDA 600: Administration of the Urban School System.
Spring, Alternate Summers, 3 credits
Reviews contemporary administrative and organizational models at the system level in American public schools and considers their impact on urban school policies and practices.

CEDA 601: Strategic Planning for Systemic Reforms.
Fall, Alternate Summers, 3 credits
Introduces students to the concept of systemic school reform and the challenges facing educational change initiatives. Considers methods and issues of planning large school interventions.

CEDA 608: Macro Educational Planning.
Occasional, 3 credits
Explores application of planning models and instruments for development of system level facilities, services and programs.

CEDA 610: Administration and Supervision of the Instructional Program
Fall, Alternate Summers, 3 credits
Focuses on teaching/learning process and provides the administrator knowledge, skills and attitudes in supervising the curriculum and instructional program. A primary emphasis is on improvement of instruction in urban schools. Direct support of teacher, group development, professional development, curriculum development and action research will be emphasized.

CEDA 612: Student Personnel Administration.
Fall, Alternate Summers, 3 credits
Studies student personnel problems in public schools.

CEDA 614: Staff Personnel Administration.
Spring, Alternate Summers, 3 credits
Studies principles and practices needed in recruitment of personnel and maintenance of school personnel programs.

CEDA 620: Economics of Educational Equity.
Fall, Alternate Summers, 3 credits
Provides analysis of pervasive equity issues facing urban schools. In-depth consideration of economic and financial challenges of ensuring equity for all students.

CEDA 630: Community Educational Leadership.

Spring, Alternate Summers, 3 credits

Introduces students to the theory and practice of community education and the role of education in urban community development.

CEDA 660: Advanced Practicum. **Fall, Spring, Summer, 3 credits**

Provides a variety of field-based experiences for education specialist and doctoral candidates over two semesters in diverse settings at school districts, state education departments or higher education. The field experience requires 218 contact hours including scheduled reflective seminars.

CEDA 690: Systematic Evaluation. **Fall, Alternate Summers, 3 credits**

Evaluates school-level organizational units and instructional programs through application of social system model of organization and planning instruments.

CEDA 699: Research Methods in Organizations. **Fall, Spring, 3 credits**

Examines methods of researching problems in organizations and develops instruments for measurement of variables in school organizations.

CEDA 709: Seminar in Strategic Leadership. **Spring, 3 credits**

Utilizing social systems theories, students will examine the issues of systemic change in educational organizations. They will review relevant literature, formulate research questions and design frameworks for interpretation and analysis.

CEDA 719: Seminar in Instructional Leadership. **Fall, 3 credits**

Students will examine school reform issues from the perspective of curriculum and instructional leadership. They will review relevant literature, formulate research questions and design frameworks for interpretation and analysis.

CEDA 729: Seminar in Organizational Leadership. **Fall, 3 credits**

Utilizing the perspective of transformational leadership, students will examine organizational behavior and the problems of organizational change. They will review relevant literature, formulate research questions and design frameworks for interpretation and analysis.

CEDA 730: Politics of Urban Education. **Fall, Alternate Summers, 3 credits**

Examines effects on educational policies of political behavior at national, state, local and institutional levels with particular focus on implications for urban schools.

CEDA 735: Educational Policy Analysis. **Spring, Alternate Summers, 3 credits**

Develops a framework for analysis and decision making in education policy, analyzes selected issues of current significance and introduces students to educational policy research methodology.

CEDA 739: Seminar in Political/Community Leadership. **Spring, 3 credits**

Analyzes issues of leadership and governance as they relate to the larger political, social and cultural context of urban schools. Students will review relevant literature, formulate research questions, and design frameworks for interpretation and analysis.

CEDA 790: Quantitative Research Methodology in Education.

Fall, 3 credits

Students will learn how to construct a variety of quantitative research designs, identify and use appropriate statistical tools and techniques, analyze, interpret and report research results using narrative, tabular and graphic forms. Prerequisite: Computer Literacy.

CEDA 795: Qualitative Research Methodology in Education. **Spring, 3 credits**

Helps doctoral students to develop theoretical framework from which qualitative inquiry emerges. Aims, assumptions, methods and strategies of qualitative research are addressed.

CEDA 791: Directed Research. **Fall, Spring, Summer 3 credits**

Develops competencies in designing and developing research proposals. (Elective)

CEDA 990: Doctoral Advisement. **Fall, Spring, Summer, 3 credits**

Maintains status of students for preparation and writing comprehensive examination and/ or prospectus or for making corrections of dissertation after final defense. Prerequisite: Approval of Department Chair.

