Latin American and Latino Studies

LALS 101 3 hrs. Introduction to Latin American Studies

Introduction to the major concepts, issues, and debates in the field of Latin American studies. Overview of history, cultures, and issues of race, ethnicity, gender, class in Latin America. World Cultures course.

LALS 102 3 hrs. Introduction to Latino Studies

Introduction to the major concepts, issues, and debates in the field of U.S. Latina/o Studies. Overview of the history, cultures, and issues of race, ethnicity, gender, and class among Latinos in the United States. U.S. Society, and World Cultures course.

LALS 103 3 hrs. Introduction to Latino Urban Studies

Demographic, economic, political, cultural, and social dimensions of Latino communities in the United States. Includes Chicanos/Mexicanos Puerto Ricans, Cubans, and Central and South Americans. U.S. Society course.

LALS 104 3 hrs. Introduction to Puerto Rican Studies

Analysis of contemporary cultural, political, social, and economic issues of Puerto Rico: the political status of Puerto Rico, problems of cultural identity, migration, and economic dependence. *World Cultures course*.

LALS 105 3 hrs. Introduction to Mexican Studies

Introduction to major issues in the formation of modern Mexico (conquest, Revolution of 1910) and to major literary works which depict and interpret the Mexican and Mexico. World Cultures course.

LALS 108 3 hrs. Indigenous Culture Change in Latin America

Overview of Latin American indigenous societies from the pre-Columbian era to the present, using archaeological, historical, and anthropological findings to analyze the changes and adaptations of native cultures from Latin America. World Cultures course.

LALS 109 3 hrs. Introduction to Latin American and Latino Cultural Studies

Examination of the cultural and artistic productions of U.S. Latinos and/or Latin Americans through historical processes of mainstreaming, transculturation, and hybridity. **Prerequisite(s)**: Open only to freshmen and sophomores or consent of the instructor. U.S. Society, and World Cultures course.

LALS 127 3 hrs. Latin American Music

Survey class that introduces students to the rich repertoire of music in Latin America. It explores the history of genres, their development, instruments, and representative artists in their geographical, social, and cultural contexts. **Same as** MUS 127. *Creative Arts, and World Cultures course.*

LALS 130 3 hrs. Introduction to Comparative Politics

Comparative study of political institutions, political culture, and political processes in selected major countries of the world. **Same as** POLS 130. Individual and Society, and World Cultures course.

LALS 161 3 hrs. Introduction to Latin American History

Introduction to major themes in Latin American history from pre-Colombian society and the European conquest to the present. **Same as** HIST 161. *Past, and World Cultures course.*

LALS 192 3 hrs. From the Convent to the Streets: Latin American Women Writers in Translation

Introduction to literature by Latin American women from the seventeenth century to the present. Focus on the role literature has played in the negotiation of gender identities in the private and the public spheres. **Same as** GWS 192 and SPAN 192. No credit toward any major or minor program in Spanish. Taught in English. *Individual and Society,* and World Cultures course.

LALS 200 1 hour. Expository Writing on Latin

American and Latino Topics Perfecting writing and expository skills in English. Must be taken concurrently with the first or second 200-level Latin American and Latino Studies course taken after declaration of the major. For Latin American and Latino Studies majors only.

LALS 217 3 hrs. Human Geography of Latin America including the Caribbean Region

Culture, settlement, political and economic development problems in Latin America, with special attention to Puerto Rico, the Caribbean Region, and Mexico. Same as GEOG 203. Individual and Society, and World Cultures course.

LALS 225 3 hrs. Racial and Ethnic Groups Sociological and social-psycho-

Sociological and social-psychological analysis of racial, religious, and other ethnic groups; consideration of historical and current social problems arising from their relationships in society. **Same as** AAST 225 and SOC 225. **Prerequisite(s):** SOC 100; or consent of the instructor. *Individual and Society, and U.S. Society course.*

LALS 227 3 hrs. Spain: 1469 to 1808

The political, socioeconomic, and cultural development of Spain from the reign of Ferdinand and Isabella to the War of Independence. **Same as** HIST 227. *Individual and Society, and Past course.*

LALS 228 Spain since 1808

Loss of the colonies, liquidation of the Ancient Regime, national integration, sociopolitical polarization, the Civil War, and the Franco regime. **Same as** HIST 228. Individual and Society, and Past course.

3 hrs.

LALS 229 3 hrs. Sociology of Latinos

Examines social, political, and economic issues affecting Latino groups. While focusing on the process of racialization, the course also examines immigration, language rights, gender and sexuality, labor market, media, and youth. **Same as** SOC 229. **Prerequisite(s):** SOC 100 or LALS 102 or SOC 105 or LALS 103; or consent of the instructor. *Individual and Society, and U.S. Society course.*

LALS 233 3 hrs. Latinos in Chicago

Development and dynamics of Chicago's Mexican, Puerto Rican, Cuban, Central and South American communities: settlement, demographics, economics, culture, social institutions, and political participation. **Prerequisite(s):** LALS 102 or consent of the instructor.

LALS 239 3 hrs. Pre-Columbian Art of South America

The art and architecture of the Andean, southern Central American, and Caribbean cultures from 3000 BC to the sixteenth century, including Chavin, Moche, Inca, Taino, and goldworking cultures of northern South America and lower Central America. **Same as** AH 273. **Prerequisite(s)**: Three hours of art history at the 100-level or consent of the instructor. *World Cultures course.*

LALS 240 3 hrs. Pre-Columbian Art of Mesoamerica

The art and architecture of prehispanic peoples of Mexico and northern Central America, including Olmec, Teotihuacan, Maya, Zapotec, and Aztec cultures. **Same as** AH 274. **Prerequisite(s):** Three hours of art history at the 100-level or consent of the instructor. *World Cultures course.*

LALS 242 3 hrs. Government and Politics of

Latin America An examination of government and politics in selected Latin American countries. Comparative and historical analysis of dictatorship, democracies, political institutions, and parties. Same as POLS 242. Prerequisite(s): Any 100-level course in Latin American and Latino studies or political science.

LALS 251 3 hrs. History of Race Relations in America

An examination of American racial thought and racial discrimination to determine how the content and function of both have changed over time. **Same as** AAST 200 and HIST 251.

LALS 255 3 hrs. South American Indians

Social and cultural practices of the native peoples of the Amazonian tropical forest and the Andes. **Same as** ANTH 275. *Individual and Society, and World Cultures course.*

LALS 256 3 hrs. European-Indigenous

Interaction in Latin America Responses of indigenous societies in Latin America to colonization by people from the Old World. The historical and social circumstances of contact and culture change will be covered. Same as ANTH 256. World Cultures course.

LALS 257 3 hrs. Archaeology of North America

Introduction to the prehistoric cultures of North America from earliest times until the arrival of Europeans. **Same as** ANTH 226. **Prerequisite(s):** ANTH 102 or consent of the instructor.

LALS 258 3 hrs. Ancient Civilizations of

Mexico and Central America Analysis and interpretation of the archaeological evidence on the process of development of native civilization in the Mesoamerican area from the beginnings of agricultural settlement to the eve of the Spanish conquest. **Same as** ANTH 227 and GEOG 207. **Prerequisite(s):** ANTH 102; or sophomore standing or above; or consent of the instructor.

LALS 259 3 hrs. Ancient Civilizations of South America

Analysis of the developmental process and social institutions of indigenous civilizations of South America. Emphasis on origins of sedentary life, evolution of cities, and dynamics of the native Andean states. **Same as** ANTH 228. **Prerequisite(s):** ANTH 102; or sophomore standing or above; or consent of the instructor.

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LALS 261 3 hrs.

Latin America to 1850 A survey of the pre-Columbian and early national periods. Same as HIST 261. Past, and World Cultures course.

LALS 262 3 hrs.

Latin America since 1850 Latin American socioeconomic, political, and cultural development since 1850 with emphasis on major countries and regions. Same as HIST 262. Past, and World Cultures course.

LALS 263 3 hrs.

Latin American Colonial Art A survey of Latin American art and architecture from European contact to independence. Same as AH 263. Prerequisite(s): Three hours of art history at the 100-level, or consent of the instructor. Creative Arts, and World Cultures course.

LALS 265 3 hrs. Mexico: 1400 to 1850

Social, economic, political, and cultural development of Mexican society from pre-Hispanic roots through Spanish conquest to independence and its aftermath. **Same as** HIST 265. *Past, and World Cultures course.*

LALS 266 3 hrs. Mexico since 1850

Revolution and evolution in the making of modern Mexican society. **Same as** HIST 266. *Past, and World Cultures course.*

LALS 270 3 hrs. Ethnography of Mesoamerica Survey of the contemporary indigenous cultures of Mesoamerica, studied against their preconquest history and in their development since the Spanish conquest. Same as ANTH 277. Individual and Society, and World Cultures course.

LALS 272 3 hrs. Brazil: A Multiethnic Society The diverse political, economic, artistic, and folkloric themes of Brazilian life are traced in such national festivals as Carnaval and Sao Joao, and folk religions such as Candomble. Same as ANTH 278. Individual and Society, and World Cultures course.

LALS 275 3 hrs. Gender in Latin America

Latin American women in historical perspective from pre-Columbian and Iberian societies to the present. **Same as** GWS 275 and POLS 275. *World Cultures course.*

LALS 276 3 hrs. Latinas in the United States

Socioeconomic conditions and cultural experiences of Latinas in the U.S. Historical and contemporary views of labor, health, education, family, identity formation, and leadership. **Same as** GWS 276 and SOC 226.

LALS 277 3 hrs. Issues of Race, Class, and Gender among Latinos Institutional, cultural, and psychological components of race, class, and gender relations.

Institutional inequality, questions of assimilation and identity, attitudes, and effects of inequality on community. **Prerequisite(s):** LALS 102.

LALS 278 3 hrs. Latin American/Latino Film Studies

Latin American and U.S. Latino film as expressing and impacting socioeconomic, political, ideological, and literary systems, modes of elite and popular culture, everyday life. **Same as** SPAN 278. **Prerequisite(s):** LALS 101 or LALS 102 or LALS 109.

LALS 283 3 hrs.

Latinos and Politics Latino politics and politicians in the context of the American political system. The political system, Latino participation, experience, and research on political processes. Same as POLS 209. U.S. Society course.

LALS 286 3 hrs.

Issues in Latino Identity Examines one or more topics of central importance to U.S. Latino populations. Topics may be related to such issues as youth, migration, family, religion, or cultural production. Prerequisite(s): LALS 102.

LALS 288 3 hrs. History of Modern Puerto Rico

Survey of political and socioeconomic history from 1868 to the present. **Same as** HIST 288.

LALS 290 3 hrs. Mexican American History

The political, social, economic, and cultural development of the Mexican people in the U.S. from colonial times until the present. **Same as** HIST 290.

LALS 295 3 hrs. Latino Literary Studies

Major trends, genres, works, themes, and writers related to Latino history and culture, mainstream and minority U.S., Latin American and third world literatures. **Same as** ENGL 295 and SPAN 295. *U.S. Society course*.

LALS 299 3–6 hrs. Independent Study

Individual reading or research project and paper in Latin American or U.S. Latino Studies, with instructor's consent and supervision. May be repeated to a maximum of 9 hrs. Students may register in more than one section per term. **Prerequisite(s):** A 2.50 grade point average. Open to undergraduate students with consent of the appropriate instructor and the Latin American and Latino studies director.

LALS 301 3 hrs. Research Methods in Latin America and Latino Studies

An examination of various research methods used in Latin American and Latino studies. Qualitative research methods used in the humanities and social sciences with emphasis on how to formulate ideas, develop them, and carry out a research project. **Prerequisite(s):** Two 200-level LALS courses; LALS major or minor or consent of the instructor; junior standing or above or consent of the instructor.

LALS 302 3 hrs. Research Workshop in Latin

American and Latino Studies Workshop where students will engage in individual research projects related to Latin American and/or Latino studies. Prerequisite(s): LALS 301, junior standing or above, and consent of the instructor.

LALS 348 3 hrs. Seminar: Political Problems of Developing Societies

Selected aspects of the politics and countries of Asia, Africa, and Latin America. **Same as** POLS 348. **Prerequisite(s):** POLS 200 and POLS 130; or consent of the instructor.

LALS 350 3 hrs. Latinos and Latin Americans in U.S. Public Discourse

The U.S. public images of Latinos and Latin Americans. **Prerequisite(s):** Two 200-level LALS courses; junior standing or above or consent of the instructor.

LALS 380 3 hrs. Social Movements in Latin America

The different ways in which different groups have used nontraditional means to change the social and political circumstances that have conditioned their lives. **Prerequisite(s):** Two 200-level courses; junior standing or above or consent of the instructor.

LALS 382 3 hrs. Race and Citizenship in the Americas

The relationship between citizenship and racial ideologies in the Americas. Comparison of the diverse racial and social experiences of U.S. Latinos with other populations in the Americas. **Prerequisite(s):** Two 200-level LALS courses; junior standing or above or consent of the instructor.

LALS 385 3 hrs. Latino Social Movements in the United States

Social movements and public action by Latinos in the United States. Includes farmworkers organizing, unionization efforts, nationalist movements, feminism, struggles, and community debates. **Prerequisite(s):** LALS 102.

LALS 391 3 hrs. Seminar in Latin American Studies

Diverse aspects of modern Latin American society, politics, culture, and economics from the wars of independence to contemporary times. May be repeated to a maximum of 6 hrs.

Prerequisite(s): Two 200-level LALS courses; junior standing or above or consent of the instructor.

LALS 395 3 hrs. Seminar in Latino Studies

Diverse aspects of the U.S. Latino experience at more theoretical and advanced levels. May be repeated to a maximum of 6 hrs. **Prerequisite(s):** Two 200level LALS courses; junior standing or above or consent of the instructor.

LALS 403 3 OR 4 hrs. Interdisciplinary Research Methods in Latin American and Latino Studies

Examination of research methods in social sciences and current trends in Latin American and Latino studies. Emphasis on critical analysis of research methods, use of analytical approaches for particular kinds of investigation, and hands on application to case studies. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** LALS 301 and LALS 302; or graduate standing. **Recommended background:**

Recommended background: Credit or concurrent registration in LALS 501.

LALS 409 3 OR 4 hrs. Ancient Maya Writing, Language, and Culture

Recent trends in Maya epigraphy, information gained from Maya hieroglyphs, linguistics, and historical ethnographies are applied to anthropological analyses of past lifeways. **Same as** ANTH 409. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Junior standing or above; and consent of the instructor.

LALS 423 3 OR 4 hrs. Andean Prehistory

An overview of the cultural evolution of the Andean region from the arrival of the first inhabitants to the development of the Inca empire. **Same as** ANTH 423. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** ANTH 228 or ANTH 269 or consent of the instructor.

LALS 427 3 OR 4 hrs. Studies in Language Policy and Cultural Identity

Examines the development, articulation, and effects of language policies on identity formation and culture. Focuses on the United States and the Spanish language, although other countries and languages are included. **Same as** SPAN 427. 3 undergraduate hrs. 4 graduate hrs. Taught in English.

Prerequisite(s): Junior standing or above.

LALS 461 3 OR 4 hrs. Topics in Latin American History

Specific topics are announced each term. **Same as** HIST 461. 3 undergraduate hrs. 4 graduate hrs. May be repeated. Students may register in more than one section per term. **Prerequisite(s)**: 3 hours of history, Latin American and Latino studies, or consent of the instructor.

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LALS 475 3 OR 4 hrs. Indians of the Andes and the Amazon

Intensive research in theoretical and ethnographic problems in South American Indian social structures and cultures. Special attention will be given Levi-Strauss' ideas on the formulation of cultural theory in South America. **Same as** ANTH 475. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** ANTH 213 or consent of the instructor.

LALS 491 3 OR 4 hrs. Interdisciplinary Seminar in Latin American Studies.

Specific topics as announced each semester. In-depth study of selected topics such as: process of state formation, education, populism, the family, democratization, industrialization, and ideological currents. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(5):** Any two 200-level Latin American and Latino studies courses or consent of the instructor.

LALS 495 3 OR 4 hrs. Interdisciplinary Seminar in Latino Studies

In-depth study of Latino communities and current issues from an interdisciplinary perspective, with emphasis on the learning and use of investigative methodologies. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Any two 200-level Latin American and Latino studies courses or consent of the instructor.

LALS 497 3 OR 4 hrs. Community Research Internship

Work in community-based organizations and cultural institutions to develop experiential knowledge about social, political, and cultural issues facing Latinos and Latin Americans. Placements introduce issues of ethnicity, identity, and transnationalism. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Junior standing or above and consent of the instructor. Concurrent registration in LALS 498. **Recommended background:**

LALS 403.

LALS 498 3 OR 4 hrs. Community Research

Community-based internship and development of a research proposal. Students are introduced to policy papers, research memos, and research grant proposals, and are expected to develop their own research proposals. 3 undergraduate hrs. 4 graduate hrs.

Prerequisite(s): Junior standing or above and consent of the instructor. Concurrent registration in LALS 497. **Recommended background:**

LALS 403.

Advanced Independent Study Individual advanced reading or research project in Latin

research project in Latin American or U.S. Latino studies, with instructor's consent and supervision. May be repeated to a maximum of 8 hrs. Students may register in more than one section per term. **Prerequisite(s):** Open, with consent of the instructor, to graduate students and Latin American and Latino Studies majors with at least a 3.00 grade point average. Students in other programs or with lower than a 3.00 grade point average are admitted at the instructor's discretion only.

Liberal Arts and Sciences

LAS 100 1 hour. Freshman Seminar: Introduction to University Study

Introduction to strategies of intellectual inquiry through the posing and solving of problems characteristic of university disciplines. Familiarization with academic life and environment at UIC. Topics vary. Meets during the first 10 weeks of the term. **Prerequisite(s):** Open only to freshmen.

LAS 110 1 hour. Success in the City

Strategies for academic success with focus on campus and community resources. Understanding the relationship between UIC and the diversity of Chicago is highlighted. Satisfactory/ Unsatisfactory grading only. Field trips outside of class hours required; lunches may need to be purchased. Class will meet first 10 weeks of term. Open to LAS freshmen only.

LAS 289 0 hrs. Cooperative Education: Off Campus

Offers students the opportunity to couple academic learning with career-related experience in an off-campus placement. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Declaration of a major, a cumulative grade point average of 2.50, completion of 40 hours of course work, and approval of the major department and the LAS Cooperative Education Office.

LAS 299 0–18 hrs. Liberal Arts and Sciences Study Abroad

Provides credit for foreign study. Student's proposal for study abroad must have prior approval of the major department and the College of Liberal Arts and Sciences office. Final determination of credit is made on the student's completion of the work. May be repeated. A maximum of 36 hours per academic year is allowed, for a total of 48 hours, all of which must be earned within one calendar year. Prerequisite(s): Approval of the student's major department and the college office, and the Study Abroad Öffice.

LAS 320 2 hrs. Introduction to Legal Analysis

Introduction to legal analysis and effective legal writing through the

preparation of a legal memorandum, judicial opinion, and other written assignments. Meets at Chicago-Kent College of Law. **Prerequisite(s):** Application to the College of Liberal Arts and Sciences and Chicago-Kent College of Law Accelerated Degree Program or junior standing; 3.5 grade point average; English 160 and 161 with grade of C or better; and consent of instructor.

LAS 490 0–18 hrs. International Student Exchange Program

The Student Exchange Program enables the reciprocal exchange of students between UIC and colleges or universities in other countries. There are a variety of programs tailored to meet the needs of both graduate and undergraduate students. May be repeated for a maximum of 36 hours per academic year or for a total of 48 hours, all of which must be earned within one calendar year. Determination of the number of credits to be granted is part of the proposal approval process. Students from other UIC colleges and schools are eligible for the program. For more information, visit the Web site at http://www.uic.edu/depts/ oia/resources-student/ studentexchange.html.

Prerequisite(s): Junior standing or above and approval of the student's major department, the LAS College Office and the Office of International Affairs.

LAS 494 3 OR 4 hrs. Topics in Cultural Studies

An interdisciplinary approach to a current cultural debate. Topics will vary. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. Taught at the Field Museum.

LAS 495 6 hrs. The Newberry Library Undergraduate Seminar

Seminar with a topic related to the holdings of the Newberry Library. Classes held in Newberry Library. Topics vary. May be repeated if topics vary. Previously listed as LAS 395. Students are required to conduct research at the Newberry Library beyond designated class hrs. Pretour of the Newberry is recommended. **Prerequisite(s):** Consent of UIC's Newberry Library seminar coordinator.

Linguistics

LING 150 3 hrs. Introduction to the Study of Language

The nature of human language and its grammatical, social, and biological aspects are covered. *Individual and Society course.*

LING 160 3 hrs. Language and Society

Language and its social context: linguistic variation in the community; types of linguistic interaction; language as a reflection of its social origins. *Individual and Society, and U.S. Society course.*

LING 170 3 Languages of the World

A survey of the world's languages: their cultural origins, relationships, similarities, and differences. Individual and Society, and World Cultures course.

3 hrs.

LING 201 3 hrs. Classical Etymology in the Life Sciences

The structure and formation of technical terms used in the health sciences, based on roots and elements from Greek and Latin. **Same as** CL 201. **Prerequisite(s):** Any 100-level biological sciences sequence.

LING 215 3 hrs. Japanese Language and Culture

Survey of the development of cultural traits and values throughout Japanese history, and the basic characteristics of Japanese grammar. Focus on the way in which grammar and vocabulary use reflect those traits and values. **Same as** JPN 215. *World Cultures course.*

LING 260 3 hrs. Language Acquisition, Language Contact, and Bilingualism

The social and psychological aspects of three major areas of language acquisition and use will be addressed: child language acquisition, adult second language acquisition, and bilingualism/language contact. **Prerequisite(s):** Sophomore

standing or above. Recommended background:

LING 150 or LING 160 or LING 161 or a similar course.

LING 402 3 OR 4 hrs. Trial Interaction

Language use, culture, and law in the trial process. Analysis of qualitative methods applied to legal processes and change. **Same as** CLJ 402. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s)**: CLJ 261 and CLJ 350; or consent of the instructor.

LING 405 3 OR 4 hrs. Introduction to General Linguistics

Linguistics, the scientific study of language as knowledge, structure, and use, involves phonetics, phonology, morphology, syntax, semantics, and pragmatics. Introduction to linguistics explores these disciplines. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Junior standing.

LING 415 3 OR 4 hrs. Linguistic Structures I

Introduction to key concepts in the field, including descriptive and perscriptive grammars, competence and performance, and human language as a system; articulatory phonetics; phonology; morphology. 3 undergraduate hrs. 4 graduate hrs. LING 425 3 OR 4 hrs. Linguistic Structures II

Fundamentals of semantics and syntax within the broad frameworks of generative and functional linguistics, including key concepts such as sense reference, utterance, sentence, form and function. 3 undergraduate hrs. 4 graduate hrs.

LING 459 3 OR 4 hrs. Topics in Linguistics

Topics vary. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

LING 474 3 hrs. Cognitive Psychology of Language

Provides students with a survey of methods, theory, and research in language and discourse processing. **Same as** COMM 454 and PSCH 454. **Prerequisite(s)**: Graduate standing or consent of the instructor.

LING 480 3 OR 4 hrs. Sociolinguistics

The study of language structure and use involving sociallyinformed pragmatics, ethnography of communication, sociolinguistic variation and dialectology, and issues of bilingualism. **Same as** ANTH 480. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** LING 405 or junior standing and consent of the instructor.

LING 483 3 OR 4 hrs. Methodology of TESOL

Methods of teaching listening, speaking, reading, and writing to speakers of English as a second or foreign language. **Same as** CI 483. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Junior standing and consent of the instructor.

LING 487 3 OR 4 hrs. Computer-Assisted Language Learning

An introduction to computer assisted language learning (CALL): the use of computer technology in second language reading and research. The effec-tiveness of CALL technology is assessed based on SLA theory and research studies. Same as GER 487 and SPAN 487. 3 undergraduate hrs. 4 graduate hrs. Taught in English. Extensive computer use required. Prerequisite(s): LING 483 or CI 483 or GER 448 or FR 448 or SPAN 448 or GER 449 or FR 449 or SPAN 449; or SPAN 502 or FR 502 or the equivalent; and senior standing or above.

LING 496 1–4 hrs. Independent Study

Students are assigned to this course at the discretion of the department. Independent study in an area of linguistics not normally covered by regular course offerings. Satisfactory/ Unsatisfactory grading only. May be repeated. Students may register in more than one section per term. A maximum of 6 hours is allowed for undergraduate students, and 8 hours of credit for graduate students. **Prerequisite(s):** 9 hours of linguistics and approval of the head of the department.

<u>Lithuanian</u>

LITH 101 4 hrs. Elementary Lithuanian I

Phonetics, introductory grammar, and reading. Four additional half hours each week in the language laboratory. For students who have had no formal work in Lithuanian.

LITH 102 4 hrs. Elementary Lithuanian II

Continues LITH 101. Four additional half hours each week in the language laboratory. **Prerequisite(s):** LITH 101 or the equivalent.

LITH 103 4 hrs. Intermediate Lithuanian I Continues LITH 102.

Prerequisite(s): LITH 102 or the equivalent.

LITH 104 4 hrs. Intermediate Lithuanian II

Continues LITH 103. **Prerequisite(s):** LITH 103 or the equivalent.

LITH 115 3 hrs. Lithuanian Culture

A thematic study of Lithuanian culture from antiquity to the present in an historical and political context. Knowledge of Lithuanian is not required. *World Cultures course.*

LITH 130 3 hrs. Lithuanian Prose Fiction in International Context

Analysis of Lithuanian prose fiction with reference to its major influences from Europe, North and South America; the development of international style. Taught in English. *Creative Arts, and World Cultures course.*

LITH 221 3 hrs.

Lithuanian Literature I Reading and analysis of the works of selected nineteenth- and twentieth-century authors. The evolution of Lithuanian literature up to 1940. Taught in English.

LITH 222 3 hrs.

Lithuanian Literature II Reading and analysis of the works of selected authors from 1940 to the present. Prerequisite(s): LITH 221.

LITH 230 3 hrs. Lithuanian Literature Abroad

Lithuanian Literature Abroau Lithuanian writers in exile: themes, trends in development, comparison with writers in Soviet Lithuania; influences of the new environment, writing in English. Taught in English.

LITH 399 1–3 hrs. Independent Study

Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 6 hrs.

a maximum of 6 nrs. **Prerequisite(s):** Junior standing, consent of the instructor and the head of the department.

LITH 410 3 OR 4 hrs. Structure of Lithuanian

Synchronic analysis of the structure of Lithuanian; emphasis on discourse analysis of oral and written texts. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** LITH 405 or

18 hours of Lithuanian or the equivalent.

LITH 425 3 OR 4 hrs. Translation of Lithuanian Texts

Problems of translating Lithuanian texts; workshop in translating Lithuanian works into English. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(S):** LITH 302 or consent of the instructor.

LITH 499 1–4 hrs. Independent Study

Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 8 hrs. Graduate students may register for more than one section per term; undergraduates may only register for one section per term. **Prerequisite(s):** Senior or graduate standing, consent of the instructor and the head of the department.

Management

MGMT 340 3 hrs.

Introduction to Organizations Important organization and management concepts and applications. Their relevance to individual and organizational goal attainment. Emphasizes organizational structure, systems, processes, and change, national and global. **Prerequisite(s):** ENGL 161 and MATH 160.

MGMT 350 3 hrs. Business and Its External Environment

Concerns the political, economic, social, legal, regulatory, and international environment of business

and the ethics and social responsibility of business actions. **Prerequisite(s):** ENGL 161 and MATH 160.

MGMT 445 3 hrs. Organizational Theory

Emphasis on organizational theories and models to analyze and improve functioning and performance of organizations. Structure, technology, environmental adaptation, and managerial control systems. **Prerequisite(s):** MGMT 340 and junior standing.

MGMT 447 3 OR 4 hrs. Organizations

Characteristics of business, government, and not-for-profit organizations; approaches used to study organizations; theoretical and empirical analysis of organizational processes. **Same as** SOC 447. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SOC 241 or MGMT 340 or SOC 244; and junior standing or above and an additional 200 or 300-level elective in sociology; or consent of the instructor.

MGMT 452 3 hrs.

Organizational Behavior Emphasis on understanding and managing people at work. Analysis of individual, group, and organization topics, including leadership, motivation, attitudes, group dynamics, and organizational culture. Prerequisite(s): luniar standing

Prerequisite(s): Junior standing and MGMT 340.

MGMT 453 3 hrs. Human Resource Management

Examination of the activities involved in attracting, retaining, and motivating employees. Topics include planning, selection, compensation, performance appraisal, succession, and legal issues. **Prerequisite(s):** MGMT 340 and MGMT 350 and junior standing.

MGMT 454 3 hrs. Labor-Management Relations

Labor unions and their impact on business firms and society. Labor-management relationships and collective bargaining practices. Public policy, union structure, and bargaining theory. **Prerequisite(s):** MGMT 340 and MGMT 350 and junior standing.

MGMT 460 3 hrs. Business, Society, and the Global Economy

Managing in a free enterprise system. Market, regulatory, ethical, and cultural norms. Internationalization of business; urban problems of business; landmark and contemporary case analyses. **Prerequisite(s):** MGMT 340 and MGMT 350.

MGMT 463 3 hrs. Negotiation and Conflict Resolution

Strategies and techniques for successful agreement negotiation and business conflict resolution. Includes applications to classic situations, such as collective bargaining, interpersonal relations, and stakeholder concerns. **Prerequisite(s):** MGMT 340.

MGMT 465 3 hrs. Compensation and Reward Systems

Examination of compensation and reward systems designed to enhance employee motivation and performance. Topics include pay structure design, incentive systems, and benefits. **Prerequisite(s):** MGMT 453 and MGMT 454.

MGMT 466 3 hrs. Managerial Effectiveness through Diversity

Management of diverse work forces. Discrimination, affirmative action, career development, socialization, and social change policies; historical, psychological, sociological, legal, and managerial viewpoints. **Prerequisite(s)**: MGMT 340.





LINGUISTICS
LITHUANIAN

MANAGEMENT

Course Descriptions

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MGMT 467 3 hrs. Impact of Technological Change

Examines the impact of technological change upon the business environment and the managerial process. Emphasis on alternative futures and the planning necessary to attain desired ends. **Prerequisite(s):** MGMT 340 and MGMT 350.

MGMT470 3 hrs. Career Planning and Development

Individual and organizational perspectives in career planning. Self-direction, networking, support facilities, and corporate management systems are considered. **Prerequisite(s):** MGMT 340 or the equivalent and junior standing.

MGMT 471 3 hrs. Organizational Design

Strategies for promoting the creativity, flexibility, and productivity of the organization and its management personnel. Readings and case studies from the public and private sectors. **Prerequisite(s):** MGMT 340 and MGMT 452, or consent of the instructor.

MGMT 480 3 hrs. Transportation Systems Management

Provides a fundamental knowledge of problems and practices encountered in the management of transportation systems. Includes impact of public policy; capital facilities; industry structure; costs; operations pricing and environmental relationships. **Prerequisite(s):** MGMT 340 and MGMT 350, or consent of the instructor.

MGMT 481 3 hrs. Managerial Logistics

Management of activities governing flow of materials and products through stages of production and distribution. Includes design of logistical systems and use of mathematical techniques. **Prerequisite(s):** IDS 355 or consent of the instructor.

MGMT 485 3 hrs. Business Ethics

Leading theories of ethics and moral choice. Analysis of ethical problems in business. Guidelines for ethical decision making. Case studies in business ethics. **Prerequisite(s):** MGMT 340 and MGMT 350.

MGMT 494 3 hrs. Special Topics in Management

Exploration of areas not covered in existing course offerings or study of selected topics in greater depth. Subject matter will vary from semester to semester. **Prerequisite(s):** Senior standing and 9 hours of 400-level management courses, or consent of the

instructor. MGMT 495 4 hrs. Competitive Strategy Multidisciplinary analysis of

Multidisciplinary analysis of organization strategy and policy, using case method and/or business simulation. Assignments involve extensive library research and oral and written reports. **Prerequisite(s):** Senior standing in the College of Business Administration and completion of all other CBA Core courses, or consent of the instructor.

MGMT 499 1–3 hrs. Independent Study in Management

Independent study of an approved topic in management. Student must prepare a written report under the guidance of the instructor. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s)**: Consent of the department head.

Marketing

MKTG 360 3 hrs. Introduction to Marketing

The role of marketing in business and society. The marketing decision process in domestic and international settings. Required of all students in the College of Business Administration. **Prerequisite(s):** ENGL 161 and MATH 160.

MKTG 452 3 hrs. Principles of Retailing

The theory and practice of making retailing decisions regarding pricing, product, place, and promotion, and the development of strategy based on market competition and trends. **Prerequisite(s):** MKTG 360.

MKTG 460 3 hrs. Marketing Analytics

Introduction to data-centered analysis for critical aspects of marketing, such as sales forcasting, profitability analysis, market segmentation, promotion budgeting, and database marketing. **Prerequisite(s):** MKTG 360 and IDS 270.

MKTG 461 3 hrs. Consumer Market Behavior

Understanding consumer decision processes; steps in decision making, including need recognition, perception, cognition, and attitude formation; effect of environmental social, psychological, and individual difference factors on consumer decision making. **Prerequisite(s):** MKTG 360 or consent of the instructor.

MKTG 462 3 hrs. Marketing Research

An investigation of the gathering, analyses, and interpretation of information used in solving marketing problems. Both qualitative and quantitative methods are employed in developing an analytical framework. **Prerequisite(s):** MKTG 360 and

Prerequisite(s): MK1G 360 and IDS 270.

MKTG 463 3 hrs. Marketing Channels and E-Commerce

Develop an integrated distribution system; relationship to firm's marketing structure (logistics); evaluation of decisions on sources, plant and warehouse location, domestic and international outlets. Analysis by marketing channels and e-commerce role in distribution. **Prerequisite(s):** MKTG 360. Business administration students

must have declared a major, or have received consent of the instructor.

MKTG 465 3 hrs. Strategic Marketing Planning and Management

Development of marketing plans for strategic and tactical programs to achieve the firm's marketing objectives. **Prerequisite(s):** 15 hours of marketing.

MKTG 466 3 hrs. Comparative Marketing Systems

Treats the topic of domestic marketing systems in other countries, their structures and processes, in a framework of comparative cultural, political, economic, and social systems. **Prerequisite(s):** MKTG 360 or consent of the instructor. Business administration students must have declared a major.

MKTG 469 3 hrs. Global Marketing

The strategic and tactical marketing of goods and services to countries beyond domestic or current markets. Distinct economic, socioccultural, and political-legal-regulatory environments are considered. **Prerequisite(s):** MKTG 360 and BA 200; or consent of the instructor.

MKTG 471 3 hrs. Services Marketing

An exploration of the special challenges of services marketing, including analyzing and developing solutions for new services, services quality, design and delivery of services, and services recovery. **Prerequisite(s):** MKTG 360.

MKTG 473 3 hrs. The Personal Selling Effort in Marketing

Analysis of selling strategies and tactics in different situations; problems of managing sales force. Cultural differences in selling techniques as well as ethical concerns will be discussed. **Prerequisite(s):** MKTG 461 or consent of the instructor.

MKTG 474 3 hrs. Advertising and Sales Promotion

The management, planning, creation, evaluation, and use of advertising and sales promotion. Evaluation and critique of an ad campaign. **Prerequisite(s):** MKTG 461 or consent of the instructor.

MKTG 475 3 hrs. Product Management

Development and review of new and existing products during their life cycles; the evolution of products and services from a creative idea to their withdrawal from the market. **Prerequisite(s):** MKTG 462 or consent of the instructor.

MKTG 476 3 hrs. Business-to-Business (B2B) Marketing

Unique concepts and strategies applied when businesses market to other organizations and institutions. Derived demand, systems selling, bid pricing, national account programs, and using distributors. **Prerequisite(s):** MKTG 360.

MKTG 494 3 hrs.

Special Topics in Marketing Intensive study of selected problems. Reading assignments from scholarly and professional journals; emphasis on covering relatively few areas in great depth. **Prerequisite(s):** Business administration students must have declared a major.

MKTG 499 3 hrs. Independent Study in Marketing

Topic and research methodology is to be determined by consultation with the instructor. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. **Prerequisite(s):** Major in marketing. Consent of the head of the department and the instructor must be obtained prior to registration.

Maternal-Child Nursing

NUMC 353 2 hrs. Nursing Dimensions of Human Sexuality

Human sexuality across life cycle; exploration of physiological, psychological, and social-cultural factors influencing sexuality; and health/illness behaviors. **Prerequisite(s):** NUSC 225 or NUSC 242; or consent of the instructor.

Mathematical <u>Computer Science</u>

MCS 260 4 hrs. Introduction to Computer Science

Introduction to computers, the C language, data types, statements and expressions, selection and repetition, functions and parameters, input/output, arrays, strings and string library functions, pointers, structures. **Prerequisite(s):** Credit or concurrent registration in MATH 180. Natural World—No Lab

MCS 275 4 hrs. Programming Tools and File Management

course.

Bit manipulation, screen and file input/output, separate compilation and linking, creating and using libraries, the ANSI C library, make utilities, interactive debuggers, introduction to C++ classes. **Prerequisite(s):** Grade of C or better in MATH 180, and grade of C or better in MCS 260 or grade of C or better in CS 102.

MCS 294 1-4 hrs. **Special Topics in Computer** Science

Course content is announced prior to each term in which it is given. May be repeated. **Prerequisite(s):** Approval of the department.

MCS 320

3 hrs. Introduction to Symbolic Computation

Introduction to computer algebra systems (MAPLE), symbolic computation, and the mathematical algorithms employed in such computation, with examples and applications to topics in undergraduate mathematics. **Prerequisite(s):** Grade of C or

better in MATH 210; and grade of C or better in MCS 260 or grade of C or better in CS 102 or grade of C or better in CS 108.

MCS 360 4 hrs. Introduction to Data Structures

Pointers and dynamic memory allocation in C/C++, recursion, stacks, queues, heaps, binary and multiway trees, graphs, hash tables. Sorting and searching algorithms. Prerequisite(s): Grade of C or better in MCS 260 and grade of C or better in MCS 275.

MCS 361 3 hrs. **Discrete Mathematics**

Discrete mathematical structures used in computer science: sets, functions and relations; induction, recursive definitions and relations, methods of proof, quantifiers; counting; graphs and trees; algorithms. Previously listed as MCS 261. **Prerequisite(s)**: Grade of C or better in MATH 215; and grade of C or better in MCS 260 or grade of C or better in CS 102.

MCS 394 2-4 hrs. **Special Topics in Computer** Science

Course content is announced prior to each term in which it is given. May be repeated. Students may register in more than one section per term. Prerequisite(s): Approval of the department.

MCS 401 3 OR 4 hrs. **Computer Algorithms I**

Design and analysis of computer algorithms. Divide-and-conquer, dynamic programming, greedy method, backtracking. Algorithms for sorting, searching, graph computations, pattern matching, NP-complete prob-lems. Same as CS 401. 3 under-graduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MCS 360; or grade of C or better in CS 202.

MCS 411 3 OR 4 hrs. **Compiler Design**

Language translation: lexical analysis, parsing schemes, symbol table management, syntax and semantic error detection, and code generation. Development of fully-functional compiler. Same as CS 473. 3 undergraduate hrs.

4 graduate hrs. Prerequisite(s): Grade of C or better in CS 301 or grade of C or better in MCS 441; and grade of C or better in CS 202 or grade of C or better in MCS 360; and grade of C or better in CS 266.

MCS 415 3 OR 4 hrs. Programming Language Design

Definition, design, and implementation of programming languages. Syntactic and semantic description; variable bindings, control and data structures, parsing, code generation, optimization; exception handling; data abstraction. **Same as** CS 476. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): MCS 360 or CS 340.

MCS 421 3 OR 4 hrs. **Combinatorics**

The pigeonhole principle, permutations and combinations, binomial coefficients, inclusion exclusion principle, recurrence relations and generating functions, special counting sequences, Polya theory of counting. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MATH 215; and grade of C or better in MATH 310 or grade of C or better in MATH 320; or consent of the instructor

MCS 423 3 OR 4 hrs. **Graph Theory**

Basic concepts of graph theory including Eulerian and hamiltonian cycles, trees, colorings, connectivity, shortest paths, minimum spanning trees, network flows, bipartite matching, planar graphs. 3 undergraduate ĥrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MATH 215; and grade

of C or better in MATH 310 or grade of C or better in MATH 320; or consent of the instructor.

MCS 425 3 OR 4 hrs. Codes and Cryptography

Mathematics of communications theory, basic information theory necessary to understand both coding theory and cryptography, basic ideas and highlights for both coding theory and cryptog-raphy, including public-key cryptosystems. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MATH 215; and grade of C or better in MATH 310 or grade of C or bet-ter in MATH 320; or consent of the instructor.

MCS 441 3 OR 4 hrs. Theory of Computation I MCS 441

Introduction to formal languages; relations between grammars and automata; elements of the theory of computable functions. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): MATH 215.

MCS 451 3 OR 4 hrs. **Object-Oriented** Programming in C++

C++ as an object-oriented language, classes and member func-

tions, access control, class scope, constructors, destructors, overloading, conversions, streams, derived classes, polymorphism through virtual functions, templates, class libraries. 3 undergraduate hrs. 4 graduate hrs. Credit is not given for MCS 451 if the student has credit for CS 474. Extensive computer use required. Prerequisite(s): Grade of C or better in MCS 360 or the equivalent or consent of the instructor.

MCS 471 3 OR 4 hrs. **Numerical Analysis**

Introduction to numerical analysis; floating point arithmetic, computational linear algebra, iterative solution to nonlinear equations, interpolation, numerical integration, numerical solution of ODEs, computer subroutine packages. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MCS 275 or grade of C or better in CS 102 or grade of C or better in CS 108; or consent of instructor.

MCS 472 3 OR 4 hrs. Introduction to Industrial Math and Computation

Technical writing and oral presentations in preparation for industrial projects. Topics include quality control, operations research, cost-benefit analysis, differential equations, using scientific software. Extensive computer use required.

Prerequisite(s): Grade of C or better in MCS 471 or consent of the instructor. Recommended background: Designed for students with a desire to explore mathematics via practical fieldwork.

3 OR 4 hrs. MCS 481

Computational Geometry Algorithmic problems on sets of points, rectangles, intervals, arcs, chords, polygons. Counting, reporting, location, intersection, pairing; static and dynamic data structures. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MCS 401 or consent of the instructor.

MCS 494 3 OR 4 hrs. Special Topics in Computer Science

Topics in mathematical computer science, such as symbolic compution, automated reasoning, cryptography or geometric algorithms. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. Prerequisite(s): Approval of the department.

MCS 496 1-4 hrs. Independent Study

Reading course supervised by a faculty member. May be repeated. Students may register in more than one section per term. Prerequisite(s): Approval of the instructor and the department.

Mathematics

MATH 070 3 hrs. **Elementary Mathematics**

Rational operations and arithmetic, fundamental operations of algebra, linear equations and polynomials, graphing. Satisfactory/Unsatisfactory grading only. Not open to students with credit in MATH 090, MATH 092 or a mathematics course at or above the 100-level. No graduation credit. Prerequisite(s): Eligibility determined by performance on the department placement test.

MATH 075 2 hrs. **Beginning Algebra**

Linear equations and inequalities, functions, linear functions, slope, exponents, polynomials, quadratic equations, rational expressions, rational equations, and applications. Satisfactory/ Unsatisfactory grading only. Not open to students with credit in MATH 070, 090, or a mathematics course at or above the 100-level. No graduation credit. Prerequisite(s): Appropriate score on the department placement test.

MATH 090 5 hrs. Intermediate Algebra

Linear equations, rational expressions, quadratic equations, graphing, exponentials and logarithms, systems of linear equations. Śatisfactory/Unsatisfactory grading only. Not open to students with credit in MATH 092 or a mathematics course at or above the 100-level. No graduation credit. **Prerequisite(s):** MATH 070 or MATH 075, or appropriate performance on the ÛÎC mathematics test.

MATH 092 5 hrs. Intermediate Algebra with

Cooperative Preparatory Chemistry

Linear equations, quadratic equa-tions, rational expressions, exponentials and logarithms, factoring, graphing, and systems of linear equations; chemical applications used throughout the course. Satisfactory/ Unsatisfactory grading only. Not open to students with credit in MATH 090, CHEM 101, or a mathematics course at or above the 100-level. No graduation credit. Prerequisite(s): MATH 070 or MATH 075 or appropri-ate performance on the UIC mathematics placement test. Must enroll concurrently in CHEM 102.

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5 hrs.

MATH 118

Mathematical Reasoning Elementary topics from algebra applied to descriptive statistics of data, scatter plots, correlation, linear regression, probability, random samples, sampling distributions, experimental designs. Graphing calculator used. No credit given if the student has credit in MATH 150 or 160 or 165 or 180, or the equivalent. No credit given if the student has credit in MATH 121 with a grade of C or better. No graduation credit for architecture, business administration, or engineering students. The only mathematics department course for which MATH 118 serves as a prerequisite is MATH 123. It may serve as a prerequisite for statistics courses in the social sciences. It does not replace MATH 090 as a prerequisite for any other mathematics department course. Prerequisite(s): MATH 070, or MATH 075, or appropriate performance on the UIC mathematics placement test.

MATH 121 5 hrs. Precalculus Mathematics

Logarithms, radicals, graphing of rational functions, complex numbers, trigonometry, DeMoivre's formula, theory of equations, sequences, systems of linear equations. No credit for students who have credit in MATH 165, MATH 180, or MATH 205. No graduation credit for architecture, business administration, or engineering students. **Prerequisite(s):** MATH 090 or MATH 092 or appropriate performance on the UIC mathematics placement test.

MATH 122 1 hour. Emerging Scholars Workshop for Precalculus Mathematics Intensive math workshop for students enrolled in MATH 121. Students work together in groups to solve challenging problems. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Admission to the Emerging Scholars Program. Must enroll concurrently in MATH 121.

MATH 123 5 hrs. Quantitative Reasoning

Choice of models for real-world problems, using elementary functions, linear equations, and graphs. Statistical data analysis, confidence intervals, estimation, testing. Graphing calculator and PC applications. No credit given if the student has credit in MATH 150 or 160 or 165 or 180, or the equivalent. No credit given if the student has credit in MATH 121 with a grade of C or better. No graduation credit for architecture, business administration, or engineering students. Prerequisite(s): Grade of C or better in MATH 118.

MATH 140 4 hrs. Arithmetic and Algebraic Structures

Introduction to conceptual foundations of mathematics. Topics include measurement, numeration, number theory, set theory, equations in one variable. Use of full purpose calculator throughout. **Prerequisite(s):** MATH 090 or MATH 092 or appropriate performance on the UIC mathematics placement test.

MATH 141 4 hrs. Algebraic and Geometric Structures

Area, perimeter, volume, surface area of plane and solid figures; integers, real and rational numbers; trigonometry and extended solution of general polygons; probability. Full purpose calculators used. Designed for students in the BA in Elementary Education program.

Prerequisite(s): Grade of C or better in MATH 140.

MATH 145 4 hrs. Effective Thinking from Mathematical Ideas

Investigates diverse mathematical concepts and highlights effective methods of reasoning relevant to real life. Topics include reasoning about numbers, infinity, the fourth dimension, topological space, chaos and fractals, and analyzing chance. **Prerequisite(s)**: MATH 090 or MATH 092 or appropriate performance on the UIC mathematics placement test or consent of the instructor.

MATH 1503 hrs.Finite Mathematics

Logic, sets, counting techniques, probability, vectors and matrices, computer programming. Credit is not given for MATH 150 if the student has credit for MATH 160. **Prerequisite(s):** MATH 090 or MATH 092 or Grade of C or better in MATH 121 or appropriate performance on the UIC mathematics placement test. *Natural World—No Lab course.*

MATH 160 5 hrs. Finite Mathematics for Business

Introduction to probability, statistics, and matrices, with emphasis on business applications. Credit is not given for MATH 160 if the student has credit for MATH 150. **Prerequisite(s):** MATH 090 or MATH 092 or a grade of C or better in MATH 121 or appropriate performance on the UIC mathematics placement test or a MATH ACT subscore of 27. *Natural World—No Lab course.*

MATH 165 5 hrs. Calculus for Business

Introduction to differential and integral calculus of algebraic, exponential, and logarithmic functions and techniques of partial derivatives and optimization. Emphasis on business applications. Credit is not given for MATH 165 if the student has credit for MATH 180. Prerequisite(s): MATH 090 or MATH 092 or grade of C or better in MATH 121 or appropriate performance on the UIC mathematics placement test or a MATH ACT subscore of 27. Natural World-No Lab course.

MATH 179 1 hour. Emerging Scholars Workshop for Calculus I

Intensive math workshop for students enrolled in MATH 180. Students work together in groups to solve challenging problems. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Admission to the Emerging Scholars Program. Must enroll concurrently in MATH 180.

MATH 180 5 hrs. Calculus I

Differentiation, curve sketching, maximum-minimum problems, related rates, mean-value theorem, antiderivative, Riemann integral, logarithm, and exponential functions. Credit is not given for MATH 180 if the student has credit for MATH 165. **Prerequisite(5):** Grade of C or better in MATH 121 or appropriate performance on the department placement test or a MATH ACT subscore of 28. *Natural World—No Lab course.*

MATH 181 Calculus II

Techniques of integration, arc length, solids of revolution, applications, polar coordinates, parametric equations, infinite sequences and series, power series. **Prerequisite(s):** Grade of C or better in MATH 180. *Natural World—No Lab course.*

5 hrs.

MATH 182 1 hour. Emerging Scholars Workshop for Calculus II

Intensive math workshop for students enrolled in MATH 181. Students work together in groups to solve challenging problems. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Admission to the Emerging Scholars Program. Must enroll concurrently in MATH 181.

MATH 194 1–4 hrs. Special Topics in Mathematics

Course content is announced prior to each term in which it is given. May be repeated. **Prerequisite(s):** Approval of the department.

MATH 205 5 hrs. Advanced Mathematics for Business

Introduction to integral calculus and its applications; probability, random variables, distributions (using calculus); linear algebra and applications; optimization. Credit is not given for MATH 205 for majors in Mathematics and Computer Science, Mathematics, and Teaching of Mathematics. Prerequisite(s): Grade of C or better in MATH 160; and grade of C or better in MATH 165 or grade of C or better in MATH 180. For students in the College of Business Administration: others by approval of the department.

MATH 210 Calculus III

Vectors in the plane and space, vector valued functions, functions of several variables, partial

3 hrs.

differentiation, maximum-minimum problems, double and triple integrals, applications, Green's theorem. **Prerequisite(s):** Grade of C or better in MATH 181. *Natural World—No Lab course.*

MATH 211 1 hour. Emerging Scholars Workshop for Calculus III

Intensive math workshop for students enrolled in MATH 210. Students work together in groups to solve challenging problems. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Admission to the Emerging Scholars Program. Must enroll concurrently in MATH 210.