CEDA 995: Dissertation Research. **Fall, Spring, Summers, 3 credits**

Provides guidance on research for and writing of the dissertation. Prerequisites: Satisfactory completion of all required courses and the comprehensive examinations. Minimum six (6) hours required.

CEDF 550: History of Urban Education. **Fall, Alternate Summers, 3 credits**

Through the disciplinary lens of history, the course reviews the major forces that have shaped, and continue to shape, the modern school system in the United States. Particular focus will be directed at the urban setting.

CEDF 553: Schooling and the Urban Community.

This course seeks to cultivate and then encourage the utilization of a sociological lens to examine our urban societies, our communities and our schools.

CEDF 557: Education and Global Development.

This course provides opportunities for educational leaders to understand the relationship between educational systems, economic and political structures.

CEDF 614: Futures Research and Educational Policy.

Examines the relationship between education and the social order from and through the perspective of futurism.

CEDF 653: Education for Social Development.

Explores effects of factors in education on social mobility, political value formation and social problems of youth. (IDE)

CEDF 654: Education and Urban Development.

Explores the social context of urban education, the development and expansion of concentrated poverty in central city schools, and the research on the relationship between poverty and educational performance. Students study coordinated services for children and families and models for institutional collaboration.

COURSE DESCRIPTIONS

SLIS 510: Libraries, Information and Society. 3 credits

This course serves as the introduction to the library/information profession. It examines objectives and principles of the profession; historical and future trends; ethical, technological, and social issues; and the functions of various types of libraries and information organizations. Core course.

SLIS 520: Collection Development and Management. 3 credits

Principles governing development and maintenance of collections of information resources; theoretical and practical bases for selecting and acquiring materials; retrospective, current and future selection tools; structure of the commercial and noncommercial publishing industry; copyright law; and intellectual freedom issues. Core course.

SLIS 521: Production of Instructional Media Materials. 3 credits

Emphasizes local production of instructional media materials; a “hands-on” laboratory course. This course is required for certification as a media specialist.

SLIS 522: Selection and Utilization of Educational Media. 3 credits

Identifies criteria and methods for the selection, utilization and evaluation of educational media materials. This course is required for certification as a media specialist.

SLIS 530: Organization of Information. 3 credits

Examines basic principles of bibliographic control of library/information records. In addition, it fosters an understanding of the function and formats of catalogs. Bibliographic utilities (e.g., OCLC and SOLINET), MARC, AACR2, DDC, Library of Congress Classification System and Library of Congress Subjects are also covered. Core course.

SLIS 540: Information Resources and Services. 3 credits

This course introduces students to the history, philosophy and development of reference services; evaluates print and electronic reference resources; and explores the functions of information services and the ways in which reference work is conducted. Core Course.

SLIS 541: Literature for Young Adults. 3 credits
Acquaints students with classic and contemporary literature for young adults focusing on the historical contexts, evaluation criteria, genres, media adaptations, selection aids and procedures, and necessary technology competencies for information retrieval and delivery.

SLIS 542: Introduction to Art/Museum Librarianship. 3 credits
Explores the different missions, collections, organizational structures, patrons, and services found in a variety of art libraries, such as those located in art museums, academic institutions, architectural colleges, art and design schools, visual resource centers, and public libraries.

SLIS 543: Multicultural Information Resources and Services. 3 credits
This course identifies, explores and focuses on issues, challenges, evaluation of resources and agendas for addressing current multicultural issues in libraries. Assessment and design of library services to multicultural society will be emphasized.

SLIS 544: Children's Literature. 3 credits
Acquaints perspective school/children's librarians and elementary/middle school teachers with knowledge to select, evaluate, and use literature and information resources in school and public libraries and to explore critical perspectives on children's literature in relation to issues of diversity and multiculturalism.

SLIS 550: Research Methods. 3 credits
Examines research needs in the library/information profession and considers techniques proposed for the solution of problems by studying various formal research models, reading and evaluating studies from professional literature, and learning the basics of descriptive and inferential statistics.

SLIS 560: Library/Information Center Management. 3 credits
Introduction to the current state of management, theory, and concepts. The course will introduce students to the basic elements of management principles focusing on planning, organizing, staffing, directing, and controlling. Approaches to managing from authoritarian to participative to laissez-faire, are examined. The course will present a variety of resources, case studies, readings, critical incidents, simulations and discussions.