MATH 215 3 hrs. Introduction to Advanced Mathematics

Introduction to methods of proofs used in different fields in mathematics. **Prerequisite(s):** Grade of C or better in MATH 181 and approval of the department.

MATH 220 3 hrs. Introduction to Differential Equations

Techniques and applications of differential equations. First order equations: separable and linear. Linear second order equations, Laplace transforms, and series solutions. Graphical and numerical methods. Fourier series and partial differential equations. **Prerequisite(s):** Grade of C or better in MATH 210.

MATH 294 1–4 hrs. Special Topics in Mathematics

Course content is announced prior to each term in which it is given. May be repeated. **Prerequisite(s):** Approval of the department.

MATH 300 1 hour. Writing for Mathematics Fulfills Writing-in-the-Discipline requirement. **Prerequisite(s):** ENGL 161 or the equivalent, and a grade of C or better in MATH 210. Students must have declared a major in the Department of Mathematics,

Statistics, and Computer Science.

MATH 310 3 hrs. Applied Linear Algebra

Appied Lifeat Algebra Matrices, Gaussian elimination, vector spaces, LU-decomposition, orthogonality, Gram-Schmidt process, determinants, inner products, eigenvalue problems, applications to differential equations and Markov processes. Credit is not given for MATH 310 if the student has credit for MATH 320. **Prerequisite(s)**: Grade of C or better in MATH 210.

3 hrs.

Analysis I The real number system, limits, continuous functions, differentiability, the Riemann integral. **Prerequisite(s):** Grade of C or better in MATH 215 or consent of the instructor.

MATH 313

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3 hrs.

Linear Algebra I Linear equations, Gaussian elimination, matrices, vector spaces, linear transformations, determinants, eigenvalues, and eigenvectors. Credit is not given for MATH 320 if the student has credit for MATH 310. **Prerequisite(s):** Concurrent registration in MATH 215.

MATH 330 3 hrs.

Abstract Algebra I Sets, properties of integers, groups, rings, fields. Prerequisite(s): Grade of C or better in MATH 215.

MATH 394 2–4 hrs. Special Topics in Mathematics

Course content is announced prior to each term in which it is given. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Approval of the department.

MATH 410 3 OR 4 hrs. Advanced Calculus I

Functions of several variables, differentials, theorems of partial differentiation. Calculus of vector fields, line and surface integrals, conservative fields, Stokes's and divergence theorems. Cartesian tensors. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 210.

MATH 411 3 OR 4 hrs. Advanced Calculus II

Implicit and inverse function theorems, transformations, Jacobians. Point-set theory. Sequences, infinite series, convergence tests, uniform convergence. Improper integrals, gamma and beta functions, Laplace transform. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 410.

MATH 414 3 OR 4 hrs. Analysis II

Sequences and series of functions. Uniform convergence, Taylor's theorem. Topology of metric spaces, with emphasis on the real numbers. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s)**: Grade of C or better in MATH 313.

MATH 417 3 OR 4 hrs. Complex Analysis with Applications

Complex numbers, analytic functions, complex integration, Taylor and Laurent series, residue calculus, branch cuts, conformal mapping, argument principle, Rouche's theorem, Poisson integral formula, analytic continuation. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade C or better in MATH 210.

MATH 419 3 OR 4 hrs. Models in Applied Mathematics

Introduction to mathematical modeling; scaling, graphical methods, optimization, computer simulation, stability, differential equation models, elementary numerical methods, applications in biology, chemistry, engineering, and physics. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 220 and grade of C or better in MCS 260.

MATH 425 3 OR 4 hrs. Linear Algebra II

Canonical forms of a linear transformation, inner product spaces, spectral theorem, principal axis theorem, quadratic forms, special topics such as linear programming. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 320.

MATH 430 3 OR 4 hrs. Formal Logic I

First order logic, syntax and semantics, completeness-incompleteness. 3 undergraduate hrs. 4 graduate hrs. Credit is not given for MATH 430 if the student has credit for PHIL 416. **Prerequisite(s):** Grade of C or better in CS 202 or grade of C or better in MATH 215.

MATH 431 3 OR 4 hrs. Abstract Algebra II

Further topics in abstract algebra: Sylow Theorems, Galois Theory, finitely generated modules over a principal ideal domain. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 320 and grade of C or better in MATH 330.

MATH 435 3 OR 4 hrs. Foundations of Number Theory

Primes, divisibility, congruences, Chinese remainder theorem, primitive roots, quadratic residues, quadratic reciprocity, and Jacobi symbols. The Euclidean algorithm and strategies of computer programming. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 215.

MATH 436 3 OR 4 hrs. Number Theory for Applications

Applications Primality testing methods of Lehmer, Rumely, Cohen-Lenstra, Atkin. Factorization methods of Gauss, Pollard, Shanks, Lenstra, and quadratic sieve. Computer algorithms involving libraries and nested subroutines. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MATH 435.

MATH 442 3 OR 4 hrs. Differential Geometry of Curves and Surfaces

Frenet formulas, isoperimetric inequality, local theory of surfaces, Gaussian and mean curvature, geodesics, parallelism, and the Guass-Bonnet theorem. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 320.

MATH 445 3 OR 4 hrs. Introduction to Topology I

Elements of metric spaces and topological spaces including product and quotient spaces, compactness, connectedness, and completeness. Examples from Euclidean space and function spaces. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s)**: Grade of C or better in MATH 313.

MATH 446 3 OR 4 hrs.

Introduction to Topology II Topics in topology chosen from the following: advanced point set topology, piecewise linear topology, fundamental group and knots, differential topology, applications to physics and biology. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 445.

MATH 480 3 OR 4 hrs. Applied Differential Equations

Linear first-order systems. Numerical methods. Nonlinear differential equations and stability. Introduction to partial differential equations. Sturm-Liouville theory. Boundary value problems and Green's functions. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 220.

MATH 481 3 OR 4 hrs. Applied Partial Differential Equations

Initial value and boundary value problems for second order linear equations. Eigenfunction expansions and Sturm-Liouville theory. Green's functions. Fourier transform. Characteristics. Laplace transform. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 220.

MATH 494 3 OR 4 hrs. Special Topics in Mathematics

Course content is announced prior to each term in which it is given. 3 undergraduate hrs. 4 graduate hrs. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Approval of the department.

MATH 496 1–4 hrs. Independent Study

Reading course supervised by a faculty member. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Approval of the instructor and the department.

Mathematics Teaching

MTHT 400 3 OR 4 hrs. Methods of Teaching Secondary Mathematics I

Philosophies, issues, techniques, and styles of teaching high school mathematics. Implications of psychological models. Mathematics in the evolving curriculum. Preparation of lessons. 3 undergraduate hrs. 4 graduate hrs. To be taken in the year prior to student teaching.

Prerequisite(s): Grade of C or better in MTHT 410, enrollment in BS or MS in the Teaching of Mathematics program in Secondary Mathematics Education, and a 2.50 grade point average in mathematics courses at the level of calculus or above.

MTHT 401 3 OR 4 hrs. Methods of Teaching Secondary Mathematics II

Secondary waterinates in Philosophies, issues, techniques, and styles of teaching high school mathematics. Preparation of diverse lessons. Supervised teaching experience. 3 undergraduate hrs. 4 graduate hrs. To be taken in year prior to student teaching. **Prerequisite(s):** Grade of C or better in MATH 210 and enrollment in the BS or MS in the Teaching of Mathematics program in Secondary Mathematics Education; and a 2.50 grade point average in mathematics courses at the level of calculus or above.

MTHT 411 3 OR 4 hrs. Advanced Euclidean Geometry

Axioms for Euclidean geometry are developed based upon reflections. Further concepts in Euclidean geometry which arise from these axioms are explored. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(5):** Grade of C or better in MATH 215.

MTHT 420 3 OR 4 hrs. Computers in Secondary School Mathematics

An overview of techniques, topics and tools for teaching secondary level mathematics using computers. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 210.

MTHT 430 3 OR 4 hrs. Mathematical Analysis for Teachers I

Basic properties of numbers, functions, graphs, limits, differentiation, continuity, completeness of the system of real numbers. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 210 and Grade of C or better in MATH 215.

MTHT 435 3 OR 4 hrs. Abstract Algebra

Sets, properties of integers, groups, rings, fields. Focus on concepts applicable to high school teaching. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** MATH 210 and MATH 215.

MTHT 438 6 hrs. Educational Practice with Seminar I

The first half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** 2.50 grade point average in mathematics courses at the level of calculus or above, successful completion of 100 clock hours of pre-student-teaching field experiences, and approval of the department. MATHEMATICS
MATHEMATICS
MATHEMATICS

Course Descriptions

MTHT 439 6 hrs. **Educational Practice with** Seminar II

The second half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. Prerequisite(s): Credit or concurrent registration in MTHT 438; and approval of the depart-ment and a 2.50 grade point average in mathematics courses at the level of calculus or above and successful completion of 100 clock hours of pre-student teaching field experiences.

MTHT 450 3 OR 4 hrs. **Concepts and Methods in** Elementary and Middle School Mathematics I

Advanced analysis of concept development and teaching methods. Sorting, classifying, counting, number tracks, addition, subtraction, group, place value, length, area, and alternative teaching strategies. 3 undergraduate hrs. 4 graduate hrs. For elementary school teachers. Prerequisite(s): Graduate standing and admission to the MS in the Teaching of Mathematics program (Option for Elementary School Teachers) or consent of the instructor.

MTHT 460 3 OR 4 hrs. **Geometric Measurement and** Numerical Methods

Classical problems of length, area and volume, including numerical trigonometry, are explored using a scientific calculator. 3 undergraduate hrs. 4 graduate hrs. Do not purchase a calculator for the course until after the first day of class. Prerequisite(s): Admission to the MS in the Teaching of Mathematics program (Option for Elementary School Teachers) or consent of the instructor.

3 OR 4 hrs. **MTHT 465 Teaching Algebra for** Understanding

Manipulatives and other representations of mathematical concepts used for teaching algebra to middle grade students. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Admission to the MS in the Teaching of Mathematics program (Option for Elementary School Teachers) or consent of the instructor.

MTHT 466 4 hrs. Introduction to Calculus and the Graphing Calculator

Problem solving using derivatives, differentials, and their applications followed by integrals and their applications. Maximum minimum problems solved directly by graphing, then by derivatives. **Prerequisite(s)**: Admission to the Mathematics Education Concentrators Program or consent of the instructor.

MTHT 467 4 hrs. Introduction to Number Theory with Application

Classical topics of elementary number theory and how they pertain to teaching the upper grades. Primes, GCF, LCM, divisibility, floor and ceiling functions, Gaussian Residue, lattices. Prerequisite(s): Admission to the Mathematics Education Concentrators Program or consent of the instructor.

MTHT 468 4 hrs. Geometry with Applications for Middle Grade Teachers

Plane and solid figures and their properties. Polygons and polyhedra. Euler's formula. Volume versus surface area. Spacial visualization; two-dimensional representations of three-dimensional figures. Prerequisite(s): Admission to the Mathematics Education Concentrators Program or consent of the instructor.

MTHT 470 3 OR 4 hrs. **Teaching Mathematics with** Science: An Activity Approach I

Introduction to basic variables (length, area, volume, mass, time) and the Scientific Method (picture, table, graph, questions). Extensive use of TIMS project curriculum. 3 undergraduate hrs. 4 graduate hrs. For elementary school teachers. Prerequisite(s): Admission to the MS in the Teaching of Mathematics program (Option for Elementary School Teachers) or consent of the instructor.

MTHT 480 3 OR 4 hrs. Microcomputers in **Elementary School** Mathematics I

Introduction to microcomputers and their use in elementary school mathematics. Basic microcomputer functions, educational software programs, pedagogical and curricular implications, and implementation questions. 3 undergraduate hrs. 4 graduate hrs. For elementary school teachers. Prerequisite(s): Admission to the MS in the Teaching of Mathematics program (Option for Elementary School Teachers) or consent of the instructor.

MTHT 490 1-5 hrs. Topics in Teaching Secondary Mathematics

Course content is announced prior to each term in which it is given. May be repeated. Students may register in more than one section per term. Prerequisite(s): Prerequisites may vary according to topic.

MTHT 491 1-5 hrs. **Topics in Teaching** Elementary/Junior High School Mathematics

Course content is announced prior to each term in which it is given. May be repeated. Students may register in more than one section per term. Prerequisite(s): Prerequisites may vary according to topic.

MTHT 496 1–4 hrs. Independent Study

Reading course supervised by a faculty member. May be repeated. Students may register in more than one section per term. Prerequisite(s): Approval of the instructor and the department.

Mechanical Engineering

ME 205 3 hrs. Introduction to Thermodynamics

Principles of energy transport and work; properties of substances and equations of state; first and second laws of thermodynamics; applications to mechanical cycles and systems. Prerequisite(s): PHYS 142.

ME 210 3 hrs. **Engineering Dynamics**

Dynamics of particles and rigid bodies. Introduction to Linear Algebra. Kinematics in different coordinate systems, coordinate transformations. Kinetics: Newton's second law, work energy relations, impulsemomentum relations, impact problems. Prerequisite(s): CME 201.

MF 211 4 hrs. Fluid Mechanics I

Fluid properties. Dimensional analysis. Statics and kinematics. Conservation equations. Inviscid and incompressible flows. Bernoulli's equation. Integral momentum theorems. Viscous flows. Boundary layer theories. Compressible Flows. Prerequisite(s): PHYS 141 and MATH 220.

MF 212 3 hrs. Fundamentals of Fluid Mechanics

Fluid properties. Dimensional analysis. Statics and kinematics. Conservation equations. Inviscid and incompressible flows, Bernoulli's equation. Integral momentum theorems. Viscous flows. Turbulent flows. Boundary layer theory. Credit is not given for ME 212 if the student has credit for ME 211 Prerequisite(s): PHYS 141; and MATH 220.

ME 250 3 hrs. **Engineering Graphics and** Desian

Principles of multiview projection. Related industrial standards, applications to all engineering disciplines. Computer-aided design. Computer programming, graphics. Prerequisite(s): Eligibility to register for ENGL 160 and credit or concurrent registration in CS 102 or CS 107 or CS 108.

ME 261 2 hrs. Materials for Manufacturing

Introductory-level course in materials engineering to familiarize students with relationships between processing, structure and properties of materials used to manufacture devices. Same as CME 261. Credit is not given for

CME 261/ME 261 if the student has credit for CME 260. Prerequisite(s): CHEM 112 and MATH 181 and PHYS 141.

MF 293 1-4 hrs. **Special Problems**

Special problems, readings or research under close supervision of a faculty member in the area of engineering graphics. May be repeated. Prerequisite(s): Consent of the instructor.

308 MF 3 hrs. **Mechanical Vibrations**

Free and forced vibrations of damped linear single and multiple degree of freedom systems. Approximate methods, instrumentation, and applications. Same as CMF 359 Prerequisite(s): ME 210 and MATH 220.

ME 312 3 hrs. **Dynamic Systems and** Control

Dynamics of linear systems. Modeling of mechanical, electrical, fluid, and thermal systems. Analysis and design of feedback control systems. Analytical, computer and experimental solution methods. Time and frequency domain techniques. Same as IE 312. Prerequisite(s): MATH 220 and PHYS 142; and sophomore standing or above; or approval of the department.

MF 318 3 hrs. Fluid Mechanics II

Conservation equations for fluid mechanics, inviscid ideal flows, viscous flow solutions of Navier-Stokes equations, pipe flows and boundary flows, compressible flow, computer solutions and applications. Prerequisite(s): ME 211.

ME 320 4 hrs. Mechanisms and Dynamics of Machinery

Kinematic analysis and synthesis of mechanisms; linkages, cams, spur gears, gear trains. Dynamic forces in machines; bearing reactions, balancing, flywheel design, friction, efficiency Prerequisite(s): ME 210.

ME 321 **Heat Transfer**

ME

4 hrs.

3 hrs.

Modes of heat transfer, material properties, one- and two-dimensional conduction. Extended surfaces. Forced and free convection. Heat exchangers. Radiation. Shape factors. Laboratories in conduction, convection, and radiation. **Prerequisite(s):** ME 205 and ME 211.

325 Intermediate

Thermodynamics In-depth study of thermodynamic principles, thermodynamics of state, vapor and gas power cycles, refrigeration cycles, thermodynamics of nonreacting and reacting mixtures, internal combustion engines, and thermodynamics of equilibrium.

Prerequisite(s): ME 205 and credit or concurrent registration in ME 211.

ME 341 3 hrs. **Experimental Methods in**

Mechanical Engineering Introduction to the theory and practice of experimental methods, measurement techniques, instrumentation, data acquisition and data analysis in mechanical and thermal-fluid systems. Experiments and reports. Prerequisite(s): CME 203 and ME 211; and credit or concurrent registration in ME 308.

ME 370 3 hrs. **Design of Machine** Components

Applications of mathematics, materials science and strength of materials to machine component design; includes fasteners, springs, gears, bearings, chains, clutches and shafts. **Prerequisite(s):** CME 203 and ME 320.

ME 380 3 hrs. **Manufacturing Process Principles**

Introduction to basic manufacturing processes such as casting, bulk deformation, sheet metal forming, metal cutting. Interaction between materials, design and manufacturing method. Economics of manufacturing. Same as IE 380. Prerequisite(s): CME 203.

ME 392 1-3 hrs. **Undergraduate Research**

Research under close supervision of a faculty member. May be repeated to a maximum of 6 hrs. Prerequisite(s): Consent of the head of the department.

ME 396 4 hrs. Senior Design I

Systematic approach to the design process. Creative problem solving. Design methodology and engineering principles applied to open-ended design problems with inherent breadth and innovation. Same as IE 396. **Prerequisite(s):** Senior standing;

completion of all core courses and consent of the instructor.

ME 401 3 OR 4 hrs. **Applied Stress Analysis I**

Complex bending and torsion, curved flexural members, energy methods in design, theories of failure. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): CME 203.

ME 408 3 OR 4 hrs. **Intermediate Vibration** Theory

Free and forced vibrations of multi-degree of freedom linear systems. Lagrangian dynamics, matrix, approximate and numeri-cal methods. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 308.

ME 409 3 OR 4 hrs. Advanced Kinematics I

Kinematic synthesis of planar linkages. Higher-order, precision point and approximate synthesis. Unified treatment of position, function, and path-angle prob-lems. Consideration of branching and rotatability. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 320.

ME 410 3 OR 4 hrs. Automation and Robotics

Applications Basic pneumatic and hydraulic systems. Design of sequential control circuits and ladder diagrams. Robot kinematics and dynamics. Robot design. Trajectory planning. Applications and demonstrations. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** ME 210.

ME 0-4 hrs. 411 Mechatronics I

Elements of mechatronic systems, sensors, actuators, microcontrollers, modeling, hardware in the loop simulations, real-time software, electromechanical systems laboratory experiments. **Same as** IE 411. 3 undergraduate hrs. 4 graduate hrs. Extensive computer use required. **Prerequisite(s):** Senior standing or above; or approval of the department.

3 OR 4 hrs. 412

Dynamic Systems Analysis I Classical control theory, concept of feedback, laplace transform, transfer functions, control system characteristics, root locus, frequency response, compensator design. Same as IE 412. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 308.

ME 413 3 OR 4 hrs. Dynamics of Mechanical Systems

Degrees of freedom, generalized coordinates, principle of virtual work. D'Alembert's Principle, Lagrange's Equation, Hamilton's Principle. Equations of motion and Newton-Euler equations for rigid bodies. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 320.

ME 414 3 OR Theory of Gearing and 3 OR 4 hrs. Applications

Classification of gear drives. Geometry of plane and spatial gears. Analysis and synthesis of gears with approximate meshing. Applications to spur, helical, worm and bevel gear drives. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 320.

3 OR 4 hrs. 415 Propulsion Theory

Thermodynamics and fluid mechanics of air-breathing engines, performance of rockets; chemical and nuclear rockets. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 419 or the equivalent.

ME

417 3 OR 4 hrs. MF **Intermediate Fluid** Mechanics

Development of conservation equations for Newtonian-fluids; continuity, Navier-Stokes and energy equations. Some exact and approximate solutions of highly viscous, viscous and inviscid flows. Boundary layer flows, jets and wakes. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 321.

MF **Compressible Flow Theory** Conservation laws, one-dimensional flows. Normal and oblique shock waves, Prandtl-Meyer expansion, flow over airfoils. Applications to nozzles, shock-

friction and heat addition or loss. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** ME 321. ME 421 3 OR 4 hrs.

tubes, wind-tunnels. Flow with

Intermediate Heat Transfer Topics in conduction, convection and radiation with emphasis on exact solutions: extended surfaces, internal and external flows, surface radiation, combined modes of heat transfer and selected topics. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 321 or consent of the instructor.

MF 422 3 OR 4 hrs. Heating, Ventilation, and Air Conditioning

Refrigeration systems and heatpump, mass transfer in humidification, solar heat transfer in buildings, heating and cooling loads, air-conditioning computer project. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** ME 321.

423 3 OR 4 hrs. MF Heat Exchangers

Classification: heat transfer and pressure drop analysis, flow distribution, transient performance, surface selection and geometrical properties, codes and standards. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 211 and ME 321.

424 3 OR 4 hrs. MF Energy Management Solutions for Industry: Theory and Practice

Emphasis on real-world applications including: understanding utility billing and identifying costs; identifying and quantifying energy savings opportunities at industrial facilities; determining investment payback scenarios and considerations. 3 undergraduate hrs. 4 graduate hrs. Extensive computer use required. Fieldwork required. Extensive use of Microsoft Excel. Prerequisite(s): Junior standing or above.

ME 425 3 OR 4 hrs. Second Law Analysis in Energy Engineering

Fundamentals: lost available work. Entropy generation minimization, optimal thermal design of: heat transfer augmentation devices, thermal energy storage, cryogenics, heat exchangers, thermal insulations, solar collectors. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 321.

426 3 OR 4 hrs. **Applied Combustion**

Topics in combustion, providing both a theoretical and applied understanding of combustion processes as they relate to furnaces. Internal and external combustion engines; pollutant formation. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 325.

ME 427 3 OR 4 hrs. Solar Engineering

Applications; solar geometry and intensities; applied heat transfer topics; flat plate and concentrating collectors; energy storage; analysis of heating and cooling systems. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 321 or consent of the instructor.

428 3 OR 4 hrs. Numerical Methods in **Mechanical Engineering**

Introduction to numerical solution methods for problems in mechanical engineering. Example problems include heat transfer, fluid mechanics, thermodynamics, mechanical vibrations, dynamics, stress analysis, and other related problems. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): CS 108 and senior standing.

ME 429 3 OR 4 hrs. Internal Combustion Engines

Introduction to engine types, characteristics and performance. Combustion processes in spark and compression ignition engines; combustion abnormalities. Analysis of intake, exhaust and fuel system. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 325.

ME 433 3 OR 4 hrs. Nonequilibrium Thermal Processes

Molecular engineering. Nonequilibrium statistical mechanics. Distribution functions. Molecular excitation and deexcitation. Ionization and dissociation. Laser engineering. Nonequilibrium chemical kinetics. Surface processes. Chemisorption and physosorption. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): ME 325 or consent of the instructor.

ME 441 Optical Methods in 0-4 hrs. Mechanical Engineering

Optical measurement techniques in solid mechanics and thermalfluid engineering. Fundamentals of optics. Use of holography, interferometry, LDV, lasers, light scattering, diffraction, and other relevant techniques. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Senior standing or consent of the instructor.

ME 444 3 OR 4 Interdisciplinary Product 3 OR 4 hrs. Development I

Cross-functional teams (w/students from AD 420/423 and MKTG 594) research and develop new product concepts. Focus on the identification of technologically appropriate prod-uct design problems. **Same as** IE 444. 3 undergraduate hrs. 4 graduate hrs. Year-long (with IE/ ME 445) project course. Prerequisite(s): Senior standing or above; and consent of the instructor.

UIC

419 3 OR 4 hrs.

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ME 445 4 hrs. Interdisciplinary Product Development 2

Cross-functional teams (w/students from AD 420 and MKTG 594) research and develop new product concepts. Focus on solutions to the opportunities identified in IE/ME 444 to functional prototypes. Serves as a replacement for IE/ME 396. **Same as** IE 445. Year-long (with IE/ME 444) project course. **Prerequisite(s):** IE 444 or ME

Prerequisite(s): IE 444 or ME 444; and senior standing or above; and consent of the instructor.

ME 447 0–4 hrs. Introduction to Computer-Aided Design

Conventional and computerassisted methods in design. Geometry manipulation. Computer-aided modeling with curves, surfaces, and solids. Design with finite-element analysis. PRO/Engineer and PRO/ Mechanica. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** MATH 220 and ME 250.

ME 449 0–5 hrs. Microdevices and

Micromachining Technology Microfabrication techniques for microsensors, microstructures, and microdevices. Selected examples of physical/chemical sensors and actuators. Simulation experiments. Laboratory. **Same as** ECE 449. 4 undergraduate hrs. 5 graduate hrs. Previously listed as EECS 449. **Prerequisite(s):** ECE 347.

ME 450 4 hrs. Air Pollution Engineering

Environmental aspects of combustion processes, pollutant formation. Control of pollutants and particulates. Air quality control. Fundamentals of combustion. **Same as** CHE 450. **Prerequisite(s):** ME 321 or consent of the instructor.

ME 464 0–4 hrs. Virtual Automation

Fundamentals of manufacturing and automation modeling using CAD/CAM and computer-integrated manufacturing methods; concepts of virtual manufacturing; industrial robots and automated factory models within virtual environments. **Same as** IE 464. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** CS 107 or CS 108.

ME 468 3 OR 4 hrs. Virtual Manufacturing

Virtual reality applications in manufacturing systems design, manufacturing applications of networked virtual reality, virtual reality modeling of occupational safety engineering. **Same as** IE 468. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** CS 107 or CS 108.

ME 494 3 OR 4 hrs. Special Topics in Mechanical Engineering

Particular topics vary from term to term depending on the interests of the students and the specialties of the instructor. 3 undergraduate hrs. 4 graduate hrs. May be repeated. **Prerequisite(s):** Consent of the instructor.

ME 499 0 hrs. Professional Development Seminar

Students are provided general information about their role as UIC Mechanical Engineering alumni in society and the role of the University in their future careers. Students provide evaluations of their educational experience in the MIE department. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Open only to seniors; and approval of the department .Must be taken in the student's last semester of study.

Medicinal Chemistry and Pharmacognosy

PMMP 365 2 hrs. Contemporary

Pharmacognosy Importance of plants in American Healthcare and as a potential source of new drugs. **Prerequisite(s):** Enrollment in the Doctor of Pharmacy program.

PMMP 380 1–3 hrs. Undergraduate Research in Medicinal Chemistry and Pharmacognosy

Investigation, under the direction of one or more faculty members, of a problem of limited scope. May require literature research related to the research project. May be repeated. A maximum of 6 hours of credit is allowed per department. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives. Prerequisite(s): Minimum cumulative grade point average of 2.50 and consent of the instructor, department head, and Associate dean for student affairs.

PMMP 381 1 hour. Professional Development Seminar I

Weekly seminar series for second professional year pharmacy students. Discusses educational issues related to the second professional year. Students create/ update Curriculum Vitae; explore various pharmacy career opportunities. Credit is not given for PMMP 381 if the student has credit for BPS 381 or PMAD 381 or PMAP 371.

Prerequisite(s): Student must be listed as an advisee of the instructor.

PMMP 382 1 hour. Professional Development Seminar II

Weekly seminar series for second year pharmacy students. Discusses educational issues related to the second professional year. Students create/update Curriculum Vitae; explore pharmacy career opportunities through exposure to distinguished guests. Credit is not given for PMMP 382 if the student has credit for BPS 382 or PMAD 382. **Prerequisite(s)**: Student must be listed as an advisee of the instructor.

PMMP 383 1 hour. Professional Development Seminar III

Weekly seminar series for third professional year pharmacy students. Discusses relevant educational and professional issues. Update CV/Resume and Portfolio. Explore pharmacy career opportunities with invited guests. Credit is not given for PMMP 383 if the student has credit for BPS 383 or PMAD 383. **Prerequisite(s):** Student must be listed as an advisee of the instructor.

PMMP 384 1 hour. Professional Development Seminar IV

Weekly seminar series for Thirdyear pharmacy students. Discusses with advisees relevant educational and professional issues. Update Curriculum Vitae or Resume and Portfolio. Explore pharmacy career opportunities with invited guests. Credit is not given for PMMP 384 if the student has credit for BPS 384 or PMAD 384. **Prerequisite(s):** Student must be listed as an advisee of the instructor.

PMMP 385 1–3 hrs. Special Topics in Medicinal Chemistry and Pharmacognosy

Course offered by faculty or a visiting lecturer on a selected topic of current interest. Available on an experimental basis for one offering only. **Prerequisite(s):** Good academic standing and consent of the instructor.

PMMP 390 1–2 hrs. Special Projects in Medicinal Chemistry and Pharmacognosy

Special projects within the departmental discipline. Defined and terminal project goals are achieved through independent study. May be repeated. A maximum of 4 hours of 390 credit is allowed in all departments. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives.

Prerequisite(s): Consent of the instructor, department head, and Associate dean for student affairs.

PMMP 395 1 hour. Biophysical Chemistry of Water

The properties of water, its fundamental structure, behavior as a solvent, and importance in biological systems. **Prerequisite(s):** PHYB 301; or consent of the instructor and good academic standing.

PMMP 412

Pharmaceutical Applications of Genomics and Bioinformatics

2 hrs.

Introduction to genomics and bioinformatics for advanced pharmacy students. Principles of gene expression, DNA sequencing in bacterial and human genomes, with emphasis on diagnostic and therapeutic applications. **Same as** MDCH 412. **Prerequisite(s):** PHAR 331 or consent of the instructor. For graduate students: one or two semesters of basic molecular biology and/or biochemistry with a grade of B or better.

PMMP 460 3 hrs. Organic Medicinal Chemistry I

Organic reactions in terms of their mechanisms and utility in the field of medicinal chemistry, particularly in the synthesis of medicinal agents. Upper division elective taught simultaneously with MDCH 560, however, does not meet the prerequisite requirement of the medicinal chemistry graduate program. **Prerequisite(s):** One year of

Prerequisite(s): One year of organic chemistry with laboratory.

Microbiology and Immunology

MIM 326 3 hrs. Introduction to Medical Microbiology

Introduction to the fundamental aspects of bacterial, fungal, and viral pathogenesis, therapy, control and prevention of infectious diseases. This is one of the recommended courses for pre-nursing at UIC. **Prerequisite(s)**: BIOS 100 and CHEM 112 or the equivalent.

MIM 425 3 hrs. Fundamentals of Immunology and Microbiology

Mechanisms of host defense; antigens, immunoglobulins and their reactions; antibody synthesis, regulation and the cellular immune response; bacterial and viral structure and function; mechanisms of pathogenesis. **Prerequisite(s):** Consent of the instructor or registration in the College of Medicine.

MIM 426 3 hrs. Microorganisms as Agents of

Human Disease Fundamental aspects of bacterial, fungal and viral pathogenesis, therapy, control and prevention of infectious diseases. **Prerequisite(s):** Consent of the instructor.

Military Science

MILS 101 1 hour. U.S. Defense Establishment

Authority relationships and structural aspects of the defense establishment; role of the U.S. Army as an instrument of national power. A practical laboratory is required.

MILS 102 1 hour. Customs and Traditions of the Military

Fundamentals, principles, and traits of leadership; discussion and practical application of communication and counseling techniques. A practical laboratory is required.

MILS 111 1 hour. Introduction to the Military Physical Fitness Training Program

Intended as an introduction to Army physical fitness. The students will gradually improve their level of physical fitness over the course of a semester. May be repeated to a maximum of 2 hrs.

MILS 121 1 hour.

Intermediate Military Physical Fitness Training Program

Intended as a continuation of MILS 111. May be repeated to a maximum of 2 hrs.

MILS 131 1 hour. Design and Implementation of a Military Physical Fitness

Training Program Intended for juniors participating in ROTC. Students are responsible for designing and implementing a military physical fitness training program. May be repeated to a maximum of 2 hrs. Requires concurrent registration in MILS 301 or MILS 302.

MILS 141 1 hour. Evaluation of a Military Physical Fitness Training Program

Intended for seniors participating in ROTC. Students are responsible for evaluating the effectiveness of a military physical fitness training program. May be repeated to a maximum of 2 hrs. Requires concurrent registration in MILS 311 or MILS 312.

MILS 199 1–3 hrs. Military Topics

Research and study of selected topics. A practical laboratory is required. May be repeated to a maximum of 4 hours if topics vary. Students may register in more than one section per term. **Prerequisite(s):** Approval of the department.

MILS 201 2 hrs. Fundamentals of Leadership, Organization, and Planning

Techniques in conducting military briefings, writing in Army style, and issuing oral orders. Review "Code of Conduct" and ethical obligations. A practical laboratory is required.

MILS 202 2 hrs. Leadership Dynamics

Role of intermediate supervisors in military operations; introduction to professional ethics and characteristics of the Army officer corps. A practical laboratory is required.

MILS 217 3 hrs. Introduction to United States

Military History Analytical study of American military history, doctrine, strategy, and tactics from their origin through the present. Emphasis on leadership, strategy, the principles of war, and growth of the military in the US. Same as HIST 217. Previously listed as MILS 107.

MILS 301 3 hrs. Military Operations and Tactics

Introduction to the principles of war; practical exercises in small unit leadership, combined arms operations. A practical laboratory is required. **Prerequisite(s):** MILS 101 and MILS 102 and MILS 201 and MILS 202 and approval of the department.

MILS 302 3 hrs. Organizational Leaders

Study of group processes, motivation, communications, socialization, organizational effectiveness, and the impact of leader behavior. A practical laboratory is required. **Prerequisite(s):** MILS 101 and MILS 102 and MILS 201 and MILS 202 or the equivalent courses and approval of the department.

MILS 311 Military Law

Nature, structure, powers, and procedures of the Uniform Code of Military Justice. A practical laboratory is required. **Prerequisite(s):** MILS 301 and MILS 302 and approval of the department.

3 hrs.

MILS 312 3 hrs. Training and Resource Management

Nature of command and staff relationships; theory and application of U.S. Army training management doctrine. A practical laboratory is required. **Prerequisite(s):** MILS 301 and MILS 302 and approval of the department.

MILS 394 1–3 hrs.

Advanced Military Topics Study of advanced topics in military science. A practical laboratory is required. May be repeated if topics vary. Students may register in more than one section per term. **Prerequisite(s):** Approval

MILS 399 1–3 hrs. Advanced Independent Research

of the department.

Intensive research and study of selected topics. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. A practical laboratory may be required. **Prerequisite(s):** Approval of the department.

Modern Greek

GKM 101 4 hrs. Elementary Modern Greek I

Fundamentals of standard modern Greek at the beginning level, including pronunciation, grammar, reading, conversation, and composition.

GKM 102 4 hrs. Elementary Modern Greek II

Continues study of standard modern Greek grammar, reading, conversation, and composition. **Prerequisite(s):** GKM 101.

GKM 103 4 hrs. Intermediate Modern Greek I

Introduces complex grammatical constructions. Improves speaking and writing ability. Develops oral composition of standard modern Greek. Greek used for conversation, English for explanation. **Prerequisite(s):** GKM 102 or the equivalent.

GKM 104 4 hrs. Intermediate Modern Greek II

Further develops writing, speaking, and comprehension. Focuses on idiomatic expressions. Lectures often conducted in Modern Greek. **Preequisite(s)**: GKM 103 or the equivalent.

GKM 105 3 hrs. Modern Greek Culture

Introduction to a variety of aspects of modern Greek culture, including basic information about the country. Readings consist partly of secondary literature (i.e., non-literary texts) and partly of relevant examples of Modern Greek literature. Taught in English. World Cultures course.

GKM 201 3 hrs. Introduction to Katharevousa

An introduction to Katharevousa the official language of modern Greece until 1976.

Prerequisite(s): GKM 101 and 102 and 103 and 104; or demonstrated fluency in spoken Modern Greek.

GKM 203 3 hrs. Modern Greek Authors in Translation

Basic introduction to the literary output of Modern Greece, looking at its historical and literary background, sampling some of the main poets and novelists (particularly of the 19th and 20th centuries), also with a look at Greek-American writing. Taught in English. **Prerequisite(s):** Sophomore

standing or above. World Cultures course.

GKM 209 3 hrs. The Byzantine Empire

The East Roman Empire from its creation by Diocletian and Constantine to its conquest by the Ottoman Turks. **Same as** HIST 209.

GKM 285 3 hrs.

Cultural History of Modern Greece: 1453 to the Present Survey of the cultural history of modern Greece, from the end of the Byzantine Empire in 1453 to the end of the present. Taught in English. **Same as** HIST 285. *Past course.*

GKM 286 3 hrs. Modern Greek Cities: Historical-Ethnographic Survey

This course is designed as an historical and ethnographic survey of the communities and culture of Modern Greek urban centers, from the early modern period to the present. Taught in English. Same as HIST 286. Past course.

GKM 298 3 hrs. Topics in Modern Greek Studies

Selected topics at an intermediate level in Modern Greek Studies. May be repeated. Students may register for more than one section per term. Taught in English. **Prerequisite(s):** Consent of the instructor. **Recommended back**ground: GKM 105.

GKM 299 1–4 hrs. Independent Study

An individual study under faculty direction in which a student can examine various aspects of Modern Greek culture and language through readings and papers. May be repeated. Students may register for more than one section per term. **Prerequisite(s):** Consent of the instructor. **Recommended background:** GKM 105.

Moving Image Arts

MOVI 102 3 hrs. Introduction to Film

Representative selections from a variety of periods and forms. Development of analytical skills in the reading of film. **Same as** ENGL 102. *Creative Arts course.*

MOVI 200 3 hrs. Communication Technologies

History, development, and social impact of communication technology: print, broadcast, cable, satellite, computer, Internet. Issues related to infrastructure, regulation, access, globalization, conveyance, and change. Same as COMM 200. Prerequisite(s): COMM 103 and sophomore standing or above and approval of the department. Course Information: Registration restrictions: For Moving Image Arts minors must obtain approval of the Department of Communication.

MOVI 232 3 hrs. History of Film I: 1890 to World War II

History of film from its beginnings in the 1890s up to World War II. **Same as** AH 232 and ENGL 232.

MOVI 233 3 hrs. History of Film II: World War II to the Present

II to the Present History of film from World War II to contemporary movements in world cinema. Same as AH 233 and ENGL 233. MILITARY SCIENCE
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MOVI 234 3 hrs.

History of Television A critical history of television. Same as COMM 234 and ENGL 234. One additional hour each week for required screenings.

MOVI 302 3 hrs.

Studies in the Moving Image Study of a topic or movement in film and/or other media forms. Same as ENGL 302. May be repeated to a maximum of 6 hrs. Prerequisite(s): ENGL 102 or consent of instructor.

MOVI 431 3 OR 4 hrs. The History and Politics of Africa on Film

Key moments and issues in African history through the eyes of African film and documentary makers. Same as AAST 431. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Junior standing or above.

Music

MUS 100 3 hrs.

Introduction to Music I Listening, understanding, and enjoying music. May not be taken for credit by music majors or minors. Creative Arts course.

MUS 101 3 hrs. Music Theory I

Notation of rhythm and pitch; scales, intervals, triads, and seventh chords; principles of voice leading and harmonic progression. Must enroll concurrently in MUS 103 and MUS 170.

3 hrs.

MUS 102 Music Theory II

Nonchord tones; cadences, phrases, and periods; introduction to Schenkerian analysis; inversions of triads and seventh chords. Prerequisite(s): MUS 101. Must enroll concurrently in MUS 104 and MUS 171.

MUS 103 1 hour. Ear Training I

The development of aural perception and sight-singing ability; material is correlated with MUS 101. Must enroll concurrently in MUS 101, and MUS 170.

MUS 104 1 hour. Ear Training II

The development of aural perception and sight-singing ability; material is correlated with MUS 102. Prerequisite(s): MUS 103 or the equivalent; and concurrent registration in MUS 102 and MUS 171.

MUS 107 3 hrs. **Fundamentals of Music** Theory

Notation, metrical organization and rhythmic structure, scales and key signatures, intervals, triads, ear training, and sight singing. For the general student. May not be taken for credit by music majors or minors. Creative Arts course.

MUS 110 0 hrs. Convocation/Recital

A weekly convocation presenting concerts by faculty, visiting artists, or students. Satisfactory/ Unsatisfactory grading only.

MUS 111 0 hrs.

Master Class in Performance Three to six master classes are offered per semester. Students must attend at least half of those offered; students must perform in one class each year. Satisfactory/ Unsatisfactory grading only. Prerequisite(s): Enrollment in the Music Performance option. Recommended background: Three years of private lessons.

MUS 113 3 hrs. Art Sona

A broad historical survey of the secular art song from the Middle Ages to the present, with greatest emphasis placed on the German, French, Italian, and English song repertory of the 18th and 19th centuries. Creative Arts course.

MUS 114 3 hrs. Jazz History

A nontechnical survey of the history and development of jazz from its West African roots to contemporary styles. Creative Arts, and Past course.

MUS 115 3 hrs. Opera

Historical survey tracing the growth and development of opera from its beginnings to the present. Creative Arts course.

MUS 117 3 hrs. Music for Symphony Orchestra

Music for symphony orchestra from Haydn to Bartok: symphony, overture and tone poem. Creative Arts course.

MUS 119 3 hrs. Music for the Piano A survey of three centuries of keyboard music, from the

Baroque to the present. Creative Arts course.

MUS 120 3 hrs. Jazz Improvisation I

A study of the techniques and methods of jazz improvisation. Nonmusic majors must pass theory/ear-training pre-test. Prerequisite(s): Grade of B or better or concurrent registration in MUS 101 and Grade of B or better or concurrent registration in MUS 103. Requires concurrent registration in MUS 153, MUS 159 or MUS 160.

MUS 127 3 hrs. Latin American Music

Survey class that introduces students to the rich repertoire of music in Latin America. It explores the history of genres, their development, instruments and representative artists in their geographical, social, and cultural contexts. Same as LALS 127. Creative Arts, and World Cultures course.

MUS 150 1 hour. **Vocal Jazz Ensemble**

Study/performance of jazz ensemble techniques and the performance of standard vocal jazz repertoire. May be repeated to a maximum of 8 hrs.

Prerequisite(s): Basic music reading skills and an audition required. Recommended background: Previous choir experience.

MUS 151 1 hour. **Concert Band**

Introduction to varied band and wind ensemble literature. Regular band and wind ensemble literature. Regular performances during the school year. May be repeated to a maximum of 8 hrs. Occasional field trips. Prerequisite(s): Audition and/or consent of the instructor.

MUS 152 1 hour. Instrumental Ensembles

Performance of chamber ensemble literature of varied types. May be repeated to a maximum of 8 hrs. Students may register in more than one section per term. Occasional concerts on and off campus. Prerequisite(s): Audition and consent of the instructor.

MUS 153 1 hour. **University Choir**

Student performance of choral literature of all musical periods. May be repeated to a maximum of 8 hrs. Occasional concerts offcampus. Prerequisite(s): Audition required.

MUS 154 1 hour. **Chamber Choir**

Study/performance of choral literature for 16 to 24 voices. May be repeated to a maximum of 8 hrs. Occasional concerts off-campus. Prerequisite(s): Audition required.

MUS 155 1 hour. Women's Choral Ensemble Study/performance of choral literature of all musical periods. May be repeated to a maximum of 8 hrs. Occasional concerts offcampus. Prerequisite(s): Basic music-reading skills and an audition required.

MUS 156 Pep Band

Performs at home basketball and hockey games. May be repeated to a maximum of 8 hrs. Prerequisite(s): Consent of instructor. Must enroll concurrently in MUS 151.

1 hour.

MUS 157 1 hour. String Ensemble

Introduction to string ensemble literature. Regular performances on campus; occasional field trip concert. Open to orchestral string players and harp. May be repeated to a maximum of 8 hrs. Field trip required at a nominal fee. Prerequisite(s): Audition and/or consent of the instructor. **Recommended background:** Three years of private lessons and/or high school orchestra experience.

MUS 159

Jazz Ensemble Practical experience in the preparation and public performance of big band and small ensemble jazz. May be repeated to a maxi-mum of 8 hrs. Field trips may be required. Prerequisite(s): Audition or consent of the instructor.

1 hour.

MUS 160 1 hour. **Small Jazz Ensemble**

Various instrumental ensembles focusing on performance techniques within the historical development of the American jazz ensemble. Performances at various events across the UIC campus and the greater Chicago community. May be repeated to a maximum of 8 hrs.

Prerequisite(s): Audition or consent of the instructor.

Recommended background: Minimum three years private instruction on student's preferred instrument.

MUS 170 2 hrs.

Keyboard Skills I Development of basic keyboard skills including sight reading, transposition, improvisation, and ensemble playing. Prerequisite(s): Concurrent registration in MUS 101 and 103, or approval of the department.

MUS 171 2 hrs.

Keyboard Skills II Continues MUS 170. Prerequisite(s): Grade of C or better in MUS 170; Concurrent registration in MUS 102 and MUS 104.

MUS 180 2 hrs. **Private Instrumental Lessons** Applied music instruction in woodwinds, brass, percussion, piano, guitar, or organ. May be repeated to a maximum of 16

hrs. Prerequisite(s): Audition prior to initial registration and approval of the department.

MUS 182 2 hrs.

Private Voice Lessons Applied music instruction in voice. May be repeated to a maximum of 16 hrs. Prerequisite(s): Approval of the department and admission to the music major and successful completion of an audition. Recommended background: Previous music and vocal study.

1 hour.

Class Voice Group instruction in singing. May be repeated to a maximum of 8 hrs. Prerequisite(s): Consent of the instructor and concurrent registration in MUS 153 or MUS 155. May not be taken concurrently with MUS 180.

MUS 190

MUS 201 3 hrs. Theory of Music III

Continues MUS 102. Chromatic harmony of the eighteenth and nineteenth centuries. Study of two- and three-part forms. Prerequisite(s): Grade of C or better in MUS 102 and grade of C or better in MUS 104 or the equivalents.

Recommended background:

Previous performance in jazz big band or small ensemble.

Continues MUS 201. Harmony in the late nineteenth century; introduction to twentieth-century practices. **Prerequisite(s)**: Grade of C or better in MUS 201 and grade of C or better in MUS 203, or the equivalents.

MUS 203 1 hour. Ear Training III

Aural perception and sight singing. **Prerequisite(s):** Grade of C or better in MUS 104 or the equivalent; and concurrent registration in MUS 201.

MUS 204 1 hour.

Ear Training IV Advanced aural perception and sight singing. Prerequisite(s): Grade of C or better in MUS 203. Must enroll concurrently in MUS 202.

3 hrs.

MUS 220 Jazz Aesthetics

A technical study of the factors and topics that permeate and surround the study, development, and production of jazz. **Prerequisite(s):** Sophomore standing or above; Grade of B or better in MUS 102 and Grade of B or better in MUS 104 and Grade of B or better in MUS 114. Requires concurrent registration in MUS 150, MUS 159 or MUS 160. **Recommended background:** Jazz ensemble performance, or individual jazz interest.

MUS 221 3 hrs. Jazz Improvisation II

Continues the study of the technique and methods of jazz improvisation. **Prerequisite(s):** Grade of B of better in MUS 102 and grade of B or better in MUS 104 and grade of B or better in MUS 171; and grade of C or better in MUS 120; and sophomore standing or above; or approval of the department.

MUS 222 1 hour. Musical Notation and Copying

A study of the art of music notation and score preparation using Finale software. **Prerequisite(s):** Grade of C or better in MUS 201 and sophomore standing or above; or consent of the instructor.

MUS 227 3 hrs. Music Cultures of the World

Examination of music throughout the world from an ethnomusicological perspective. Emphasis on classical, tribal, and folk musics; music as a cultural phenomenon. Creative Arts, and World Cultures course.

MUS 230 3 hrs.

Music History I Principal styles and composers from the Middle Ages through the Renaissance. **Prerequisite(s):** Grade of C or better in MUS 102 and grade of C or better in MUS 104 or the equivalents. Music Majors may have only one grade of D among MUS 230,

MUS 231, and MUS 232. MUS 231 3 hrs.

Music History II Principal styles and composers from the baroque period through the classical period. **Prerequisite(s):** MUS 230; and a grade of C or better in MUS 202 and MUS 204, or the equivalents. Music Majors may have only one grade of D among MUS 230, MUS 231, and MUS 232.

MUS 232 3 hrs. Music History III

Composers and the development of musical styles of the nineteenth and twentieth centuries, with emphasis on innovations of the latter half of the twentieth century. **Prerequisite(s):** Grade of C or better in MUS 202 and grade of C or better in MUS 204 or the equivalents; and MUS 231. Music Majors may have only one grade of D among MUS 230, MUS 231, and MUS 232. **MUS 270 2 hrs.**

Keyboard Skills III Continues MUS 171.

Prerequisite(s): Grade of C or better in MUS 171 and concurrent registration in MUS 201 and MUS 203 or approval of the department.

MUS 271 2 hrs. Keyboard Skills IV

Advanced keyboard skills, including keyboard harmony, improvisation, accompanying, and score reading. **Prerequisite(s):** Grade of C or better in MUS 270 and concurrent registration in MUS 202 and MUS 204 or approval of the department.

MUS 280 3 hrs. Advanced Private Instrumental Lessons

Private instruction at an

advanced level in woodwinds, brass, percussion, or piano, culminating in a jury exam. May be repeated to a maximum of 12 hrs. **Prerequisite(s):** Four semesters of MUS 180 and approval of the department. Students must receive a grade of B or better in order to repeat this course.

MUS 282 3 hrs. Advanced Private Voice Lessons

Advanced applied music instruction in voice. May be repeated to a maximum of 12 hrs. **Prerequisite(s)**: Approval of the department and admission to the music major and successful completion of four terms of MUS 182. Students must receive a grade of B or better in order to repeat this course. **Recommended background:** Performance experience beyond regular UIC studies.

MUS 298 3 hrs. Selected Topics in Music

Study in specialized areas of music history, music theory, jazz, and ethnomusicology. May be repeated to a maximum of 12 hrs. **Prerequisite(s):** Consent of the instructor.

MUS 299 1–4 hrs. Independent Study

Projects and topics for individual investigation. Course number may be used for student-initiated courses. May be repeated to a maximum of 16 hrs. Students may register in more than one section per term. **Prerequisite(s)**: MUS 202 and MUS 204 and approval of the department.

MUS 300 3 hrs. Counterpoint

Written exercises and study of contrapuntal techniques in a variety of styles. **Prerequisite(s):** Grade of C or better in MUS 202 and grade of C or better MUS 204; or approval of the department. Music major may have only one grade of D in 300level course work.