SLIS 561: Academic Library Management and Services. 3 credits
Addresses the historical development of academic libraries and the methods used in their management. Attention is given to major issues including staffing, the role of the library within the institution, the impact of technology on the delivery of services, funding, digital resources, scholarly communication, and developing information fluency among users. *Prerequisite: SLIS 460.*

SLIS 562: Public Library Management and Services. 3 credits
Introduction to planning, organizing, Staffing, managing, budgeting and

evaluating of public libraries. Emphasis will be on public library roles in meeting educational, informational, cultural, and recreational needs of the community. *Prerequisite: SLIS 460.*

SLIS 563: School Media Center Management and Services. 3 credits
Examines the philosophy supporting current guidelines and trends in the administration, management, organizational structure, research technology, services, and functions of school library media center programs and develops skills in evaluating the roles in program and resource management in the school setting.

SLIS 564: Special Library Management and Services. 3 credits
Introduction to planning, organizing, staffing, networking, designing, budgeting of library and information centers in governmental, corporate, and research institutions environment. Emphasis is on organizational culture, information-seeking behavior, knowledge management, technology, and professional development. *Prerequisite: SLIS 460.*

SLIS 571: Library and Information Technology. 3 credits
This class provides students with a fundamental introduction to computer hardware, operating systems, software applications, integrated online library systems (IOLS), Internet applications, metadata, and emerging standards such as Z39.50 and XML. The student is introduced to the technological resources, tools, and issues central to their professional development and success. Upon completion, students will be able to develop websites, identify and evaluate formats, resources and systems that provide access to knowledge.

SLIS 630: Bibliographic Control of Nonprint Materials. 3 credits
Organization of nonprint material with special emphasis on the Library of Congress Subject Headings, and the Library of Congress Classification, MARC and the AACR2R. Covers cartographic materials, sound recordings, video recordings, computer files and Internet resources. *Prerequisite: SLIS 430.*

SLIS 631: Subject Cataloging. 3 credits
Intensive coverage of the organization of materials utilizing the subject approach with emphasis on the Library of Congress Classification System, the Library of Congress Subject Headings, OCLC and the MARC Record. Special attention is given to uncontrolled and controlled vocabularies. The construction of a mini-thesaurus is a requirement for the course. *Prerequisite: SLIS 430.*

SLIS 632: Indexing and Abstracting. 3 credits
Basic techniques, concepts and methods of indexing monographs, serials, and specialized materials. It covers the process of preparing abstracts and includes a survey of analyzing secondary abstracting and indexing services. *Prerequisites: SLIS 430 and 631.*

SLIS 640: Ethnic Materials for Children and Young People. 3 credits
Study and critical evaluation of literature for children and young adults rooted in the cultures of the Native Americans, Hispanic Americans, African-Americans, and the Asian Americans. Students develop skill in selecting and evaluating, and strategies for using multicultural materials in both print and non-print formats. *Prerequisite: SLIS 540 or 541.*

SLIS 641: Online Resources and Services. 3 credits
Intensive survey of concepts and techniques of professional literature searching; analysis of evaluation of computerized bibliographic files; planning and management of computerized search services in an information environment. Indexing, thesauri construction and retrieval effectiveness in relationship to user requirements are given special attention. *Prerequisite: SLIS 440.*

SLIS 642: Government Information Resources and Policy. 3 credits
Introduction to US Government information resources with particular emphasis on public access issues to print and electronic publications identification, acquisition, organization and use of government information resources. Consideration of selected information resources of state and international bodies such as United Nations (UN) and European Union (EU). *Prerequisite: SLIS 440.*

SLIS 643: Information Resources and Services for Afro-American Studies. 3 credits
Examines the specialized print and electronic resources and services that support research and study related to the black experience in the United States. Some attention is given to resources and services related to Blacks in other parts of the Western hemisphere. *Prerequisite: SLIS 440.*

SLIS 644: Information Resources in the Humanities. 3 credits
An inquiry into the scholarly communication system in the humanities. Study of the print and electronic resources in the fields of religion, philosophy, visual arts, music, and literature. *Prerequisite: SLIS 440.*

SLIS 645: Information Resources and Services in the Social Sciences. 3 credits
Examines print and electronic bibliographic and reference resources for the disciplines in the social sciences and the consideration of the role of library/information professionals in meeting the information needs of researchers and practitioners. *Prerequisite: SLIS 440.*

SLIS 646: Information Resources and Services in Science and Technology. 3 credits
Introduction to information resources and services in science and technology, including primary and secondary publications, electronic databases, user needs and communication patterns within the scientific community. *Prerequisite: SLIS 440.*

SLIS 647: Law Librarianship. 3 credits
Introduction to the profession of law librarianship; the print and electronic source materials of the law with emphasis on primary authority, indexes and finding aids which are used in the legal profession. *Prerequisite: SLIS 440.*