MUS 301 3 hrs. Analytic Techniques

Analysis of representative works in a variety of genres from the seventeenth through the twentieth centuries. **Prerequisite(s)**: Grade of C or better in MUS 300. Music majors may have only one grade of D in 300-level course work.

MUS 302 3 hrs. Composition I

Class and individual instruction in the basic techniques of twentieth-century composition. Practice in the use of twentieth-century musical materials.

Prerequisite(s): Grade of C or better in MUS 202 and grade of C or better in MUS 204 or approval of the department. Music majors may have only one grade of D in 300-level course work.

MUS 303 3 hrs. Composition II

Continues instruction in the techniques and materials of twentieth-century composition. **Prerequisite(s):** Grade of C or better in MUS 302. Music majors may have only one grade of D in 300-level course work.

3 hrs.

MUS 304 Conducting

Basic techniques; body position; beat patterns; use of baton; division of beats; starting and stopping; the left hand; dynamics; fermatas; ensemble application; score preparation; memorization. **Prerequisite(s):** Grade of C or better in MUS 202 and grade of C or better in MUS 204 or approval of the department. Music majors may have only one grade of D in 300-level course work.

MUS 306 Orchestration and Arranging I

3 hrs.

The acoustical properties, musical characteristics, and scoring problems of string, woodwind, and brass instruments. Scoring for string, woodwind, and brass ensembles. **Prerequisite(s):** Grade of C or better MUS 202 and grade of C or better in MUS 204 or approval of the department. Music majors may have only one grade of D in 300-level course work.

MUS 307 3 hrs. Orchestration and Arranging II

The acoustical properties, musical characteristics, and scoring problems of percussion, keyboard, and electronic instruments. Scoring for mixed ensembles, band, orchestra, jazz, and commercial groups. **Prerequisite(s):** Grade of C or better in MUS 306. Music majors may have only one grade of D in 300-level course work.

MUS_310 3 hrs.

Jazz Theory and Keyboard I Introductory course designed to acquaint students with rhythmic, melodic, harmonic, and structural aspects of jazz. **Prerequisite(s):** Grade of C of better in MUS 202, and Grade of C or better in MUS 204, and Grade of B or better in MUS 271; and junior standing or above; or approval of the department. Majors may have only one D in 300-level courses.

MUS 311 3 hrs. Jazz Theory and Keyboard II Advanced course to continue exploration of rhythmic, melodic, harmonic, and structural aspects of jazz. **Prerequisite(s):** Grade of C or better in MUS 310. Majors may have only one D in 300level courses.

MUS 312 3 hrs. Jazz Arranging I

Concentration on developing compositional and orchestration/ arranging skills in various jazz and commercial styles. **Prerequisite(s):** Grade of C or better in MUS 306; and junior standing or above; or approval of the department. Majors may have

only one D in 300-level courses. MUS 313 3 hrs.

Jazz Arranging II

Advanced course for developing compositional and orchestration/ arranging skills in various jazz and commercial styles. **Prerequisite(s):** Grade of C or better in MUS 312; or approval of the department. Majors may have only one D in 300-level courses.

MUS 320 1–3 hrs. Music Proseminar

Selected topics for intensive study in specialized areas of music history or music theory. May be repeated to a maximum of 6 hrs. **Prerequisite(s):** Senior standing with major in music and consent of the instructor.

• MUSIC



MUS 391 0-16 hrs.

Study Abroad in Music Study abroad within an approved foreign exchange program or department-sponsored program. May be repeated with approval. Approval to repeat course granted by the department. Prerequisite(s): Approval of the department.

MUS 490 1-4 hrs. **Music Education: Special** Topics

An investigation of various topics in music education pertinent to practicing music teachers. May be repeated. Prerequisite(s): Senior standing or above.

Native American Studies

NAST 112 3 hrs. Introduction to Native American Literatures

An introduction to the oral and written literatures of American Indians. Same as ENGL 112. Creative Arts, and U.S. Society course.

NAST 113 3 hrs. Native American Studies: Sovereignty

Overview of native and nonnative perspectives of American Indian sovereignty in historical context. Primary focus on spiritual, political, ethnic, and legislative aspects of sovereignty. Past, U.S. Society, and World Cultures course.

NAST 115 3 hrs. Introduction to North American Indian History

The history of North American Indians from before contact with Europeans through the late twentieth century. The interactions between Europeans and American Indians in ways that foreground the experiences and perspectives of indigenous peoples. Same as HIST 115. Past, U.S. Society, and World Cultures course.

NAST 260 3 hrs. American Indians in Popular **Culture: Native Americans in** Print, Film and Electronic Media

Considers the history of representations of American Indian people, in print, performance, film and electronic media, and over the course of the 19th and 20th centuries. Same as HIST 260. Prerequisite(s): Sophomore standing or above; and approval of the department.

Recommended background:

Grade of B or better or concurrent registration in HIST 115 or grade of B or better or concurrent registration in NAST 115. Creative Arts, and U.S. Society course.

NAST 271 3 hrs. Native American Art

Survey of the arts of the indigenous peoples of the United States and Canada. Same as AH 271. Prerequisite(s): 3 hours of art history at the 100-level or consent of the instructor. World Cultures course.

3 OR 4 hrs. **NAST 415** American Indian Ethnohistory

Introduction to ethnohistory, an interdisciplinary approach to researching, conceptualizing, and writing American Indian history. The course is organized topically and centers on classic and current monographs and articles. Same as HIST 415. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Junior standing or above and consent of the instructor.

Recommended background:

Courses in cultural anthropology, American Indian anthropology, American Indian literature.

NAST 471 3 OR 4 hrs. **Topics in Native American** Literatures

The history and development of literature by and about American Indians. Content varies. Same as ENGL 471. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time. Prerequisite(s): Senior standing or above and 6 hours of English, African American studies, or Latin American studies or consent of the instructor.

Natural Sciences

NATS 101 4 hrs. Physical World

A multidisciplinary course that relates biological and chemical systems to the physical sciences. The epistemology, history, and philosophy of science; exploring the phenomena of sound and light; the physical earth; earth's place in the universe. Prerequisite(s): High school

algebra and trigonometry. *Natural* World—With Lab course.

NATS 102 4 hrs. **Chemical World**

A multidisciplinary course that relates biological and physical systems to chemistry. The sociology of science; chemical composition and change; the chemistry of life; chemistry and society. Credit is not given for NATS 102 if the student has credit for CHEM 100. Prerequisite(s): High school algebra and trigo-nometry. Natural World—With Lab course.

NATS 103 Biological World

A multidisciplinary course that relates physical and chemical systems to biology. Systems and the movement of matter, energy, and information; cells and organisms; unity within diversity of life; genetics; evolution. Credit is not given for NATS 103 if the student has credit for BIOS 100. Prerequisite(s): High school algebra and trigonometry. Natural World—With Lab course.

NATS 104 1 hour. Project-Based Seminar in **Natural Science**

Students select and design a multidisciplinary investigation that results in the presentation and exhibition of the project. Prerequisite(s): Student must have passed at least two of the following: NATS 101, NATS 102, NATS 103 or the equivalent and must be concurrently registered in NATS 101 or NATS 102 or NATS 103.

Naval Science

NS 101 2 hrs. Introduction to Naval Science Introduction to sea power and the naval service. Includes an overview of officer and enlisted rank and rating structures, training, promotion and military courtesy. Prerequisite(s): Consent of the instructor.

200 3 hrs. NS **Naval Ships Systems**

The types, structure and purpose of naval ships. Includes nuclear, gas turbine, and steam propulsion systems, auxiliary systems, interior communications and damage control. Prerequisite(s): Consent of the instructor.

201 3 hrs. **Naval Weapons Systems** Introduction to the theory and

principles of naval weapons systems. Covers type of weapons, capabilities and limitations and theory of operation. Prerequisite(s): Consent of the

instructor.

NS 202 3 hrs. Sea Power and Maritime Affairs

Concept of sea power and its effect on history, naval strategies of past and present, the role of U.S. sea power from the Revolutionary War to the present. Prerequisite(s): Consent of the instructor.

NS 294 1-3 hrs. Topics in Naval Science

Study of topics in naval science. May be repeated if topics vary. Students may register in more than one section per term. **Prerequisite(s):** Approval of the department.

3 hrs.

NS 301 Navigation

Ship navigation. Covers areas of piloting, celestial and electronic means of shipboard navigation. Prerequisite(s): Consent of the instructor.

4 hrs. NS

302

3 hrs.

Naval Operations Ship operations and movement. Covers maneuvering, seamanship, communications, and command and control. Prerequisite(s): Consent of the instructor.

NS 310 3 hrs. **Evolution of Warfare**

Survey of all military history thereby providing a very basic understanding of the art and concepts of warfare from the beginning of recorded time to the present. **Prerequisite(s):** Consent of the instructor.

320 3 hrs. **Amphibious Warfare**

Historical survey of the evolution of amphibious warfare in the twentieth century. Prerequisite(s): Consent of the instructor.

NS 351 3 hrs. **Naval Leadership and Ethics**

Responsibilities of the junior naval officer and division officer. Professional responsibilities that the junior officer will have after commissioning will be covered. Prerequisite(s): Consent of the instructor.

360 0 hrs.

NS

Leadership Seminar Application of the study of organizational behavior and management to naval science. Case studies. Satisfactory/ Unsatisfactory grading only. Prerequisite(s): Concurrent registration in MGMT 340 and approval of the department.

NS 394 1-3 hrs. Advanced Topics in Naval Science

Study of advanced topics in naval science. May be repeated if topics vary. Students may register in more than one section per term. Prerequisite(s): Approval of the department.

NS 399 1-3 hrs. Independent Study in Naval Science

Independent study of an area within naval science under the direction of a faculty member. May be repeated. Students may register in more than one section per term. Prerequisite(s): Consent of the instructor and approval of the department.

Neuroscience

NEUS 483 4 hrs. Neuroanatomy

Organization of the nervous system, with an emphasis on mammals. Same as BIOS 483 and PSCH 483. Animals used in instruction. Prerequisite(s): BIOS 272 or BIOS 286 or BIOS 325 or PSCH 262; or consent of the instructor.

Nursing Sciences

NUSC 202 3 hrs. Concepts and Processes of Professional Nursing

Introduction to the history and framework of nursing practice. Emphasis on basic curricular concepts and processes of professional nursing. **Prerequisite(s):** Junior standing or above; or consent of the instructor.

NUSC 210 3 hrs. Health Assessment

Introduction to assessment of physical and psychosocial health across the life span. Includes physical assessment techniques, interviewing skills and introduction to medical terminology and health risk assessment.

Prerequisite(s): Credit or concurrent registration in NUSC 202 or credit or concurrent registration in NUSC 242; and junior standing or above; or consent of the instructor.

NUSC 215 4 hrs. Pathophysiology and Applied Pharmacology I

Presents clinical pathophysiological mechanisms across the life span integrating pharmacological principles and therapies required for nursing practice. Provides learning strategies for this content. **Prerequisite(s):** CHEM 130 and KN 254 or the equivalent; or consent of the instructor.

NUSC 217 3 hrs. Pathophysiology and Applied Pharmacology II

Presents clinical pathophysiological mechanisms across the life span integrating pharmacological principles and therapies required for nursing practice. Provides learning strategies for this content. **Prerequisite(s):** NUSC 215; or consent of the instructor.

NUSC 225 0-6 hrs. Introduction to Clinical Concepts and Processes

Applies nursing process, communication and teaching/learning to individuals. Includes mobility, comfort, safety, infection, protection, fatigue, sleep, oxygenation, and elimination. Clinical application in various settings. Students in the traditional BSN program are required to register for 6 credit hours; students in the RN to BSN program are required to register for 5 credit hrs. **Prerequisite(s):** Credit or concurrent registration in NUSC

210 and credit or concurrent registration in NUSC 215; or consent of the instructor.

NUSC 242 4 hrs. Concepts and Processes for Contemporary Nursing Practice

Introduces RN/BSN student to contemporary concepts for professional nursing practice in healthcare systems with emphasis on the nursing paradigm, health promotion, and continuity of care. **Prerequisite(s):** Credit or concurrent registration in NUSC 210; or consent of the instructor.

NUSC 250 3 hrs. Human Development Across

the Life Span Survey of biological, psychological and social influences on human development from conception to death. Emphasis is on current research and its application to societal issues.

NUSC 310 2 hrs. Exploring Complementary/ Alternative Practices

Explores philosophical, historical, cultural and clinical aspects of complementary/alternative practices. Providing wholistic nursing care by incorporating complementary/alternative practices will be emphasized. **Prerequisite(s):** NUSC 217 and NUSC 225; or consent of the instructor.

NUSC 312 2 hrs. Ethical-Legal Issues in Nursing

Analysis of ethical-legal issues in nursing practice across the life span. Examines legal concerns

and ethical decision making for nurses in diverse roles and practice settings.

NUSC 3132 hrs.Nursing Perspectives onHealth Policy and Politics

Health policy issues are analyzed from political, socioeconomic, and ethical perspectives and their relation to policy process and healthcare delivery.

NUSC 315 2 hrs. Fluid and Electrolyte Alterations

Exploration of fluid and electrolyte alterations across the life span. Comprehensive analysis of fluid and electrolyte balance regulatory processes and nursing care in clients with a variety of conditions. **Prerequisite(s):** NUSC 225 and NUSC 217; or consent of the instructor.

NUSC 316 2–3 hrs. Nursing Informatics

Exploration of information system concepts in healthcare delivery and nursing practice. Emphasis on application of systems concepts in addressing healthcare delivery issues. **Prerequisite(s):** NUSC 225 or equivalent; or consent of the instructor.

NUSC 317 2 hrs. Introduction to Critical Care Nursing

An introduction to critical care nursing, focusing primarily on cardiac and respiratory conditions, hemodynamic monitoring, EKG interpretation, and mechanical ventilation. Observational clinical experience in intensive care settings. **Prerequisite(s):** NUSC 335 or consent of the instructor.

NUSC 320 2 hrs. Death and Dying

Focuses on biopsychosocial and spiritual issues that arise for the patient, significant others, and the nurse clinician during the process of dying and death itself.

NUSC 322

Introduction to Nursing Research and Statistics for Evidence-Based Practice Basic concepts of research emphasizing relationship between research and nursing practice. Includes basic statistical mea-

4 hrs.

sures, hypothesis testing, and interpretation of nursing research for application and practice. **Prerequisite(s):** NUSC 217 and NUSC 225; or consent of the

instructor.

NUSC 335 6 hrs. Clinical Concepts and

Processes in Adult Health Nursing concepts/processes concerning common adult health problems: oxygenation, information processing, regulation, immune response, elimination, metabolism, mobility, substance abuse, and perioperative. Clinical application in various settings. **Prerequisite(s):** NUSC 225 and credit or concurrent registration in NUSC 217; or consent of the instructor.

NUSC 345 5 hrs. Clinical Concepts and Processes in Women's and

Processes in Women's and Family Health

Nursing care of women and families across the life span. Emphasizes health promotion from a community-based perspective. Socioeconomic, cultural, political, legal, and ethical influences on health behavior and guarance are ampleted

outcomes are explored. **Prerequisite(s):** NUSC 225 and credit or concurrent registration in NUSC 217; or consent of the instructor.

NUSC 350 2 hrs. History of Nursing

Trends in nursing education and practice in terms of historical development of nursing. Focus on social, cultural, religious, political and education forces influencing the evolution of nursing. **Prerequisite(s):** NUSC 202; or consent of the instructor.

NUSC 355 5 hrs. Clinical Concepts and Processes in Children's and Family Health

Nursing care of the well, acutely and chronically ill infant and child using a family-focused approach with clinical applica-

tion in various settings. **Prerequisite(s):** NUSC 225 and credit or concurrent registration in NUSC 217; or consent of the instructor.

NUSC 365 5 hrs. Clinical Concepts and Processes in Mental Health

Application and integration of biopsychosocial and cultural concepts and principles in the nursing process for individuals and groups in psychiatric settings. Clinical application in various settings. **Prerequisite(s):** NUSC 225 and credit or concurrent registration in NUSC 217; or consent of the instructor.

NUSC 375 3 hrs. Concepts and Processes in Older Adult Health

Application of concepts of gerontology, aging theories and care of the older adult, including health promotion and maintenance and rehabilitation. **Prerequisite(s):** NUSC 225; or consent of the instructor.

NUSC 385 5 hrs. Clinical Concepts and Processes in Population-Focused Nursing

Synthesis of theory, research, and practice related to populationfocused nursing care, with emphasis on health promotion of aggregates. Clinical application with aggregates across the life span. **Prerequisite(s):** NUSC 345 and NUSC 355; or consent of the instructor.

NUSC 390 6 hrs. Nursing Leadership and Management in Realthours

Management in Healthcare Appraisal and synthesis of theory, research and practice in the application of principles of nursing leadership and management. Clinical application will focus on the management of groups of clients and systems. **Prerequisite(s)**: NUSC 335 and NUSC 345 and NUSC 355 and credit or concurrent registration in NUSC 365 and credit or concurrent registration in NUSC 385; or consent of the instructor.

NUSC 393 3 hrs. Readings in Evidence-Based Practice

Application of basic research concepts to the building of evidence-based practice in nursing. Emphasis will be on the critique of published research and utilization of research in clinical practice. **Prerequisite(s):** NUSC 322; and senior standing or above; or consent of the instructor.

NUSC 394 1–4 hrs. Special Topics: Undergraduate

Discusses selected topics of current interest. Offered according to sufficient student demand and instructor availability. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

NUSC 397 3 hrs. Issues in Nursing Practice

Analysis of social, economic, and policy issues affecting the practice of professional nursing with emphasis on strategies for advancing the profession. **Prerequisite(s):** Credit or concurrent registration in NUSC 390; or consent of the instructor.

NUSC 399 1–4 hrs. Independent Study: Undergraduate

Individually arranged study of a topic selected by the student under the guidance of an individual instructor. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

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Course Descriptions



NURSING SCIENCES

NURSING SCIENCES
PHARMACY

358

NUSC 438 3 hrs. Infant Feeding: Historical, Societal, and Health Policy Issues

Examines infant feeding practices from historical, contemporary, societal, and political dimensions. The importance of infant feeding in developing countries as well as legislation regarding infant feeding is also examined.

Prerequisite(s): Senior standing; or consent of the instructor.

NUSC 440 2 hrs. Wholistic Health: Use of Self

Comprehensive mind, body and spiritual healthcare. Spiritual assessment of self, individuals and families. Self as a therapeutic agent/health provider for wholistic healthcare. Prerequisite(s): Senior standing; or consent of the instructor.

NUSC 441 2 hrs. Wholistic Health: Community Focus

Community and congregational assessment. Health beliefs and practices of faith communities and their impact on healthcare services, communities, and systems to foster planned change. Prerequisite(s): Senior standing; or consent of the instructor.

NUSC 450 3 hrs. Women and Mental Health Nursing

Theories of female psychology; women's daily lives and mental health; gender differences in mental illness; strategies for improving women's mental health. Same as GWS 450 and NUWH 450. Prerequisite(s): Consent of the instructor. Students enrolled in the College of Liberal Arts and Sciences must have credit in PSCH 100 and either PSCH 270 or PSCH 315 or GWS 315.

NUSC 455 3 hrs. Women's Health: A Primary **Healthcare Approach**

Health promotion and disease prevention in women's health. Includes community experience with community women. Primary healthcare approaches examined. Same as CHSC 456 and NUWH 455. Prerequisite(s): Consent of the instructor.

NUSC 460 1-5 hrs. Individualized Internship

Intensive internship experience will consist of a practicum that will develop skills, competencies, and knowledge in a focused healthcare delivery setting. Satisfactory/Unsatisfactory grading only. May be repeated. Prerequisite(s): Consent of the instructor.

NUSC 494 1-3 hrs. **Special Topics**

Discusses selected topics of current interest. Offered according to sufficient student demand and instructor availability. May be repeated. Students may register in more than one section per term. Prerequisite(s): Consent of the instructor.

Pharmacv

PHAR 321 3 hrs. Drug Delivery Systems I

The roles of dosage forms and drug delivery systems in healthcare. Pharmaceutical calculations included. Prerequisite(s): Acceptance into the Doctor of Pharmacy program.

PHAR 322 3 hrs. Drug Delivery Systems II

Continuation of PHAR 321. The roles of additional dosage forms and drug delivery systems in healthcare. Prerequisite(s): PHAR 321.

PHAR 323 3 hrs. Drug Delivery Systems III

The the role of nonsterile and sterile dosage forms and drug delivery systems in healthcare. Pharmaceutical calculations for parenteral dosage forms included. Prerequisite(s): PHAR 322.

PHAR 324 3 hrs. **Contemporary Pharmacy** Practice

Students obtain experience in compounding dosage forms, dispensing medications, counseling patients, problem solving and administration of various dosage forms. Prerequisite(s): PHAR 323 and credit or concurrent registration in PHAR 355.

PHAR 331 5 hrs. Fundamentals of Drug Action I

Introduction to basic concepts of drug chemistry and biological targets. Chemistry of simple bimolecules, redox chemistry, stereochemistry. Biology of nucleic acids, proteins, and membranes. Prerequisite(s): One year of organic chemistry with laboratory and one year of general biology with laboratory.

PHAR 332 4 hrs. **Fundamentals of Drug Action II**

Continuation of PHAR 331. Includes drug-receptor interactions, drug design, mechanistic enzymology, and cellular chemistry and immunology. Prerequisite(s): PHAR 331.

PHAR 333 4 hrs. **Fundamentals of** Drug Action III

Continuation of PHAR 332. Topics of microbiology and virology, drug metabolism and chemical toxicology, basic clinical chemistry with laboratories. Prerequisite(s): PHAR 332.

PHAR 342 2 hrs. Experiential I—IPPE

Introduction to contemporary pharmacy practice including the Ashville Project, Cultural Competence, and controversial issues/topics in pharmacy practice. Prerequisite(s): PHAR 441 and a current pharmacy technician license in good standing.

PHAR 343 2 hrs. Pharmacy Systems Management

Personnel management and human resources issues in

professional pharmacy practice. Introduction to pharmacy operations management, the process of change management, and management of innovative changes in pharmacy practice. Prerequisite(s): Second year standing in the Doctor of Pharmacy program.

PHAR 344 2 hrs. Social and Behavioral Pharmacy

Application of behavioral science principles and theories in understanding patient and health pro-fessional behavior, and application of social issues involved in pharmacy practice. Prerequisite(s): Acceptance into the Doctor of Pharmacy program.

PHAR 346 2 Pharmacy Services and 2 hrs. Reimbursement

Techniques in marketing of pharmaceutical care services and developing compensating mechanisms for pharmacy services, discussion of managed care principles, and healthcare financ-ing issues. **Prerequisite(s):** PHAR 341.

PHAR 352 2 hrs. Experiential II—IPPE

Introduction to concepts and skills used by pharmacists to provide direct patient care. Development of skills required to gather information, conduct physical assessment, and document information relevant to therapeutic interventions. Prerequisite(s): PHAR 342 and PHYB 301 and PHYB 302 and a current pharmacy technician license in good standing.

PHAR 353 2 hrs. Experiential III—IPPE

Students are given information and participate in exercises that will enable them to develop the skills pharmacists need to gather, evaluate, document, and communicate information relevant to therapeutic interventions and overall patient care. Prerequisite(s): PHAR 352 and Third-year professional standing in the Doctor of Pharmacy Program.

PHAR 354 2 hrs. Experiential IV—IPPE

Students will participate in exercises enabling them to develop the skills a pharmacist needs; to gather, evaluate, document, and communicate information relevant to therapeutic interventions and overall patient care in sspecial patient populations. Prerequisite(s): PHAR 353 and Third-year professional standing in the Doctor of Pharmacy Program.

PHAR 356 2 hrs. Principles of Pharmacoeconomics and

Drug Treatment Outcomes Basic and applied concepts of economic efficiency, pharmacoeconomics, decision models, and drug therapy outcome measures are presented with an emphasis

on the practical application of such priniciples. Prerequisite(s): Acceptance into the Doctor of Pharmacy program.

PHAR 357 4 hrs. Experiential V—IPPE

The primary setting for this course is a direct patient care setting where the students will apply their successfully completed didactic and previous early experiential course work to the patient care setting. Prerequisite(s): PHAR 342 and PHAR 344 and PHAR 352 and PHAR 353 and PHAR 354 and PHAR 365 and PHAR 401 and PHAR 402 and PHAR 403 and PHAR 404 and PHAR 405 and PHAR 406 and PHAR 407 and PHAR 408 and PHAR 455; or consent of the instructor and Third-year professional standing in the Doctor of Pharmacy program.

PHAR 365 3 hrs. Nonprescription

Pharmaceuticals and Herbal Medicinals A pharmacotherapeutics course

discussing the use of nonprescription drugs, supplies, and herbal medicinals with emphasis on the pharmacist's role as communicator, educator, and advisor to patients. Prerequisite(s): Thirdyear professional standing in the Doctor of Pharmacy program or consent of the instructor.

PHAR 371 4 hrs.

Ambulatory Care—APPE Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis placed on disease states and their treatment in ambulatory care patients. Prerequisite(s): Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PHAR 372 4 hrs.

Community Practice—APPE Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in community practice. Prerequisite(s): Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PHAR 373 4 hrs. Hospital Practice—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in hospital practice. Prerequisite(s): Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PHAR 374

4 hrs.

Medicine—APPE Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in general medicine patients. Prerequisite(s): Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PHAR 400 3 hrs. **Pharmacokinetics**

Concepts and principles in pharmacokinetics including theories and basis for drug receptor actions, drug absorption, distribution, excretion, and biotransformation. Prerequisite(s): Credit or concurrent registration in PHAR 322 and credit or concurrent registration in PHAR 332 and credit or concurrent registration in PHYB 302.