SLIS 648: Information Resources and Services in Business. 3 credits
Objectives include an understanding of key business concepts and the resources that support business research in academic, corporate and public library environments; experience with electronic information from commercial services and free bed sites; awareness of trends in business service delivery. *Prerequisite: SLIS 440.*

SLIS 649: Information Resources and Services in Health Sciences. 3 credits
Introduces medical librarianship as a profession and examines the use and application of medical reference tools and modern access systems. Analysis of medical literature, retrieval systems and centers, and remote bibliographic sources through interactive terminals are studied. *Prerequisite: SLIS 440.*

SLIS 661: Archival Management. 3 credits
Introduction to basic principles and techniques of the management of archival materials and repositories; includes the historical development of archival institutions. *Prerequisite: SLIS 410, or approval of instructor.*

SLIS 663: School Media System Supervision. 3 credits
Introduces students to the leadership and management concepts, skills, and strategies required for this position and examines and evaluates the structure, services, and functions of school media system supervision and its relationship to the school system organization. *Prerequisite: SLIS 463.*

SLIS 670: Advanced Topic in Library and Information Technology. 3 credits
This course provides the student with in-depth exposure to concepts and issues related to the application of computer technology to library and information service above and beyond what is covered in SLIS 571. SLIS 670 addresses relational database concepts and design, the creation of database-driven WEB sites, and WEB-site management in the context of libraries. The class also reviews the digital library field and explores issues related to that arena (such as Dublin Core and other metadata topics, digital preservation, and digital rights management) from the perspectives of both creators and users.

SLIS 750: Directed Research. 3 credits
An approved systematic research project that is supervised by an SLIS faculty member. Required for the Specialist degree. Credit is awarded upon completion of the research project. Open to students pursuing the Specialist degree. Specialist Degree Students only.

SLIS 780: Independent Study.

3 credits

Independent study in a specialized area of librarianship by advanced students under the supervision of an SLIS faculty member. Prior approval by the advisor and the dean is required.

SLIS 781: Internship.

3 credits

Seminar and practicum of supervised observation and practice in a library or information center. Students gain experience in a wide variety of functions. Students maintain journal of systematic observation and are assigned appropriate readings and other assignments. *Prerequisite: Completion of core courses.*

SLIS 782: Seminar.

3 credits

An in-depth study of a current issued in the field of library and information science. The specific topic of each individual offering of SLIS 782 is announced prior to registration. *Prerequisite(s) will be announced for each seminar.*

MSW Course Descriptions

CSSW 500A: Autonomous Social Work Practice I. 3 credits

This is the first of two required courses in the method sequence that provides the foundation for all practice courses in the curriculum for two year full time and three year part time students. Framed in a generalist perspective, the course examines social work practice as both a method and process for intervention with micro systems (individuals, families and small groups). It includes fundamental ethical practice principles and concepts, values and skills used by social workers. Primary attention is given to the application of practice components with micro systems where the goal is to achieve an optimal level of social functioning within the context of client's problems. Autonomous Social Work Practice – Matrix Roles – Humanistic Values, and the Afrocentric Perspective are linked to the ecological system and strength perspectives. Students must be enrolled in CSSW 600A HBSE I and Field Practicum CSSW 501 A.

CSSW 501A: Concurrent Field Practicum I. 3 credits

Field Practicum I provides students with a supervised field experience in an agency setting using generalist social work skills. Students apply foundation knowledge, skills, values and ethics to practice. The practicum focuses on skill development, the nature of social systems, and the integration of social work theory and practice.

CSSW 585: Research Methods I - (Web-Enhanced Course). 3 credits

This is an introductory course on applied methods at the graduate level. The course is a comprehensive overview of the methods used to evaluate the efficacy of individual-level, group-level, and program-level social service interventions. The topics include sampling, measurement, design and procedures as they relate to single systems design, program evaluation, and basic research. Issues of reliability and validity provide the framework through which empirical research and original studies are critiqued. The major methodologies, both quantitative and qualitative, are considered. The implications of research in social work are explored as they impact issues of human behavior, policy and practice. *Prerequisites: None.*

CSSW 600A: Human Behavior and the Social Environment I. 3 credits

This foundation course focuses on oppression, poverty, various types of racism and inequalities, how these forces have been institutionalized in our society, how they impact diverse communities, organizations, groups, and shape the behaviors and development of children and adolescents. The course introduces the

ecological systems perspective for understanding human development in contemporary context and individual identity development within the family and groups and the life span. The Afrocentric perspective and humanistic paradigm will be the lens through which these issues will be addressed. Content will focus on processes of oppression, cultural pluralism, biculturalism, integration, acculturation and assimilation. The theories discussed will correspond and provide support to the first semester practice course-CSSW 500A: Autonomous Social Work Practice I.

CSSW 700: Social Welfare Policy and Services. 3 credits

This course is the first of two policy sequence courses and is designed to assist students in acquiring knowledge of the history of America's response to the needs of the poor and oppressed, including legislative policies and the development and role of the social work profession. Special attention is focused on general social problems, children, family and health issues, program services and structures, and beginning skills for analyzing social welfare issues.

CSSW 500B: Autonomous Social Work Practice II. 3 credits

This course is the second required foundation course in the practice sequence for full time two-year students and part-time three-year students. The course builds upon CSSW 500A with a focus on generalist social work practice with groups and expands with emphasis on organizations and communities. This course, like Autonomous Social Work Practice I, continues the conceptual framework of the ecological systems perspective, (the client system in context of reciprocal relationship with their environment), and incorporates the Autonomous Social Work Practice roles, the humanistic value system, and the Afro Centric Perspective. Primary attention is given to assessment and intervention with organizations and communities (mezzo and micro systems). *Prerequisites: CSSW 501A, 600A.*

CSSW 500C: Clinical Practice with Children, Adolescents, Adults, Families (Advance Standing Students Only). 3 credits

This is the first practice course for Advanced Standing Students. The course makes the assumption that these students enter the graduate program with competencies in the requisite knowledge, values and skills from a generalist social work perspective. It is expected that such competencies will enable the students to transition into advanced practice content areas. The course builds upon and extends social work practice models, methods, and processes for work with children, adolescents, adults, and families in different settings who present with a range of problems. Attention is given to models of assessment and interventions with each of these client systems. The concept of social functioning is used to inform problem identification, assessment and intervention. Students enrolled in this course will prepare to select a specialization area in health/mental health or child and family. Students who select the child and family specialization can also select school social work as a subspecialty.

CSSW 501B: Concurrent Field Practicum II. **3 credits**
Field Practicum II is a continuation of CSSW 501A. The practicum experience focuses on skill development, the reciprocal nature of social systems, application of ethics to practice and the integration and application of social work theory to practice. *Prerequisite: CSSW 501A: Field Practicum I and CSSW 500A: Autonomous Social Work Practice I.*

CSSW 600B: Human Behavior and the Social Environment II. **3 credits**
This course continues to expand understanding of individual growth and development over the life cycle begun in CSSW 600A. It focuses on young and middle adulthood, families, later adulthood and aging with special attention to biological, cognitive, social, psychological and spiritual issues. Attention is paid to how communities, organizations, groups, poverty, oppression, discrimination and racism impact development.

CSSW 600C: Human Behavior and the Social Environment III. (Advanced Standing Students Only). **3 credits**
This is the first Human Behavior and Social Environment course for Advanced Standing Students. The course reviews content on oppression, discrimination and poverty along with other factors as they affects communities, organizations, groups. Students will then integrate their understanding of human development issues that affect individuals, families, groups as they interface with communities, organizations, groups.

CSSW 586: Research Methods II (Statistics) (Web-Enhanced Course). **3 credits**
This course is an introduction to applied research statistics designed to develop skills in data analysis and statistical software computer usage for social work research and practice. The course focuses on: 1) computing and interpreting descriptive statistics, i.e. frequency distributions, graphic representations, measures of central tendency and dispersion; and 2) bivariate statistical procedures, such as chi-square, t-tests of group means, and One-way ANOVA. An applied research project is the primary vehicle by which students will demonstrate their mastery of course content. *Prerequisite: CSSW 585: Research Methods I.*

CSSW 588: Advanced Research Methods (Advanced Standing Students). **3 credits**
This course focuses on the application of research methods and statistics. The content assumes that the student has a basic understanding of research methods. There are two course objectives: 1) students will develop skills in conceptualizing, designing, conducting and writing for social work research and practice; and 2) students will develop skills in data analysis and statistical software computer usage. There are three broad areas covered in the course: 1) application of research methods; 2) computing and interpreting descriptive statistics, i.e. frequency distributions, graphic representations, measures of central tendency and dispersion; and 3) bivariate statistical procedures, such as chi square, t-tests of group means, and One-way ANOVA. An applied research project is the

primary vehicle by which students demonstrate their mastery of course content. *Prerequisite: Research Methods Course.*