PHAR 401 3 hrs. Principles of Drug Action and Therapeutics I

Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxicology in the drug actions related to the disease states associated with the endocrine, renal, optical, and auditory systems. Prerequisite(s): PHYB 302 and PHAR 342 and PHAR 400 and second year standing in the Doctor of Pharmacy program.

PHAR 402 4 hrs. Principles of Drug Action and Therapeutics II

Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxicology in the areas of the autonomic nervous system, cardiology, lipid disorders, and hypertension. Prerequisite(s): PHYB 302 and PHAR 342 and PHAR 400 and second year standing in the Doctor of Pharmacy program.

PHAR 403 3 hrs. Principles of Drug Action and Therapeutics III

Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxicology in the area of infectious disease. **Prerequisite(s):** PHAR 352 and PHAR 401 and PHAR 402 and second year standing in the Doctor of Pharmacy program or consent of the instructor.

PHAR 404 3 hrs. Principles of Drug Action and Therapeutics IV

Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxiocology in the areas of women's and men's health, respiratory disorders, diabetes, and pediatrics. **Prerequisite(s):** PHAR 352 and PHAR 401 and PHAR 402 and second year standing in the Doctor of Pharmacy program or consent of the instructor.

PHAR 405 3 hrs. Principles of Drug Action and

Therapeutics V Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxicology in the areas of drug abuse, cerebrovascular diseases, Parkinson's, and epilepsy. Prerequisite(s): PHAR 353 and PHAR 401 and PHAR 402 and Third-year standing in the Doctor of Pharmacy program or consent of the instructor.

PHAR 406 3 hrs. Principles of Drug Action and **Therapeutics VI**

Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxicology in the areas of pain management and psychiatric disorders. **Prerequisite(s):** PHAR 403 and PHAR 404 and Thirdyear standing in the Doctor of Pharmacy program or consent of the instructor.

4 hrs.

Integration of medicinal chemistry, pharmacology, pharmacotherapeutics, pharmacokinetics, and toxicology in the areas of transplants, gastrointestinal disorders, body fluids, nutrition, and the impact of drug therapies on a geriatric person. **Prerequisite(s):** PHAR 353 and PHAR 401 and PHAR 402 and Third-year standing in the Doctor of Pharmacy program or consent of the instructor.

Principles of Drug Action and

Integration of medicinal chemistry, pharmacology, pharmacotherapeu ogy in the areas of bones and joints, hematological disorders, oncology. Prerequisite(s): PHAR 353 and PHAR 401 and PHAR Doctor of Pharmacy program or consent of the instructor.

PHAR 441 Roles, Environments, and

PHAR 445 3 hrs. Pharmacy Law

Federal and state statutes and regulations pertaining to the licensing of pharmacists, the practice of pharmacy, and distribution of drugs. Case law and the ethical dilemmas relating to the pharmacists' standard of care are included. Prerequisite(s): PHAR 342.

PHAR 455 4 hrs. **Drug Information and** Statistics

Overview of drug information resources and statistics used in healthcare research, including systematic approaches for critical evaluation of the literature and effective communication of information. Prerequisite(s): PHAR 341.

Pharmacy **Administration**

PMAD 380 1-3 hrs. Undergraduate Research in **Pharmacy Administration**

Investigation, under the direction of one or more faculty members, of a problem of limited scope. May require literature research related to the research project. May be repeated. A maximum of 6 hours of credit is allowed per department. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives. Prerequisite(s): Minimum cumulative grade point average of 2.50 and consent of the instructor, department head, and associate dean for stu-

PMAD 381 1 hour. **Professional Development** Seminar I

dent affairs.

Weekly seminar series for second professional year pharmacy students. Discusses educational issues related to the second professional year. Students create/update Curriculum Vitae; explore various pharmacy career opportunities. Credit is not given for PMAD 381 if the student has credit for BPS 381 or PMMP 381 or PMPR 371. Prerequisite(s): Student must be listed as an advisee of the instructor.

PMAD 382 1 hour. **Professional Development** Seminar II

Weekly seminar series for second year pharmacy students. Discusses educational issues related to the second professional year. Students create/update Curriculum Vitae; explore various pharmacy career opportunities. Credit is not given for PMAD 382 if the student has credit for BPS 382 or PMMP 382. Prerequisite(s): Student must be listed as an advisee of the instructor.

PMAD 383 1 hour. **Professional Development** Seminar III

Weekly seminar series for third professional year pharmacy students. Discusses relevant educational and professional issues. Update CV/resume and portfolio. Explore pharmacy career opportunities with invited guests. Credit is not given for PMĂD 383 if the student has credit for BPS 383 or PMMP 383. Prerequisite(s): Student must be listed as an advisee of the instructor.

PMAD 384 1 hour. **Professional Development** Seminar IV

Weekly seminar series for Thirdyear pharmacy students. Discusses with advisees relevant educational and professional issues. Update CV/Resume and Portfolio. Explore pharmacy career opportunities with invited guests. Credit is not given for PMAD 384 if the student has credit for BPS 384 or PMMP 384. Prerequisite(s): Student must be listed as an advisee of the instructor.

PMAD 385 1-3 hrs. **Special Topics in Pharmacy** Administration

A selected topic of current interest in pharmacy administration, or an experimental course, offered by faculty or a visiting lecturer. **Prerequisite(s):** Good standing and consent of the instructor.

PMAD 390 1-2 hrs. Special Projects in Pharmacy Administration

Special projects within the departmental discipline. Defined and terminal project goals are achieved through independent study. May be repeated. A maximum of 4 hours of 390 credit is allowed in all departments. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives.

Prerequisite(s): Consent of the instructor, department head, and associate dean for student affairs.

PMAD 421 3 hrs.

Pharmaceutical Marketing Introduction to the field of marketing with specific emphasis on pharmaceuticals and the marketing of pharmacy services.

PMAD 470 3 hrs. Managed Care Pharmacy

Professional development in managed care pharmacy to learn history, administrative and policy aspects, network with operational managers and leaders in field, visit managed care sites and observe activities of managed care pharmacists. Prerequisite(s): Third-year standing in the Doctor of Pharmacy program or second year standing in the Doctor of Pharmacy program with consent of the instructor, or graduate standing in pharmacy.

PMAD 482 3 hrs. Professional Practice Management

Managerial functions of the pharmacist in all practice environments with emphasis on the planning, organizing, staffing, directing and controlling of resources.

UIC

 PHARMACY ADMINISTRATION PHARMACY

Course Descriptions

PHAR 407 Principles of Drug Action and Therapeutics VII

PHAR 408 3 hrs. Therapeutics VIII

tics, pharmacokinetics, and toxicol-402 and Third-year standing in the

3 hrs. Communications

Selected factors that influence pharmacist's practice, societal, and professional expectations, and the importance of effective communications with a variety of patients and professional audiences. Prerequisite(s): Acceptance into the Doctor of Pharmacy program.

PMAD 484 3 hrs. Systematic Reviews and Meta-Analysis

The course will discuss the concepts, process, and statistical methods required to perform a systematic review or meta-analysis of a large body of empirical findings. Extensive computer use required. Prerequisitie(s): EPID 400 or BSTT 400 and PHAR 355 or PMAD 502 or graduate or professional standing or consent of the instructor.

PMAD 494 1–3 hrs. Special Topics in Pharmacy Administration

Topics will vary, including the ongoing analysis of contemporary issues associated with delivery, financing, and management of pharmaceutical products and professional services. May be repeated to a maximum of 6 hrs.

Pharmacy Practice

PMPR 325 2 hrs. Drugs and Society

Presents factual basis of drug use and abuse. Provides physiological and sociopsychological underpinnings of drug abuse. Evaluates social policies and regulatory issues surrounding drug abuse. **Same as** BPS 325. Extensive computer use required. **Prerequisite(s):** Open only to first-year students in the Doctor of Pharmacy program.

PMPR 326 1 hour. Topics for Professional Student Enrichment

Students will meet at the beginning of the semester with the course instructor to review and select topics from a schedule of topics. Topics chosen will reflect 15 hours of class time as well as written journals. **Prerequisite(s)**: PHAR 341.

PMPR 330 1 hour. Journal Club and Advanced Literature Analysis

A course designed to familiarize students with more advanced study design and statistical concepts commonly used in the medical literature. **Prerequisite(s):** P-3 standing and completion of PHAR 455.

PMPR 345 3 hrs. Clinical Toxicology

Basic and applied concepts in clinical toxicology including general approach, poisoning prevention measures, retrieval and evaluation of toxicology literature, substance abuse issues, and practice site specific toxicology concerns. **Prerequisite(s):** Enrollment in the Doctor of Pharmacy program.

PMPR 355 1 hour. Seminar in Pharmacy Research

A weekly 1-hour research seminar provided by the College of Pharmacy faculty who are currently conducting clinical and/or basic science research. **Prerequisite(s):** Enrollment in the Doctor of Pharmacy Program.

PMPR 356 2 hrs. The Role of the Pharmacist in Tobacco Cessation

In topacco cessation An in-depth knowledge base in smoking cessation, skills for counseling, and detailed "how to" information on specific counseling techniques.

PMPR 357 1 hour. Natural and Recombinant Plasma-Derived Therapeutics

Introduction to plasma-derived therapeutics including albumin, immune globulins, and factor products. Production, viral safety, and clinical applications will be covered. **Prerequisite(s):** P3 class standing.

PMPR 358 1 hour. Pharmacotherapeutic Issues in Women's Health

Team taught case-based pharmacotherapeutic lecture course related to women's health. **Prerequisite(s):** P3 class standing or consent of the instructor.

PMPR 359 2 hrs. Topics and Issues in Clinical Post-Graduate Training Programs

Increases PharmD students' knowledge and professionalization about post-graduate training. Students will "shadow" residents or fellows during nonclass times, overnight and weekends while the resident or fellow is on call. Fieldwork required. **Prerequisite(s):** Second or Thirdyear standing in the Doctor of Pharmacy program with good academic standing.

PMPR 360 2 hrs. Clinical Aspects of Drug Interactions, Metabolism, and Pharmacogenetics

Clinical perspective in interpreting drug interaction/metabolism and pharmacogenetic data from the literature; application of the information in practice. Hands-on opportunities to manage drug interactions using real-life cases. **Prerequisite(5):** Third-year standing in the Doctor of Pharmacy program or above; or consent of the instructor.

PMPR 361 2 hrs. Introduction to Public Health: Concepts and Applications in Pharmacy

Introduces pharmacy students to major concepts in public health. Emphasizes an interdisciplinary team that focuses on the wellbeing of the population.

PMPR 363 2 hrs. Primary Care Clinical Nutrition

Students will evaluate the clinical importance of nutritional intervention, and its practical applications for chronic disease prevention and management such as cancer, hypertension, hyperlipidemia, diabetes, and obesity.

PMPR 370 1 hour. Pharmacy Grand Rounds

Case studies in drug therapy; review of relevant areas of drug treatment and research. Role of the pharmacist emphasized. Weekly presentations. Manadatory attendance. Satisfactory/Unsatisfactory grading only. May not be repeated for credit. **Prerequisite(s):** Enrollment in the Doctor of Pharmacy program.

PMPR 371 1 hour. Professional Development Seminar I

A weekly seminar series designed to draw select second year professional students together to discuss educational issues related to the second professional year. Credit is not given for PMPR 371 if the student has credit in BPS 381 or PMAD 381 or PMMP 381. **Prerequisite(s):** Completion of the first year of the Doctor of Pharmacy program; student must be listed as an advisee of the instructor.

PMPR 377 1 hour. Professional Development for Pharmacists

Designed to develop the skills necessary for the professional development of future pharmacists: resume writing, interview preparation, written correspondence, and verbal presentation skills. **Prerequisite(s):** Enrollment in the Doctor of Pharmacy program.

PMPR 378 2 hrs. Pediatric Therapeutics

Drug therapy of common pediatric disease states, emphasizing special pediatric considerations in the areas of pediatric infectious diseases, neurology, and psychiatry. **Prerequisite(s)**: Completion of the second year of the Doctor of Pharmacy Program.

PMPR 380 1–3 hrs. Undergraduate Research in Pharmacy Practice

Investigation, under the direction of one or more faculty members, of a problem of limited scope. May require literature research related to the research project. May be repeated. A maximum of 6 hours of credit is allowed per department. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives. Prerequisite(s): Minimum cumulative grade point average of 2.50 and consent of the instructor, department head, and associate dean for stu-

PMPR 381 2 hrs. Chronic Kidney Disease (CKD)—Interventions and Treatment

dent affairs.

Identification and treatment of patients with chronic kidney disease utilizing a multifactorial approach to attain goals set by Kidney Disease Outcome Quality Initiatives (KDOQI) Guidelines, ADA Guidelines, JNCVII Guidelines and NCEPIII Guidelines. **Prerequisite(s):** PHAR 401.

PMPR 382 2 hrs.

Ethical Considerations in the Practice of Pharmacy Students will review ethical prin-

ciples, identify ethical dilemmas, analyze case studies, and engage in role playing. Individual and group written/oral presentations will be required. **Prerequisite(s)**: PHAR 404.

PMPR 383 2 hrs. Managed Care Pharmacy

Covers fundamental concepts in managed care pharmacy and provides a basic understanding of how managed care pharmacy impacts the healthcare system.

PMPR 384 4 hrs. Advanced Ambulatory

Care—APPE Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states of patients and their treatment not covered in the core ambulatory care clerkship. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 385 1–4 hrs. Special Topics of Current Interest in Pharmacy Practice

Course offered by faculty or a visiting lecturer on a selected topic of current interest. Available on an experimental basis for two offerings only. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Good academic standing and consent of the instructor.

PMPR 386 4 hrs. Administrative—APPE

Clinical pharmacy experience in the management of hospital pharmacy department including purchasing, personnel management, drug utilization review, committees and accreditation approval process. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 387 4 hrs.

Advanced Medicine—APPE Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in general medicine patients not covered in the core medicine clerkship. May be repeated. Students may register in more than one section per term. Prerequisite(s): Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

360

Advanced Specialty—APPE Clinical pharmacy experience in various specialty areas of practice, including pharmaceutical industry, government, associations, or other healthcare specialties. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy technician license in good standing.

4 hrs.

4 hrs.

PMPR 389 Critical Care—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis placed on disease states and their treatment in critical care patients. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 390 1–2 hrs. Special Projects in Pharmacy Practice

Special projects within the departmental discipline. Defined and terminal project goals are achieved through independent study. May be repeated. A maximum of 4 hours of 390 credit is allowed in all departments. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives.

Prerequisite(s): Consent of the instructor, department head, and associate dean for student affairs.

PMPR 391 4 hrs. Drug Information—APPE

Clinical pharmacy experience in a drug information center providing written and verbal communication of drug information to healthcare professionals, patients, and the general public. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 392 Geriatric—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis placed on disease states and their treatment in geriatric patients. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

4 hrs.

4 hrs.

PMPR 393 Kinetics—APPE

Clinical pharmacy experience in patient interviewing, pharmacokinetic monitoring, and drug therapy. Emphasis will be placed on disease states and the pharmacokinetic monitoring of patients. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 394 4 hrs.

Nutrition—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and nutrition therapy. Emphasis will be placed on disease states and their treatment requiring nutrition therapy. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 395 4 hrs. Pediatric—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in pediatric patients. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 396 4 hrs. Psychiatry—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in psychiatric patients. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy technician a current pharmacy technician license in good standing.

4 hrs.

PMPR 397 Surgery—APPE

Surgery—AFFE Clinical pharmacy experience in patient interviewing, patient monitoring and drug therapy. Emphasis will be placed on disease states and their treatment in surgical patients. **Prerequisite(s)**: Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 398 4 hrs. Advanced Community Practice—APPE

Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states of patients and their treatment in community practice not covered in the core community practice clerkship. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 399 4 hrs.

Home Health—APPE Clinical pharmacy experience in patient interviewing, patient monitoring, and drug therapy. Emphasis will be placed on disease states and their treatment in home healthcare. **Prerequisite(s)**: Fourth year standing in the Doctor of Pharmacy program and a current pharmacy technician license in good standing.

PMPR 430 Critical Care I

Advanced pharmacotherapeutics course that will concentrate on the medical management and the pharmacotherapist's role in the management of the critically ill patient. **Prerequisite(s):** PHAR 402 and PHAR 403 and PHAR 404 and PHAR 405 and PHAR 406; and completion of the second year of the program. Must enroll concurrently in PHAR 407 and PHAR 408.

2 hrs.

PMPR 440 2 hrs. Applied Pharmacokinetics

An elective course demonstrating practical application of pharmacokinetic principles. Previously listed as PMPR 340. Scientific calculator required. **Prerequisite(s)**: PHAR 401, PHAR 402, PHAR 403, PHAR 404, PHAR 405, and PHAR 406 or consent of the instructor.

Philosophy

PHIL 100 3 hrs. Introduction to Philosophy

A survey of traditional problems concerning the existence and nature of God, freedom, justification, morality, etc. Readings from historical or contemporary philosophers. *Individual and Society course.*

PHIL 102 3 hrs. Introductory Logic

Sentential logic: representation of English using truth-functional connectives, decision methods, natural deduction techniques. Introduction to predicate logic: representation of English using quantifiers. Decision methods for monadic predicate logic.

PHIL 103 3 hrs. Introduction to Ethics

Surveys attempt to answer central questions of ethics: What acts are right? What things are good? How do we know this? *Individual and Society course.*

PHIL 104 3 hrs. Introduction to Political Philosophy

An introductory survey of topics in political philosophy that bear on U.S. society. Readings will usually be drawn from both classical and contemporary sources. *Individual and Society, and U.S. Society course.*

PHIL 105 3 hrs. Science and Philosophy

An exploration of central philosophical (and/or religious) issues as they arise in the sciences. Readings include both scientific (e.g. physics or biology) and philosophical works, and may be drawn from various periods. *Natural World—No Lab course*.

PHIL 107 3 hrs. Understanding Art

Introduction to the fundamental problems in understanding art; the historical background; the concept of the aesthetic; theories of art; intentionalistic criticism, metaphor, symbolism, expression; theories of evaluation.

PHIL 110 3 hrs.

Philosophy of Love and Sex A philosophical inquiry into traditional and contemporary views about love and sex. *Individual and Society course*.

PHIL 112 3 hrs. Morality and the Law

What must the law do if it is to protect our rights (such as free speech, privacy, equal treatment)? Why believe we have rights? Individual and Society course.

PHIL 115 3 hrs. Death

Philosophical examination of our attitudes towards death. Our attitudes towards mortality and immortality; definitions of death; treating others as persons; our attitudes towards life, quality of life issues, suicide, rights of the dying. *Individual and Society course*.

PHIL 116 3 hrs. Medical Ethics

Moral issues as they arise in medical contexts, including such topics as abortion, euthanasia, paternalism, allocation of medical resources, and psychiatric issues.

PHIL 120 3 hrs. Introduction to Ancient Philosophy

Introduction to issues and methods of philosophy through engagement with classic Greek and Roman texts (read in translation). **Same as** CL 120. *Individual and Society, and Past course.*

PHIL 122 3 hrs. Philosophy of Consciousness

A philosophi of consciousness A philosophical investigation into the nature and importance of consciousness as discussed in a variety of sources in philosophy, literature, and psychology.

PHIL 201 3 hrs. Theory of Knowledge

Basic issues concerning knowledge of the external world, other minds, scientific laws, and necessary truths. **Prerequisite(s):** One course in philosophy.

PHIL 202 3 hrs. Philosophy of Psychology

Theories and methods of scientific psychology: modes of explaining the structure of theories, the nature of mental states; implications of commonsense conceptions of the mind.

Prerequisite(s): One course in philosophy; or junior or senior standing in the physical, biological, or social sciences; or consent of the instructor.

PHIL 203 3 hrs. Metaphysics

Philosophical issues concerning free will, causation, action, mind and body, identity over time, God, universals and particulars. Emphasis varies from term to term. **Prerequisite(s):** One course in philosophy or consent of the instructor. **Course Descriptions**



PHARMACY PRACTICE • PHILOSOPHY

PHILOSOPHY

PHIL 204

Introduction to the Philosophy of Science

3 hrs.

The nature of scientific observation, explanation, and theories; confirmation of laws and theories; the relation between the physical and social sciences. **Prerequisite(s):** One course in philosophy; or junior or senior standing in the physical, biological, or social sciences; or consent of the instructor.

PHIL 210 3 hrs. Symbolic Logic

Representation of English sentences using quantifiers and identity; quantificational natural deduction; interpretations. Optional topics include naive set theory; axiomatic systems; theory of descriptions; metatheory. Prerequisite(s): PHIL 102. Recommended background:

Grade of B or better in PHIL 102.

PHIL 211 3 hrs. Inductive Logic and Decision Making

How to gamble and make other decisions rationally. The role of probability, decision rules, and statistics in real-life contexts. Prerequisite(s): PHIL 102 or PHIL 210.

PHIL 220 3 hrs. Ancient Philosophy I: Plato and His Predecessors

Introduction to Plato and his predecessors in the ancient period. Same as CL 220. It is recommended that PHIL 220/ CL 220 and PHIL 221/CL 221 be taken as a sequence in successive terms. Prerequisite(s): One course in philosophy or consent of the instructor.

PHIL 221 3 hrs. Ancient Philosophy II:

Aristotle and His Successors Introduction to Aristotle and his successors in the ancient period. Same as CL 221. It is recommended that PHIL 220/CL 220 and PHIL 221/CL 221 be taken as a sequence in successive terms. Prerequisite(s): One course in philosophy or consent of the instructor.

PHIL 223 3 hrs. History of Modern Philosophy I: Descartes and His Successors

Introduction to Descartes and some of his successors in the early modern period. It is recommended that PHIL 223 and PHIL 224 be taken as a sequence in successive terms. Prerequisite(s): One course in philosophy or consent of the instructor.

PHIL 224 3 hrs. History of Modern Philosophy II: Kant and His Predecessors

Introduction to Kant and some of his predecessors in the early modern period. It is recommended that PHIL 223 and PHIL 224 be taken as a sequence in successive terms. Prerequisite(s): One course in philosophy or consent of the instructor.

PHIL 225 3 hrs. Nineteenth-Century Philosophy

A survey course of the works of major nineteenth century philosophers such as: Hegel, Marx, Nietzsche, Kierkegaard, and Schopenhauer. Prerequisite(s): One course in Philosophy or consent of the instructor. Individual and Society course.

PHIL 226 3 hrs. **Twentieth-Century Analytic** Philosophy

Historical introduction to the major issues and figures of twentieth-century philosophy in the analytic tradition. Readings from Frege, Russell, Wittgenstein, Quine, and others. Prerequisite(s): PHIL 102 or

PHIL 210 or consent of the instructor.

PHIL 227 3 hrs. Continental Philosophy I: Phenomenology and Existentialism

Existential themes in dramas and fiction as well as selections from the works of such thinkers as Kierkegaard, Nietzsche, Husserl, Heidegger, Merleau-Ponty, Camus, and Sartre. Prerequisite(s): Junior standing or consent of the instructor.

PHIL 230 3 hrs. **Topics in Ethics and Political** Philosophy

Survey of major topics in ethical theory and political philosophy. Emphasis varies. **Prerequisite(s):** One course in philosophy or consent of the instructor.

Recommended background: PHIL 103 or PHIL 109 or PHIL 112 or PHIL 116.

PHIL 232 3 hrs. Sex Roles: Moral and Political Issues

Philosophical inquiry into controversies surrounding the changing roles of men and women. Same as GWS 232.

PHIL 234 3 hrs. Philosophy and Film

A philosophical examination of film, dealing with aesthetic issues, or moral and political issues, or both. Screening accompanies discussion. Prerequisite(s): One course in philosophy or consent of the instructor.

PHII 240 3 hrs. Philosophy and Revelation: Jewish and Christian Perspectives

Introduction to philosophical ways of addressing the claim that a book (the Bible, the Qur'an) comes from God. Texts by Immanuel Kant, Moses Mendelssohn, and Soren Kierkegaard, among others. Previously listed as PHIL 141. Same as RELS 240 and JST 240. Prerequisite(s): Two courses in philosophy or consent of the instructor. Individual and Society, and World Cultures course.

PHII 241 3 hrs. Philosophy of Religion

Philosophical inquiry into the grounds of faith and belief, the nature of religious and mystical experience, and the existence and nature of God. Prerequisite(s): One course in philosophy or consent of the instructor.

3 hrs.

PHII 299 Seminar

Selected topics. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. Prerequisite(s): One course in philosophy or consent of the instructor.

PHII 300 3 hrs. Fundamentals of Philosophical Discourse

An intensive course for philosophy majors aimed at infroducing and developing skill in philosophical writing and oral presen-tation. Previously listed as PHIL 400. Prerequisite(s): Major in philosophy; and junior standing or above or approval of the department.

PHIL 310 3 hrs. Aristotle and the Arabs

Traces the major topics of ancient Greek philosophy, especially those of Aristotle, and their transformation into the philosophy developed in the Arabic classical period. Same as ARAB 310 and CL 310. Prerequisite(s): CL 221 or PHIL 221 or RELS 230.

PHIL 390 3 hrs. Senior Thesis in Philosophy

Students will work individually with a member of the faculty on a topic chosen by the student and approved by the faculty. Prerequisite(s): Open only to seniors; consent of the instructor

and department. **PHIL 399** 2-6 hrs. Independent Study

Independent study, under the supervision of a staff member, of a topic not covered in the regular curriculum. Offered at the request of the student and only at the discretion of the staff members concerned. May be repeated. Students may register in more than one section per term. Prerequisite(s): Consent of the instructor.