CSSW 709: Differential Policy Analysis. **3 credits**
This course builds on CSSW 700 and is designed to assist students in developing conceptual, analytical, and political skills necessary to improve existing social policies, defeat policy initiatives incongruent with social work values, or establish new policies. Each student selects a social welfare policy or policy issue in his/her area of specialization at the local, state, or federal level for analysis and advocacy action. *Prerequisite: CSSW 700: Social Welfare Policy and Services.*

CSSW 502A: Field Practicum III. **3 credits**
This practicum provides students with advanced practice experience to sharpen the translation of theoretical constructs that undergird the students' specialization. Critical knowledge regarding skills, values and ethics is reinforced. *Prerequisites: CSSW 501A and 501B: Field Practicum I and II and CSSW 500A and 500B: Autonomous Social Work Practice I and II.*

CSSW 601: Psychopathology. **3 credits**
This course covers the description, classification, evaluation and diagnosis of the adult psychiatric disorders described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Additionally, personality development theories are drawn upon to further promote students' understanding of assessment and treatment interventions.

CSSW 598: Thesis/Conceptual Paper or CSSW598A Practice-Based Research. **4 credits**
This four-semester credit hour course covers two semesters (two-semester credit hours per semester). It is a formal, rigorous research study conducted as partial fulfillment of the master's degree under the direction of a faculty supervisor.

CSSW 503A: Social Work Practice with Children and Families. **3 credits**
This course is designed for students who have completed the first-year foundation courses and have selected the Child and Family Specialization. Building upon CSSW 500A and CSSW 500B, this course examines clinical assessment and interventions with children and their families. The course covers theoretical issues and practical techniques used in social work interventions with children and their families. Issues such as conducting an assessment, developing a treatment alliance, understanding family dynamics including resistance, worker's use of self, and termination will be explored. Work with parents and collaterals will be viewed as an integral part of clinical intervention with children.

CSSW 503B: Social Work Practice in Health/Mental Health Settings. **3 credits**
This course is designed for students who have completed the first-year foundation courses and have selected the Health/Mental Health Specialization. Building

upon CSSW 500A and CSSW 500B, this course focuses on understanding the contextual and conceptual framework of social work practice in health/mental health settings and the development of skills for practice in acute medical settings, public health agencies, mental health settings, and long-term care facilities. An effort is made to provide an understanding of the complexities inherent in the application and use of clinical interventions in different health care settings and systems of health care delivery. Value and ethical conflicts inherent in clinical practice in health care are considered, with special attention to issues related to women, minorities, at-risk populations, and the poor.

CSSW 502B: Field Practicum IV. 4 credits

Field Practicum IV is a continuation of CSSW 502A. It provides advanced clinical practice experience that undergirds the student's specialization. *Prerequisites: CSSW 501A, 501B, 502A: Field Practicum I, II, and III and CSSW 500A and 500B: Autonomous Social Work Practice I and II.*

CSSW 801: Integrative Seminar. 3 credits

This seminar is designed to complement the course work, integrate class and field, and explore relevant issues of practice, policy and research. The course is organized to create cross-fertilization among and between the two specialization areas and the subspecialty in school social work. *Prerequisites: All first-year foundation courses and all second-year, first semester courses.*

Electives

CSSW 506: Program and Organizational Development for Clinical Practice. 3 credits

This course provides students with advanced knowledge and understanding of organizational needs and identifies strategies and models for achieving these needs. Select organizational development models are examined to determine their applicability to social service agencies.

CSSW 508: Brief Interventive Methods. 3 credits

This course examines the theory and practice of brief treatment methods, including crisis intervention. It focuses on the basic phases of time-limited treatment and provides selection criteria, assessment procedures, goal setting, techniques of intervention, and termination approaches with individuals, families and small groups. *Prerequisite: All foundation practice courses.*

CSSW 510: AIDS: Psychosocial Issues and Intervention. 3 credits

This course provides critical information on practice, prevention, education, intervention methods and models of care for working with people with HIV/AIDS. Additionally, the course focuses on the AIDS population as an at-risk group. Prejudice, legal, spiritual, ethical, and other issues that confront social workers in clinical practice with AIDS persons are addressed.

CSSW 511: Intervention Strategies with Children and Adolescents. 3 credits

This course provides advanced knowledge and specialized skills for practice with children and adolescents who experience developmental issues and a range of psychosocial problems and social injustices. It examines practice issues relevant to culturally diverse children and adolescents, especially African-American and Latino children and adolescents. The course emphasizes the importance of understanding resiliency and strengths in making assessments and interventions in various treatment settings: schools, child welfare agencies, and juvenile justice systems.

CSSW 512: Intervention Strategies with Adults and the Aged. 3 credits

This course is designed to integrate the theories and practice skills for effective clinical work with the elderly and their families. Attention will be paid to the significance of the older person's history, various losses experienced including how to deal with grief and mourning, as well as understanding behaviors within their environmental context. The provision of concrete service delivery and case management as well as individual, family and small group treatment approaches will be addressed.

CSSW 513: Child Abuse and Neglect. 3 credits

This is an elective practice course located in the Child and Family Specialization. It is concerned with the abuse and neglect of children within a family system and how these patterns are perpetuated. It examines societal injustices faced by children, particularly children of color, and explores strategies for addressing these injustices. Core objectives of the course are to: 1) explore research findings on the prevalence of factors that contribute to child abuse and neglect; 2) offer in-depth knowledge about the types and causes of child abuse; and 3) provide knowledge of and skills in investigation, assessment, case management, treatment approaches, prevention and methods of evaluation at the macro and micro levels. *Prerequisites: First-year foundation courses.*

CSSW 514: Group Processes in Social Work Practice and Administration. 3 credits

This course offers an overview of the use of groups in social work practice. The early sessions focus on understanding task groups. The balance of the course focuses on treatment groups and the role of the worker in planning and conducting group treatment sessions. Lectures, group demonstrations, role-playing, and film are among the classroom activities.

CSSW 517: Community-Based Health Care. 3 credits

This course provides, to a multidisciplinary student group, the opportunity to analyze health problems in a given community. Emphasis is placed on access and barriers to health services, the role and function of multidisciplinary teams, community needs assessment and interventions, and policy advocacy for change. Students work as teams in a select community. They engage in fact-finding activities that lead to a presentation of recommendations for improved community health to state and local legislators.

CSSW 518: Community Health Promotion and Disease Prevention. 3 credits

This course builds on CSSW 517 and provides the knowledge and skills needed to conduct a health promotion activity in an assigned community. Using the Proceed Steps of the Precede/Proceed Model of Health Promotion, students plan, develop, and implement an intervention to address a community health problem identified in CSSW 517. *Prerequisite: CSSW 517.*

CSSW 520: Family Therapy. 3 credits

This is an advanced clinical social work practice course designed to increase students' knowledge and skills for intervening with families. The course engages students in: 1) exploring the development of family therapy and the dimensions of family treatment in social work practice; 2) using major models of family therapy for assessment and intervention; 3) identifying key family processes to include belief systems, individual family roles, and individual communication patterns and dynamics; and 4) identifying major research findings in family therapy.

CSSW 521: Supervision and Consultation in Clinical Practice. 3 credits

This course provides concepts and principles of supervision and consultation. Attention is given to emerging trends and practices in supervision, staff development, personnel utilization and assessment. The course explores the history, rolls, techniques and practices involved in the supervisory process. The course is designed for the experienced student who desires and expects to become an agency supervisor within the next few years, and to assist practicing supervisors to develop additional competencies. Attention is given to issues of clinical supervision and licensure.

CSSW 522: Public Health Social Work Practice. 3 credits

This course prepares social work students for advanced practice in the area of public health with a focus on disease prevention. Students are introduced to the historical development of public health practice, current public health issues, policies and procedures, research, assessment, and intervention strategies. Professional values and ethics are promoted as a foundation for helping students accept the differences in health behaviors related to ethnicity, gender, race, culture, socioeconomic status, at-risk status, and sexual orientation. Students are exposed to content on humanistic values, Afrocentric perspective, and autonomous social work practice matrix roles as they relate to public health in social work.

CSSW 603: African-American Families. 3 credits

This course examines historical and contemporary forces impinging upon African-American families to include disadvantaged status, racism and poverty, and the resultant survival strategies of these families. The Afrocentric perspective in conjunction with ecological-social systems theories is used. Attention is given to historical, economic, cultural and psychological factors that impact African-American families. Strengthens that exist in black families are acknowledged to include: adaptability of family roles, strong kinship bonds, a strong work and achievement ethic, and strong religious orientation.

CSSW 606: Alcoholism and Drug Dependency. 3 credits

This course examines psychosocial, cultural, physiological, political and economic roles that influence the use and abuse of alcohol and substances by diverse groups. Students are taught how to screen for alcohol and drug problems and how to evaluate the patterns, context, and consequences of alcohol and drug-taking behaviors. Students are introduced to 12-step programs, individual family assessment and intervention, and skills training for alcohol and drug abusers.