PHIL 401 3 OR 4 hrs. Theory of Knowledge

Survey and analysis of key topics in epistemology, such as skepticism, the nature of propositional knowledge, justification, perception, memory, induction, other minds, naturalistic epistemology. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 201 or consent of the instructor.

PHIL 402 3 OR 4 hrs. **Topics in Philosophy of Mind**

Survey and analysis of one or more topics in philosophy of mind, such as the mind-body problem, philosophy of psychology, perception and sensation, intentional content, consciousness, and mental causation. 3 undergraduate hours; 4 graduate hrs. Prerequisite(s): PHIL 202. **Recommended background:**

PHIL 102 or PHIL 210.

PHIL 403 3 OR 4 hrs. Metaphysics

Intensive treatment of one or more topics, such as free will, personal identity, causation, existence, substance and attribute, the nature of the mind. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 203 or PHIL 226 or PHIL 426 or consent of the instructor.

PHIL 404 3 OR 4 hrs. **Philosophy of Science**

Selected works on the aims and methods of science; the status of scientific theories, natural laws and theoretical entities; the nature of scientific explanation. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 102 or PHIL 210, and one 200-level course in philosophy; or consent of the instructor.

PHIL 406 3 OR 4 hrs. Philosophy of Language

Intensive treatment of one or more topics, such as meaning and reference, communication, the structure of language, language and thought, and the relation of language to reality. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 102 or one 200- or 400-level logic course or PHIL 226 or consent of the instructor.

PHIL 410 3 OR 4 hrs. **Introduction to Formal Logic** Review of predicate logic and of introductory set theory. The concept of a formal system. Notions of completeness and soundness. Introduction to Godel's first incompleteness theorem. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 210 or consent of the instructor.

PHIL 416 3 OR 4 hrs. Metalogic I

Metatheory for sentence and predicate logic. Completeness and compactness theorems and their applications. 3 undergraduate hrs. 4 graduate hrs. Students who have taken MATH 430 may not register for this course. Should be taken in sequence with PHIL 417. Prerequisite(s): PHIL 210 or consent of the instructor.

PHIL 417 3 OR 4 hrs. Metalogic II

Effective computability and recursive functions. Peano arithmetic. Arithmetization of syntax. Incompleteness and undecidability: Godel's and Church's theorems. 3 undergraduate hrs. 4 graduate hrs. Frerequisite(s): PHIL 416 or consent of the instructor.

PHIL 420 3 OR 4 hrs. Plato

Careful reading of selected works. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. Prerequisite(s): PHIL 220 or PHIL 221 or 3 courses in philosophy or consent of the instructor.

PHYS 112

Astronomy in the context of the scientific process, history, and current events. Covers the Solar System, stars and galaxies and the origin and fate of the universe. Student may obtain one additional hour of credit by concurrently registering in Physics 122. Natural World-With Lab course.

PHIL 421 3 OR 4 hrs. Aristotle

Careful reading of selected works. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. **Prerequisite(s):** PHIL 220 or PHIL 221 or 3 courses in philosophy or consent of the instructor.

PHII 422 0-4 hrs. Medieval Philosophy

Study of selected philosophers such as Augustine, Boethius, Averroes, Maimonides, Aquinas, William of Ockham, Buridan, Suarez. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 220 or PHIL 221 or PHIL 420 or PHIL 421 or consent of the instructor.

PHIL 423 3 OR 4 hrs. **Studies in Early Modern** Philosophy

Careful reading of selected works of one or more philosophers, 1600 to 1750, such as Descartes, Hobbes, Spinoza, Leibniz, Locke, Berkely, Hume, Reid and Rousseau. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. Prerequisite(s): PHIL 223 or PHIL 224 or 3 courses in philos-

ophy or consent of the instructor.

PHIL 424 3 OR 4 hrs. Kant

Intensive study of Kant's metaphysics and theory of knowledge with main reading drawn from the Critique of Pure Reason. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 223 or PHIL 224 or 3 courses in philosophy or consent of the instructor.

PHIL 425 3 OR 4 hrs. Studies in Nineteenth-**Century Philosophy**

Careful reading of one or more post-Kantian philosophers such as Hegel, Schelling, Fichte, Schopenhauer, Marx, J.S. Mill, Kierkegaard, Nietzsche. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): One 200-level course in philosophy or consent of the instructor.

PHIL 426 3 OR 4 hrs. Analysis and Logical Empiricism

Developments in twentieth century philosophy with roots in the study of logic and language, such as logical atomism, logical empiricism, and contemporary analytic philosophy. Topics vary. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 210 or PHIL 226 or consent of the instructor.

PHIL 427 3 OR 4 hrs. **Continental Philosophy II: European Thought since** 1960

European thought since 1960: existential Marxism; critical theory; structuralism, poststructuralism and deconstruction. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): PHIL 227 or consent of the instructor.

PHIL 428 3 OR 4 hrs. **Topics in Ancient Philosophy** Careful reading of related works by ancient philosophers, such as Plato and Aristotle. 3 undergraduate hours; 4 graduate hrs. **Prerequisite(s):** PHIL 220 or PHIL 221; and junior standing or above.

PHIL 429 3 OR 4 hrs. **Special Studies in the History** of Philosophy Advanced study of a historical

school, period, or the development of a historical theme. $\bar{3}$ undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. Prerequisite(s): One 200-level course in the history of philosophy or consent of the instructor. **PHIL 430** 3 OR 4 hrs.

Ethics

Selected topics in moral philosophy, such as normative ethics, value theory or meta-ethics. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. Prerequisite(s): One 200-level course in philosophy or consent of the instructor. **Recommended background:** Credit in a course in moral, social, or political philosophy.

PHIL 431 3 OR 4 hrs. Social/Political Philosophy

Selected topics in social and political philosophy. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. Prerequisite(s): One 200level course in philosophy or consent of the instructor. **Recommended background:**

Credit in a course in moral, social, or political philosophy.

PHII 432 3 OR 4 hrs. **Topics in Ethics**

Selected topics in ethics. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the depart-ment. **Prerequisite(s):** One 200level course in philosophy or consent of the instructor.

Recommended background: Credit in a course in moral, social, or political philosophy.

PHIL 433 3 OR 4 hrs. **Topics in Social/Political** Philosophy

Selected topics in social and political philosophy. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. Prerequisite(s): One 200level course in philosophy or consent of the instructor. **Recommended background:**

Credit in a course in moral, social, or political philosophy.

PHIL 441 0-4 hrs. Topics in Philosophy of Religion

Intensive study of one or more selected topics concerning the philosophical aspects of basic reli-gious beliefs and concepts. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time with approval. Approval to repeat course granted by the department. **Prerequisite(s):** One 200-level course in philosophy or consent of the instructor. **Recommended background:** PHIL 241.

PHIL 484 3 hrs. Neuroscience I

Neuroscience as an integrative discipline. Neuroanatomy of vertebrates, neural development, cellular neurobiology, action potential mechanisms, synaptic transmission and neuropharmacology. Same as BIOS 484 and PSCH 484. Prerequisite(s): BIOS 286 or PSCH 262.

PHIL 485 3 hrs. Neuroscience II

Intergrative neuroscience, continuation of BIOS/PSCH/PHIL 484. Sensory and motor systems; learning, memory, and language. Pathology of nervous systems. Philosophical perspectives, and modeling. **Same as** BIOS 485 and PSCH 485. **Prerequisite(s):** BIOS 484.

Physics

PHYS 099 3 hrs. Preparation for Elementary **Physics Sequences**

Provides smooth transition into PHYS 141. Overview of physics. Emphasis on word problems and applications of mathematics. Discussion of particle kinematics. Satisfactory/Unsatisfactory grading only. No graduation credit. Eligibility determined by performance on the department placement test or recommendation of the department. Prerequisite(s): High school algebra.

PHYS 104 1 hour. **Problem-Solving Workshop** for Introductory Physics I

A workshop where groups of students work together to solve problems using computers. The problems are similar to, and sometimes more challenging than, those in PHYS 105. Satisfactory/Unsatisfactory grading only. PHYS 104 is the companion course for the PHYS 105 lecture. Must enroll concurrently in PHYS 105.

PHYS 105 4 hrs. Introductory Physics I—Lecture A noncalculus course. Kinematics; Newton's laws;

momentum; work and energy; torque and angular momentum; rotational dynamics; gravitation; oscilliations; waves physical; optics; relativity. Students may obtain one additional hour of credit by concurrently registering in PHYS 104. Prerequisite(s): High school algebra and trigonometry. Must enroll concurrently in PHYS 106. Natural World-No Lab course.

PHYS 106 1 hour. Introductory Physics I—Laboratory

Noncalculus course. Kinematics; Newton's laws; simple harmonic motion; linear momentum; work and energy; torque and angular momentum; rotational dynamics; gravitation; waves, physical geometric optics; relativity. Students may obtain one additional hour of credit by concurrently registering in PHYS 104.

Prerequisite(s): High school algebra and trigonometry. Must enroll concurrently in PHYS 105. Natural World-With Lab course.

PHYS 107 4 hrs. Introductory Physics II—Lecture

A noncalculus course. Electrostatics; electric current; magnetism; Farady's law; Maxwell's relations; electromagnetic radiation; geometric optics; quantum mechanics; the Heisenberg uncertainty principle; Bohr model; nuclear and particle physics. Prerequisite(s): PHYS 105 and PHYS 106. Must enroll concurrently in PHYS 108. Natural World—No Lab course.

PHYS 108 1 hour.

Introductory Physics II—Laboratory Noncalculus course.

Electrostatics; electric current; magnetism; Faraday's law; Maxwell's relations; electromagnetic radiation; introduction to quantum mechanics, the Ĥeisenberg uncertainty principle; Bohr model; nuclear physics; particle physics. Natural Sciences CDC granted only upon successful completion of both PHYS 107 and PHYS 108.

Prerequisite(s): PHYS 101; or PHYS 105 and PHYS 106. Must enroll concurrently in PHYS 107. Natural World-With Lab course.

4 hrs.

Astronomy and the Universe

UIC

• PHILOSOPHY

PHYS 113 4 hrs.

Physics of Sports Investigation of physical principles underlying various phenomena in sports. Examples are taken from baseball, basketball, track and field, swimming and other areas. **Prerequisite(s):** High school algebra. *Natural World— With Lab course.*

PHYS 115 4 hrs. Physics of Sound and Music

Study of production, transmission, reception, and perception of musical sound both vocal and instrumental, both live and electronically reproduced. **Prerequisite(s):** High school algebra. *Natural World—With Lab course.*

PHYS 121 4 hrs. Natural Sciences—The Physical Universe

Physical laws and the nature of matter in the evolving universe. Students may obtain one additional hour of credit by concurrently registering in PHYS 122. **Prerequisite(s):** Basic algebra. *Natural World—With Lab course.*

PHYS 122 1 hour. Problem-Solving Workshop for Natural Sciences -The Physical Universe

A workshop where small groups of students work together to solve problems similar to, but more challenging than, the problems given in PHYS 112 or PHYS 121. Must enroll concurrently in PHYS 112 or PHYS 121.

PHYS 123 5 hrs. Physics of the Environment

Investigation of the physical environment of humans and of environmental problems, using the language and methods of physics including a study of energy, climate, ozone, and industrial waste. **Prerequisite(s):** High school algebra. *Natural World— With Lab course.*

PHYS 141 4 hrs. General Physics I (Mechanics)

Kinematics; Newton's laws of motion; linear momentum and impulse; work and kinetic energy; potential energy; rotational dynamics; simple harmonic motion; gravitation. Students may obtain one additional hour of credit by concurrently registering in PHYS 144. **Prerequisite(s):** Grade of C or better in MATH 180 or consent of the instructor. *Natural World— With Lab course.*

PHYS 142 4 hrs. General Physics II (Electricity and Magnetism)

Electrostatics; electric currents; DC circuits; magnetic fields; magnetic media; elctromagnetic induction; AC circuits; Maxwell's equations; electromagnetic waves; reflection and refraction; interference. **Prerequisite(s):** MATH 181; and grade of C or better in either Physics 141 or both Physics 105/106; or consent of the instructor. *Natural World— With Lab course.*

PHYS 144 1 hour. Problem-Solving Workshop for General Physics I (Mechanics)

A workshop where small groups of students work together using computer simulations to solve problems similar to, but more challenging than, the ones given in PHYS 141. Satisfactory/ Unsatisfactory grading only. Must enroll concurrently in PHYS 141.

PHYS 210 3 hrs. Astrophysics

Quantitative study of stellar evolution from proto stars to red giants, white dwarfs, neutron stars, and black holes. Introduction to big bang cosmology. No calculus required. **Prerequisite(s):** PHYS 107 or PHYS 142 or consent of the instructor.

PHYS 215 4 hrs. Mathematical Methods for Physicists

Applications of mathematical methods to physics problems. Vector calculus, linear algebra, ordinary differential equations of first and second Fourier series. Students may obtain one additional hour of credit by concurrently registering in PHYS 216. **Prerequisite(s):** Grade of C or better in MATH 210.

PHYS 216 1 hour. Problem-Solving Workshop for Mathematical Methods for Physicists

A workshop where groups of students work together to solve mathematical physics problems using Maple. Satisfactory/ Unsatisfactory grading only. Extensive computer use required. Taught in a computer lab. **Prerequisite(s):** Credit or concurrent registration in PHYS 215. Recommended to be taken concurrently with PHYS 215.

PHYS 244 3 hrs. General Physics III (Modern Physics)

Special theory of relativity. Particle-wave duality. Uncertainty principle; Bohr model; introduction to quantum mechanics; Schroedinger equation; hydrogen atom; many-electron atoms. Introduction to nuclear and particle physics. **Prerequisite(s):** Grade of C or better in PHYS 107 and grade of C or better in PHYS 108; or grade of C or better ter in PHYS 142.

PHYS 245 4 hrs. General Physics IV (Heat, Fluids, and Wave Phenomena)

Thermodynamic laws and processes; kinetic theory of gases; hydrostatics and fluid flow; general wave phenomena; acoustics; geometrical optics; physical optics. **Prerequisite(s)**: PHYS 142.

PHYS 391 Physics Seminar

Preparation and presentation by students of talks on topics of current interest in physics. Satisfactory/Unsatisfactory grading only. May be repeated to a maximum of 4 hrs. **Prerequisite(s):** Senior standing.

1 hour.

4 hrs.

PHYS 392 2–4 hrs. Physics Research Research under the close supervi-

sion of a faculty member. **Prerequisite(s):** Approval of the department.

PHYS 393 2–4 hrs. Special Problems

Special problems or reading in modern physics under individual arrangement with a faculty member. **Prerequisite(s):** Approval of the department.

PHYS 401 Electromagnetism I

Vector calculus; electrostatic fields in vacuum; solution of electrostatic boundary-value problems; electrostatic fields in material media; electrostatic energy; electric currents. **Prerequisite(s):** PHYS 142 and PHYS 215.

PHYS 402 4 hrs. Electromagnetism II

Magnetic fields of steady currents and magnetic materials; electromagnetic induction; magnetic energy; slowly-varying currents; AC circuits; Maxwell's equations; electromagnetic waves; bounded regions; special relativity. **Prerequisite(s):** PHYS 401.

PHYS 411 4 hrs. Quantum Mechanics I

Wave particle duality; wave functions; Schroedinger equation; mathematical structure of quantum mechanics; operators and observables; matrix representation of operators; three-dimensional Schroedinger equation. **Prerequisite(s):** PHYS 215 and PHYS 244 and PHYS 245; or consent of the instructor.

PHYS 412 4 hrs. Quantum Mechanics II

This is the second semester of a two-semester undergraduate level sequence on the concepts and methods of Quantum Mechanics and their applications. **Prerequisite(s):** PHYS 411.

PHYS 421 4 hrs. Modern Physics: Atoms and Molecules

Hydrogenic atoms, electron spin, external fields, multi-electron atoms, diatomic molecules, line widths, photons, radiation from atoms and other electromagnetic processes, positrons, positronium, elastic electron scattering. **Prerequisite(s):** Credit or concurrent registration in

PHYS 411.

PHYS 425 Modern Optics

Review of electromagnetic wave theory; advanced geometrical optics; Fourier transforms and

5 hrs.

optics; interference and diffraction; laser cavities and gain media; introduction to nonlinear and fiber optics. **Prerequisite(s):** PHYS 244.

PHYS 431 4 hrs. Modern Physics: Condensed Matter

Crystal structures; interatomic binding; lattice vibrations; thermal and magnetic properties; quantum statistical mechanics; free electron theory of metals; electronic band theory; semiconductivity. **Prerequisite(s):** PHYS 411 and PHYS 461; or consent of the instructor.

PHYS 441 4 hrs. Theoretical Mechanics

Covers variable motion, noninertial frames, oscillations, rigid body motion, three-dimensional motion, angular momentum, torque, orbits, Lagrange's equations. **Prerequisite(s):** PHYS 142 and PHYS 215.

PHYS 450 4 hrs. Molecular Biophysics of the Cell

Introduction to force, time energies at nanometer scales; Boltzmann distribution; hydrodynamic drag; Brownian motions; DNA, RNA protein structure and function; sedimentation; chemical kinetics; general aspects of flexible polymers. **Same as** BIOE 450. **Prerequisite(s):** PHYS 245 or the equivalent.

PHYS 451 4 hrs. Modern Physics: Nuclei and Elementary Particles

Accelerators, detectors, symmetries, conservation laws, leptons, weak interactions, electroweak theory, strong interactions, hadrons, nuclear forces, systematics and reactions, nuclear models, nuclear astrophysics, quarks, quantum chromodynamics. **Prerequisite(s):** PHYS 411.

PHYS 461 4 hrs. Thermal and Statistical Physics

Thermal equilibrium (Zeroth Law); thermodynamic states (First Law); irreversibility; entropy (Second Law); thermodynamic potentials and properties; phase transitions; kinetic theory of gases; classical statistical mechanics. **Prerequisite(s)**: PHYS 245.

PHYS 470 6 hrs. Educational Practice with Seminar I

The first half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** Good academic standing in a teacher education program, completion of 100 clock hours of pre-student-teaching field experiences, and approval of the department.

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PHYS 471 6 hrs. Educational Practice with Seminar II

The second half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** Good academic standing in a teacher education program, completion of 100 clock hours of pre-student-teaching field experiences, credit or concurrent registration in PHYS 470, and approval of the department.

PHYS 481 4 hrs. Modern Experimental Physics I

Theory and experimental use of linear circuits, semiconductor devices, amplifiers, oscillators. Techniques and experiments in atomic, molecular, and solid-state physics. **Prerequisite(s):** PHYS 244.

PHYS 482 4 hrs. Modern Experimental Physics II

Techniques and experiments in nuclear and particle physics. Gamma-gamma correlations, muon lifetime, Compton scattering, alpha particle scattering. Computer-based experimentation. **Prerequisite(s):** PHYS 481.

PHYS 491 1–4 hrs.

Special Topics in Physics Selected topics of current interest in physics. May be repeated. **Prerequisite(s):** PHYS 215 and sophomore standing or above; or approval of the department.

PHYS 494 2–4 hrs. Special Topics in Physics Teaching

Seminar on various topics related to the teaching of physics. Subjects are announced. May be repeated. Students may register in more than one section per term. Supervised teaching practice included. **Prerequisite(s):** Graduate standing or approval of the department.

PHYS 499 1 hour. Survey of Physics Problems

Problem-solving techniques applied to the variety of undergraduate physics topics. May be repeated up to 1 time. No graduation credit for graduate students. Grade of C or better required to graduate with an undergraduate degree in physics. **Prerequisite(s)**: Credit or concurrent registration in PHYS 481.

Physiology and Biophysics

PHYB 301 5 hrs. Human Physiology and Pathophysiology I

Designed for the College of Pharmacy. Physiology and pathophysiology of the nervous, cardiovascular, and excretory systems at the cell, tissue, organ, and system levels. **Prerequisite(s):** Enrollment in the Doctor of Pharmacy program.

PHYB 302 5 hrs. Human Physiology and Pathophysiology II

Pathophysiology II Continuation of PHYB 301. Physiology and pathophysiology of the blood, respiratory, endocrine, and reproductive systems. General pathology, mechanisms of disease. **Prerequisite(s):** PHYB 301 and enrollment in the Doctor of Pharmacy program.

PHYB 396 1–4 hrs. Independent Study

Independent study (non-laboratory) for advanced undergraduates majoring in appropriate disciplines. **Prerequisite(s):** Consent of the instructor.

PHYB 399 1–4 hrs. Laboratory Research

Laboratory research for advanced undergraduates majoring in appropriate disciplines. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Consent of the instructor.

Polish

POL 101 4 hrs. Elementary Polish I

Phonetics, introductory grammar, and reading. Four additional half hours each week in the language laboratory. **Prerequisite(s):** For students who have had no formal work in Polish.

POL 102 4 hrs. Elementary Polish II

Continues POL 101. Four additional half hours each week in the language laboratory. **Prerequisite(s):** POL 101 or the equivalent.

POL 103 4 hrs. Intermediate Polish I

Continues POL 102. **Prerequisite(s):** POL 102 or the equivalent.

POL 104 4 hrs. Intermediate Polish II

Continues POL 103. **Prerequisite(s):** POL 103 or the equivalent.

POL 115 3 hrs. Introduction to Polish Culture

Main trends in Polish culture in the context of parallel developments in Western European civilization. Taught in English. *World Cultures course.*

POL 120 3 hrs. The Polish Short Story in Translation

Translation Introduction to representative Polish short stories of the nineteenth and twentieth centuries; the elements of fiction; close reading of prose texts. Taught in English. *Creative Arts, and World Cultures course.*

POL 130 3 hrs. Masterworks of Polish Literature in Translation

Literature in Iranslation The most important works of Poland's greatest writers in the areas of poetry, drama, and prose. Taught in English. Creative Arts, and World Cultures course.

POL 140 3 hrs. Polish Drama in Translation Elementary aspects of Polish dramatic theory and close reading of representative scripts selected from various periods. Same as

matic theory and close reading of representative scripts selected from various periods. **Same as** THTR 140. Taught in English. *Creative Arts, and World Cultures course.*

POL 150 3 hrs. Introduction to Polish Cinema

Introduction to the major themes and techniques of Polish film art; comparative survey of narrative film and literature. Taught in English. Films screened with English subtitles. *Creative Arts,* and World Cultures course.

POL 234 3 hrs. History of Poland

Political, socioeconomic, and cultural developments since the first Polish state, the union with Lithuania, the struggle for independence, Communist rule to the present. **Same as** HIST 234. *Individual and Society, and Past course.*

POL 241 3 hrs. Mickiewicz and Sienkiewicz: Polish Romanticism and Realism

The study of two major Polish authors as foremost representatives of Polish romanticism (Mickiewicz) and realism (Sienkiewicz). Taught in English. **Prerequisite(s):** Sophomore standing or consent of the instructor. *Creative Arts, and World Cultures course.*

POL 301 3 hrs. Polish Composition and Conversation I

Composition and conversation, systematic grammar, vocabulary development, and aural comprehension. **Prerequisite(s):** POL 104 or the equivalent.

POL 302 3 hrs. Polish Composition and

Conversation II Continues POL 301. Prerequisite(s): POL 301.

POL 321 3 hrs. Introduction to Polish Literature I

Old Polish literature from medieval Latin and vernacular texts to masterpieces of the Polish Enlightenment. Taught in English. **Prerequisite(s):** Junior standing or consent of the instructor.

POL 322 3 hrs. Introduction to Polish Literature II

Modern Polish literature in Poland and abroad. Taught in English. **Prerequisite(s):** Junior standing or consent of the instructor.

POL 399 1–3 hrs.

Independent Study Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 6 hrs. **Prerequisite(s):** Junior standing, consent of the instructor and consent of the head of the department.

POL4013 OR 4 hrs.Polish Composition and
Conversation III

Development of oral and writing skills: expanding vocabulary and perfecting style. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** POL 302.

POL 402 3 OR 4 hrs. Polish Composition and

Conversation IV Continues POL 401. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** POL 401 or the equivalent.

POL 410 3 OR 4 hrs. Structure of Modern Polish

A synchronic linguistic analysis of Polish substantives, pronouns, verbs, deverbal nouns, and minor parts of speech from a syntagmatic and paradigmatic point of view. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** POL 402 or the equivalent.

POL 450 3 OR 4 hrs. Studies in Polish Drama Main trends in Polish drama, leading playwrights, their aesthetics, and philosophy in the context of European drama and from the Renaissance to the present. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). **Prerequisite(s):** Advanced undergraduate

standing.

POL 460 3 OR 4 hrs. Studies in Polish Literature Literary trends in Polish poetry and prose; their poetics, aesthetics, and philosophy in their European context. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). Prerequisite(s): Advanced undergraduate standing.

POL 499 1–4 hrs. Independent Study

Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 8 hrs. Graduate students may register for more than one section per term. **Prerequisite(s):** Senior or graduate standing, consent of the instructor and consent of the head of the department.

Political Science

POLS 101 3 hrs. Introduction to American Government and Politics

Introduction to American political ideas, individual and group political behavior, institutions of national government, and public policy. May be taught in blended learning format. Please check the *Schedule of Classes* for blended sections. *Individual and Society, and U.S. Society course.*

POLS 103 3 hrs. Who Rules?: Introduction to the Study of Politics

An introduction to the concepts and methods of political analysis, philosophy, and action. Substantive focus on the selection of political leaders in the U.S. U.S. Society course.

Course Descriptions

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PHYSIOLOGY AND BIOPHYSICS
POLITICAL SCIENCE

UIC

POLS 105 3 hrs. Honors Seminar in Political

Science Selected problems in political analysis. Course content and format varies according to programmatic needs and instructor expertise. Prerequisite(s): Membership in the Honors College or consent of the instructor.