CSSW 609: Emotional Disorder of Children and Adolescents. 3 credits

This course is designed to explore a range of factors, situations, and experiences that contribute to the development and progression of emotional disorders in children and adolescents. In addition to formal diagnostic DSM-IV criteria, and an understanding of developmental issues, a strengths approach, supported by both Afrocentric and ecological perspective, is used.

CSSW 706: Law and Social Work. 3 credits

This course is designed to provide students with a basic analysis of social work as it interfaces with the law. It is not designed to turn professional social workers into lawyers, but rather to make encounters with lawyers and the legal system less mysterious and more beneficial to the client population. At the conclusion of this course, the student should be able to recognize how federal and state court systems operate, attain a level of confidence with respect to court testimony, understand the value of effective social work advocacy, develop cognizance of professional licensing and practice issues, and use basic legal terms and legal library resources.

CSSW 707: School Social Work. 3 credits

This is an advanced policy/practice required core course for the School of Social Work subspecialty. The course examines the scope of school social work; analyzes the impact of federal and other policies on schools as educational and socialization systems; explores influences of diverse ethnic/racial and oppressed student/parent population groups on schools and school responses by schools; and provides for increased differential clinical social work skills and roles, intervention models, interdisciplinary team work, and home-school-community approaches in school social work practice. *Prerequisite: first year foundation courses.*

CSSW 800: Independent Study 1, 2, or 3 credits

An independent study is a one semester individualized course that is arranged between an individual faculty member and a student on a specific topic of interest to the student and that meets academic and professional requirements of the MSW Program. Permission of both the Chair of the MSW Program and the instructor is required.

The Progressions in the MSW Program of Study are as follows:

CSSW 800: Independent Study. 1, 2, 3, credits
An independent study is a one-semester individualized course that is arranged between an individual faculty member and a student on a specific topic of interest to the student and that meets academic and professional requirements of the Ph.D. Degree Program. Permission of both the Director of the Ph.D. Degree Program and the instructor is required.

CSSW 900: Historical Analysis of Social Welfare and Professional Social Work Practice. 3 credits
This course examines the growth of social welfare and social work as social institutions in American society.

CSSW 901: Social Welfare and Professional Social Work Policy Planning and Development. 3 credits
This course creates awareness of sequential policy development on several levels, as well as fosters understanding of administration procedures, techniques and interventions that may be employed in the implementation of policies and programs.

CSSW 910: Descriptive and Inferential Statistics. 3 credits
This course provides in-depth understanding of descriptive and inferential statistics that enable students to master the procedures of statistical analysis as used in the field of social work.

CSSW 911: Evaluative Research and Multivariate Statistics. 3 credits
This course provides dual focus; the major focus is on application of advanced research methods for the evaluation of human service programs; the secondary focus is on use of multivariate statistics and microcomputers in evaluation and planning.

CSSW 912: Research Methodology in Social Work Planning and Administration. 3 credits
This course covers aspects of research methodology for social work planning

and administration including: problem formulation, conceptual and operational definitions of variables, theory and literature selection, design, data analysis and data presentation; emphasis is placed on experimental and quasi-experimental designs and research for administration and computer applications in the analysis and presentation of data.

CSSW 913: Doctoral Seminar I. 3 credits
This course analyzes current issues in the field of social work administration, planning and research; a framework for analyzing new developments, trends and projections in the field is provided through the use of selected topics.

CSSW 914: Doctoral Seminar II. 3 credits
This course is open to students who have completed core requirements and have selected a defined area for dissertation research. The course is a continuation of CSSW 913 and promotes the development of individual research projects using critical feedback from students and faculty.

CSSW 920: Organizational Development. 3 credits
This course prepares students to understand and work effectively in existing and newly designed organizations. Students examine competing organizational designs and new and traditional organizational forms and structures. Recognizing that organizations are organic, living systems, the roles, competencies and interpersonal skills required of managers and leaders who seek to develop more effective and efficient human service organizations are explored in-depth.

CSSW 921: Planned Change in Complex Organizations. 3 credits
This course examines: (1) language of complex organizations; (2) organization theory (theory of bureaucracies); (3) knowledge and data on recent studies of complex organizations and suggests implications for social change and social policy regarding complex organizations in the area of human service delivery with special attention to organizations serving persons of color.

CSSW 930: Critique and Analysis of Managerial Theories. 3 credits
This course provides a critique and analysis of various administrative and managerial theories, principles and concepts. It establishes a framework for assessing the potential applicability of selected managerial theories in human service agencies.

CSSW 931: Administration in Human Service Organizations. 3 credits
This course builds on CSSW 930 and is designed to help students strengthen their managerial skills and acquire new skills that will enable them to function more competently as managers, and administrators of human service organizations.