POLS 111 3 hrs. United States Politics: **Current Problems and** Controversies

Selected current political problems and controversies are analyzed and placed in the context of past and future public policies and the development of political institutions.

POLS 112 3 hrs. **African American Politics** and Culture

A survey of African American political and cultural activism from the Black Convention Movement of the 1830s to contemporary times. Same as AAST 103. Individual and Society. and U.S. Society course.

POLS 120 3 hrs. Introduction to Political Theory

Competing accounts of the relationships among individuals, society, and the state. Analysis of differing conceptions of human nature through readings in ancient and modern classics Individual and Society, and Past course.

POLS 130 3 hrs. Introduction to Comparative Politics

Comparative study of political institutions, political culture, and political processes in selected major countries of the world. Same as INST 130 and LALS 130. Individual and Society, and World Cultures course.

POLS 184 3 hrs. Introduction to International Relations

Political, military, and economic relations between states, international organizations, and transnational actors. Problems of war, imperialism and the world economy. Prospects for global cooper-ation. **Same as** INST 184. Individual and Society, and World Cultures course.

POLS 190 3 hrs. Scope of Political Science

Politics as law and institutions, markets and power, and culture and identity. Emphasizes writing of essays. Prerequisite(s): Freshman, sophomore or junior standing. Seniors require consent of the instructor. Individual and Society course.

POLS 200 3 hrs. **Methods of Political Science**

Different methods for doing research on law and institutions, markets and power, and identity and culture. Problems in explanation and interpretation. Prerequisite(s): POLS 190.

POLS 201 3 hrs. Political Data Analysis

Introduction to basic elements of statistics and data analysis for political science. Includes descriptive and inferential statistics; introduction to UIC computer facility and statistics software. Prerequisite(s): MATH 090 or MATH 092 or MATH 118.

POLS 202 3 hrs. **Topics in Political Practice**

Selected topics in contemporary political practice. May be repeated to a maximum of 6 hours if topics vary. Students may register in more than one section per term. Prerequisite(s): POLS 101 or POLS 190.

POLS 206 3 hrs. **Political Behavior**

An introduction to political behavior; includes the structure and functions of political attitudes, the role of personality, political socialization, electoral behavior, and related topics. Prerequisite(s): POLS 101.

POLS 207 3 hrs. The Mass Media and Politics Impact of mass media coverage on political attitudes and the conduct of American politics. Communication policies and media institutions in times of rapid technological change. Same as COMM 207. Prerequisite(s): One course in political science, sociology or contemporary history.

POLS 209 3 hrs. Latinos and Politics

Latino politics and politicians in the context of the American political system. The political system, Latino participation, experience, and research on political processes. Same as LALS 283. U.S. Societv course.

POLS 210 3 hrs. Introduction to Urban Politics Growth and legal problems of cities: intergovernmental relations; powers and forms of government; pressure group activity; municipal functions and services; and revenue problems. Prerequisite(s): POLS 101 or POLS 103 or POLS 190.

POLS 211 3 hrs. **Chicago's Future**

Emphasis on the political and governmental future of Chicago. Covers racial and ethnic politics, metropolitan, city, and neighborhood government, machine versus reform politics. Prerequisite(s): POLS 101 or POLS 103 or POLS 190.

POLS 212 3 hrs. State Government

Organization and powers of state governments in the U.S.; constitutions and problems of revision; the major institutions and their interrelationships, intergovernmental relations. Prerequisite(s): POLS 101 or POLS 103 or POLS 190.

POLS 225 3 hrs. **Political Interest Groups**

Pluralism, the logic of collective action, the special-interest state, public-interest groups, and corporatism. **Prerequisite(s):** POLS 101 or consent of the instructor.

3 hrs.

POLS 226 Political Parties

Historical development, organization, and functioning of state and national parties; committees, conventions, campaigns and finances; party platforms and issues. Prerequisite(s): POLS 101 or POLS 103 or POLS 190.

POLS 227 Voting Behavior and 3 hrs. Elections

Examination of elections, voting behavior, election law, and voting theories and influences. Prerequisite(s): Grace of C or better in POLS 101.

POLS 228 3 hrs. **U.S. Congress**

Introduction to the structures and processes of congressional politics. Emphasis on elections, organization, interinstitutional relations and authorizations and appropriations processes Prerequisite(s): POLS 101.

POLS 229 3 hrs. The American Presidency Examination of such phenomena as presidential elections; the pres-

idency and the Constitution; the presidency and public administration; the president as policymaker; presidential leadership. Prerequisite(s): POLS 101.

3 hrs.

3 hrs.

POLS 231 Politics in China

The dynamics of the Chinese Communist revolution; post-Mao reforms; the structure and operation of key political institutions; relations with major powers. Same as ASST 231. Prerequisite(s): POLS 130 or POLS 190; or consent of the instructor. World Cultures course.

POLS 232 3 hrs.

Politics in Japan and Korea Sources, dynamics, and patterns of politics in Japan and the two Koreas. Appraisal of the Japanese model. Comparison of Japan and Korea. Same as ASST 232. Prerequisite(s): POLS 130 or POLS 190 or consent of the instructor. World Cultures course.

POLS 233 British Politics and

Government

Examination of the British political system.

POLS 234 3 hrs. Western European Politics and Government

Comparison of government and politics of major Western European countries. Topics include political culture, political parties, elections, legislatures, executive arrangements, and the European community. Prerequisite(s): POLS 130 or POLS 190 or consent of the instructor.

POLS 235 3 hrs. **Politics and Government of** Russia

The nature, evolution, and problems of political process and institutions in the former USSR and successor states. Prerequisite(s): POLS 130 or

POLS 190. **POLS 236** 3 hrs.

Politics and Government of Eastern Europe

Similarities and differences of the political system of eastern European states and the sources and meaning of political change. Prerequisite(s): POLS 130 or POLS 190.

POLS 242 3 hrs. **Government and Politics of** Latin America

An examination of government and politics in selected Latin American countries. Comparative and historical analysis of dictatorship, democracies, political institutions, and parties. Same as LALS 242. Prerequisite(s): Any 100-level course in Latin American and Latino studies or political science.

POLS 243 3 hrs. Politics and Government of the Middle East

Contemporary Middle East political institutions, culture, processes, and conflicts. Emphasis on interaction of traditional and modern forces, such as Islam, nationalism, political elites, ideologies, states. **Same as** JST 243. Prerequisite(s): POLS 130 or POLS 190; or consent of the instructor. World Cultures course.

POLS 245 3 hrs. **Politics and Government of** Africa

Contemporary political systems of selected African countries with emphasis on political leadership, nationalism, ideological trends, and economic development. Same as AAST 245. Prerequisite(s): POLS 130 or POLS 190 or AAST 100; or consent of the instructor. World Cultures course.

POLS 249 3 hrs. **Political Economies of Advanced Industrial** Countries

The role of governments in the economies of the U.S., Western Europe, and Japan. Governmentindustry relations, central planning macroeconomic and industrial policies. Prerequisite(s): POLS 130 or

consent of the instructor.

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POLS 251 3 hrs. African Americans and the Law to 1954

Survey of the African American constitutional experience from the 1600s until the landmark *Brown* decision in 1954 striking down state-sponsored racial segregation and de jure discrimination. **Same as** AAST 251.

Prerequisite(s): Grade of C or better in AAST 100 or grade of C or better in POLS 101 or grade of C or better in POLS 103 or grade of C or better in POLS 190; or consent of the instructor. Past, and U.S. Society course.

POLS 252 3 hrs. African Americans and the Law, since 1954

Survey of the African American constitutional experience since the landmark 1954 *Brown* decision to the present day. **Same as** AAST 252. **Prerequisite(s):** Grade of C or better in AAST 100 or grade of C or better in POLS 101 or grade of C or better in POLS 103 or grade of C or better in POLS 190; or consent of the instructor. **Recommended**

background: AAST 251 or POLS 251. Past, and U.S. Society course.

POLS 258 3 hrs. The Judicial Process

Dispute settlement and policy making in state and federal court systems; judicial decision making and the impact of decisions on the polity. **Prerequisite(s):** POLS 101 or POLS 103 or POLS 190.

POLS 275 3 hr Gender in Latin America

Latin American Latin American women in historical perspective from pre-Columbian and Iberian societies to the present. **Same as** GWS 275 and LALS 275. World Cultures course.

POLS 281 3 hrs. United States Foreign Policy Internal and external factors that influence formulation and execution of U.S. foreign policy. Major problems of contemporary foreign policy: constitutional, organizational, and intellectual factors. **Prerequisite(s):** POLS 101 or POLS 190.

POLS 282 3 hrs. National Model United Nations

Students prepare to assume the role of diplomatic representatives at the National Model United Nations Conference. May be repeated to a maximum of 6 hours with approval. Approval to repeat course granted by the department. **Prerequisite(s):** Consent of the instructor.

POLS 283 3 hrs. International Political Economy

Political underpinnings and ramifications of international economic relations. Foreign trade policy, multinational corporations, oil North-South relations, economic warfare. **Same as** INST 283. **Prerequisite(s):** POLS 184 or INST 184 or consent of the instructor.

POLS 284

International Security International conflict and cooperation, including war, nationalism, global inequality, and the environment. Same as INST 284. Prerequisite(s): POLS 184 or INST 184 or consent of the instructor.

3 hrs.

POLS 286 3 hrs. The United Nations and Other International Organizations

The development, structure, functioning, and impact of the United Nations and other international organizations. An assessment of their contributions and limitations. **Prerequisite(s):** POLS 184 or consent of the instructor.

POLS 287 3 hrs. International Law

The nature, scope, and limits of international law in the contemporary world. Examines three dimensions of international law: doctrine, practice, and jurisprudence (case-law). **Prerequisite(s)**: POLS 184 or consent of the instructor.

POLS 290 3 hrs.

History of Political Thought I Western political theorists from ancient Greece through the sixteenth century, including Plato, Aristotle, Aquinas, and Machiavelli. Prerequisite(s): POLS 120 or POLS 190.

POLS 291 3 hrs. History of Political Thought II Western political theorists from

the seventeenth century through modern times, including Hobbes, Locke, Marx, Mill and Nietzsche. **Prerequisite(s):** POLS 190 or POLS 120.

POLS 293 3 hrs. Possible Political Systems: Ideal and Actual

Political possibilities beyond those that presently prevail. Arguments for gender equality, participatory democracy, and alternative technologies are examined and evaluated. **Prerequisite(s):** POLS 190 or consent of the instructor.

POLS 295 3 hrs. Introduction to Marxism

Examination and evaluation of the basic theories of Marx and Engels to determine their contribution to the understanding of contemporary politics. **Prerequisite(s):** POLS 190 or consent of the instructor.

POLS 297 3 hrs.

American Political Theories American political theorists from the colonial period to the present, including Paine, Madison, Hamilton, Thoreau, Calhoun, Sumner, DuBois, and Dewey. Prerequisite(s): POLS 190 or consent of the instructor.

POLS 300 3 hrs. Symposium on Politics

Selected problems in politics. Course content and format will vary to adapt to the changing political scene. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** Junior or senior standing or consent of the instructor.

POLS 301 6 hrs. Field Experience in Political Science

Provides students an opportunity to apply theoretical knowledge in real-life political settings, such as governmental agencies, political parties or interest groups. **Prerequisite(s):** Junior or senior

standing; at least 12 credit hours in political science, including courses relevant to the field experience; GPA of 3.00 in political science; and consent of the instructor.

POLS 302 6 hrs. Great Cities Internship

Provides students an opportunity to apply theoretical knowledge and conduct research in metropolitan organizations through field placements and seminars. **Same as** UPP 302. **Prerequisite(s):** Junior or senior standing and grade point average of 3.00, or consent of the instructor.

POLS 303 1–3 hrs. Supervised Readings and Research

Supervised readings and research in political science. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

POLS 305 3–6 hrs. Honors Course

Independent reading and research for students seeking departmental distinction. May be repeated to a maximum of 6 hrs. **Prerequisite(s):** A 3.25

University grade point average and a 3.50 political science grade point average and approval of the department. Open only to seniors.

POLS 307 3 hrs.

Political Psychology Analysis of mass and elite political behavior from the perspectives of several psychological approaches, including psychoanalytic, behavioral, humanistic, and social psychology theories. Prerequisite(s): One course in political science, psychology, or sociology.

POLS 309 3 hrs. Topics in Political Behavior

Intensive analysis of topics in political behavior. Possible topics include: elections and campaigns, political culture. May be repeated to a maximum of 6 hrs. **Prerequisite(s):** POLS 206 or consent of the instructor.

POLS 310 3 hrs.

Governing the Megalopolis Examination of political/governmental issues in massive metropolitan areas, utilizing the six-county greater Chicago area for example. **Prerequisite(s):** POLS 101 or POLS 200 or the equivalent or consent of the instructor.

POLS 311 3 hrs. Black Politics in the United States

Historical analysis of Black electoral politics in the U.S., including traditional political party participation and movement politics. **Same as** AAST 306. **Prerequisite(s):** Three courses in political science, history or sociology, or consent of the instructor.

POLS 312 3 hrs. Topics in Local Politics

Intensive examination of selected problems of local politics. Actual research involvement. Topics vary. **Prerequisite(s):** POLS 101 and POLS 210.

POLS 313 3 hrs. Urban Political Economy

The interaction of the national political economy and urban political structures and their impact on social problems, racial and class conflict, and fiscal crisis. **Prerequisite(s):** POLS 101 and POLS 200.

POLS 314 3 hrs. Neighborhood and Community Political Organizations

The strategies, strengths and weaknesses of community and neighborhood organizations designed around human capital investment (such as education, employment, crime and violence, and community preservation). **Prerequisite(s):** POLS 101 and POLS 200.

POLS 329 3 hrs.

Seminar on American Politics Advanced seminar on special topics in American politics. Content varies. May be repeated to a maximum of 6 hrs. **Prerequisite(s)**: POLS 101 and POLS 200.

POLS 3483 hrs.Seminar: Political Problems
of Developing SocietiesSelected aspects of the politics
and countries of Asia, Africa, and

and countries of Asia, Africa, and Latin America. **Same as** LALS 348. **Prerequisite(s):** POLS 200 and POLS 130; or consent of the instructor.

POLS 349 3 hrs. Topics in Comparative Politics

Selected problems in comparative politics. **Same as** INST 349. May be repeated to a maximum of 6 hours if topics vary. **Prerequisite(s):** POLS 130 or INST 130 and POLS 200.

POLS 353 3 hrs. Constitutional Law

Selected constitutional provisions and principles as they developed through Supreme Court interpretation. Major attention given to powers and practices of, and interactions among governmental institutions. **Prerequisite(s):** POLS 101 or consent of the instructor.

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POLITICAL SCIENCE

POLITICAL SCIENCE
PORTUGUESE
PSYCHOLOGY

POLS 354 3 hrs. The Constitution and Civil Liberties

Civil rights, including religion, speech, assembly, press, and rights of the accused. **Prerequisite(s):** POLS 101 or consent of the instructor.

POLS 356 3 hrs. Constitutional Law: Women, Gender, and Privacy

A multidisciplinary examination of U.S. constitutional law and politics in shaping issues of gender, privacy, race, and sexual orientation; including reproduction, labor, sexual harassment, political participation, and women and crime. Same as AAST 356 and GWS 356. Prerequisite(s): Grade of C or better in POLS 101 or grade of C or better in POLS 112 or grade of C or better in AAST 100 or grade of C or better in AAST 100 or grade of C or better in GWS 101; or consent of the instructor.

POLS 359 3 hrs. Topics in Public Law

Selected problems arising in public law and judicial arenas. May be repeated to a maximum of 6 hours if topics vary. **Prerequisite(s):** POLS 190 or POLS 200 or POLS 258.

POLS 384 3 hrs. International Relations Theory

Philosophical foundations of international relations, including assumptions of anarchy, rationality, power, and the state. Applications to security and political economy.

Prerequisite(s): POLS 283 or POLS 284 or consent of the instructor.

POLS 389 3 hrs. Seminar: Topics in International Relations

Selected topics in international relations. Topics may vary and may cover global military, economic, cultural, ecological, or methodological issues. May be repeated to a maximum of 6 hours if topics vary. **Prerequisite(s):** POLS 184 and POLS 200.

POLS 399 3 hrs.

Seminar in Political Theory Selected topics and problems in political theory. May be repeated to a maximum of 6 hrs. Prerequisite(s): POLS 120 and POLS 200.

POLS 401 3 OR 4 hrs. Data Analysis I

Statistical inference for the social sciences. Emphasis on univariate and bivariate statistics. **Same as** PPA 401. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s)**: POLS 200 and POLS 201; or graduate standing.

POLS 405 3 OR 4 hrs. The Problem of Justice

Premodern and modern views of justice and their practical utility in analyzing legislative, executive, and judicial programs for enhancing or restricting justice. **Same as** CLJ 405. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** CLJ 101, plus two 200-level courses in criminology, law, and justice or two 200-level courses in political science.

POLS 435 3 OR 4 hrs. Special Topics in Bureaucracy

Consideration of timely or enduring issues in policy formation and bureaucracy not available in regularly offered courses. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. **Prerequisite(s):** Consent of the instructor.

POLS 451 3 OR 4 hrs. Law and Public Policy

The role of law and legal institutions in the development and implementation of public policies. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Graduate standing or consent of the instructor.

POLS 465 3 OR 4 hrs. Topics in Sociology of Politics

Intensive examination of a specialized topic announced when the class is scheduled. **Same as** SOC 465. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. **Prerequisite(s)**: 6 hours of upper-division sociology or consent of the instructor.

POLS 467 3 OR 4 hrs. Public Opinion and Political Communication

Nature of public opinion and political communication systems. Patterns of opinion distribution and its measurement. Forces shaping public opinion and its impact on public policy. **Same as** COMM 467. 3 undergraduate hrs. 4 graduate hrs.

Prerequisite(s): POLS 200 or the equivalent or consent of the instructor.

POLS 482 3 OR 4 hrs. Democratic Theory

Democracy as a procedure of government and value commitments associated with this form of government. Special attention paid to classical and modern democracies. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** POLS 290 or POLS 291 or consent of the instructor.

POLS 485 3 OR 4 hrs. Gender and Politics

Impact of gender on basic categories of western political thought. Distinctions between reason and emotion, public and private, among others, examined from feminist perspective. **Same as** GWS 485. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** POLS 190 and one 200-level course in political theory; or consent of the instructor.

POLS 494 3 OR 4 hrs. Topics in Political Science

Selected topics in political science. Topics vary and may cover American politics, law, urban and global politics, cultural, ecological, or methodological issues. May be repeated up to 1 time. **Prerequisite(s):** POLS 190 and POLS 200; or consent of the instructor.

Portuguese

PORT 240 4 hrs. Rapid Portuguese for Romance Language Speakers I

Characteristics of Portuguese grammar from the perspective of Romance languages speakers, leading to basic conversational skills in Portuguese. **Prerequisite(s):** SPAN 202 or ITAL 201 or FR 232; or consent of the instructor.

PORT 241 4 hrs. Rapid Portuguese for Romance Language Speakers II

Characteristics of Portuguese grammar from the perspective of speakers of a Romance language, leading to intermediate to advanced conversational and reading skills in Portuguese. **Prerequisite(s):** Grade of C or better in PORT 240; and sophomore standing or above; or consent of the instructor.

Psychology

PSCH 100 4 hrs. Introduction to Psychology

Survey of basic concepts of contemporary psychology. Introduction to the nervous system, perception, motivation, learning and memory, social behavior, personality, developmental, and clinical psychology. Students under 18 years of age need parental consent to participate in research experiments that are part of the course. Instructions for obtaining parental consent will be provided during class early in the semester. *Individual and Society course*.

PSCH 201 3 hrs. The Psychology of African Americans

Historical analysis of various psychological approaches to the African American experience and identity. Special attention to development of African American psychology as a disciplinary orientation. Same as AAST 201. **Prerequisite(s):** PSCH 100 or consent of the instructor. *Individual and Society, and U.S. Society course.*

PSCH 202 3 hrs. African American Behavioral Patterns

Formal theories on personality in terms of interdependence between personal characteristics, African American culture, and oppression; social-psychological aspects of black identity and interpersonal behavior. **Same as** AAST 202. **Prerequisite(s)**: PSCH 100 or consent of the instructor. **Recommended back**ground: Credit in AAST 201. Individual and Society, and U.S. Society course.

PSCH 210 3 hrs.

Theories of Personality Survey of major theoretical approaches to the study of personality and the evidential basis underlying each approach. Prerequisite(s): PSCH 100. Individual and Society course.

PSCH 231 3 hrs. Community Psychology

Psychological principles, research and interventions concerning community settings; community human services, primary prevention, consultation, advocacy, social ecology, organizational change, and citizen participation. **Prerequisite(s):** PSCH 100. *Individual and Society course.*

PSCH 242 3 hrs. Introduction to Research in Psychology

Techniques and problems associated with the study of behavior. Emphasis on measurement, descriptive statistics, and the principles of experimental design. Exercises involving data collection. Participation in research. **Prerequisite(s):** Grade of C or better in PSCH 100.

PSCH 262 3 hrs. Physiological Psychology

Research and theories concerning the physiological bases of behavior. Understanding of basic brain organization with emphasis on neural substrates of learning, motivation and perception. **Prerequisite(s):** PSCH 100.

PSCH 270 3 hrs. Abnormal Psychology

A survey course covering the assessment, description, causes, and treatments of many psychological disorders, including depression, anxiety disorders, psychosis, sexual dysfunction, and personality disorders. **Prerequisite(s):** PSCH 100. *Individual and Society course.*

PSCH 303 3 hrs. Writing in Psychology

Teaches students the fundamentals of scientific writing including literature reviews, research reports and book reviews. Students will write a minimum of three papers dealing with psychological topics. **Prerequisite(5):** PSCH 242 and ENGL 161 with a minimum grade of C; MATH 118 (or the equivalent) with a minimum grade of C or MATH 090; or consent of the instructor. For psychology majors only.

PSCH 305 3 hrs. History of Psychology

The history of scientific psychology with emphasis on forerunners of modern psychological issues. **Prerequisite(s):** 15 hours in psychology.

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PSCH 312 Social Psychology 3 hrs.

Survey of theory and research in social psychology, emphasizing experimental investigations of attitudes and social cognition, and interpersonal relations and group processes. **Prerequisite(s)**: Grade of C or better in PSCH 242.

PSCH 313 3 hrs. Laboratory in Social Psychology

Conduct laboratory and field experiments in social psychology on problems in attitudes and social cognition, and interpersonal relations and group processes. **Prerequisite(s):** PSCH 343 and credit or concurrent registration in PSCH 312.

PSCH 315 3 hrs. Psychology of Women and Gender

Critical examination of research on women and gender across the life span, including psychological aspects of reproduction, and the way that gender shapes cognition, sexuality, family, friendship, and work experiences. **Same as** GWS 315. **Prerequisite(s):** Grade of C or better in PSCH 242 or consent of the instructor.

PSCH 320 3 hrs. Developmental Psychology

Analysis of research and theory concerning social, cognitive, and biopsychological aspects of human development. **Prerequisite(s):** Grade of C or better in PSCH 242.

PSCH 321 3 hrs. Laboratory in Developmental Psychology

Survey of dominant research strategies in contemporary developmental psychology. Laboratory experience in developmental research. **Prerequisite(s):** PSCH 343 and credit or concurrent registration in PSCH 320.

PSCH 330 3 hrs. Industrial and Organizational Psychology

The application of psychological principles and methods to problems and issues in work organizations. Employee selection, decision making, performance appraisal, group dynamics, leadership, job design. **Prerequisite(s):** Grade of C or better in PSCH 242.

PSCH 331 3 hrs. Laboratory in Community and Prevention Research

Examines how researchers conceptualize, design, implement, and evaluate school and community programs to enhance competence, promote empowerment, and prevent behavioral problems. **Prerequisite(s):** PSCH 231 and PSCH 343.

PSCH 340

3 hrs.

Psychological Testing Introduction to principles of psychological assessment, with an overview of representative techniques. Particular emphasis is placed on objective tests. Prerequisite(s): Grade of C or better in PSCH 242.

PSCH 343 4 hrs. Statistical Methods in Behavioral Science

Introduction to statistical inference, probability distributions, sampling, hypothesis testing, correlation and analysis of variance. Credit is not given for PSCH 343 if the student has credit for IDS 371. **Prerequisite(s):** PSCH 242 and ENGL 161 with a minimum grade of C; MATH 118 (or the equivalent) with a minimum grade of C or MATH 1090; or consent of the instructor. For Psychology majors only.

PSCH 350 3 hrs.

Sensation and Perception Survey of theories and empirical findings in the study of sensation and perception. Emphasis on human vision and audition as information processing systems. **Prerequisite(s):** Grade of C or better in PSCH 242.

PSCH 351 3 hrs. Laboratory in Perception

Laboratory practicum in sensation and perception. **Prerequisite(s):** PSCH 343, and credit or concurrent registration in PSCH 350.

PSCH 352 3 hrs. Cognition and Memory

Survey of experimental findings in human learning, memory, attention, knowledge representation, problem solving, conceptual behavior, and psycholinguistics. **Prerequisite(s):** Grade of C or better in PSCH 242.

PSCH 353 3 hrs. Laboratory in Cognition and Memory

Laboratory practicum in memory, psycholinguistics, problem solving, and reasoning. **Prerequisite(s):** PSCH 343, and credit or concurrent registration in PSCH 352.

PSCH 354 3 hrs. Knowledge Acquisition

Knowledge Acquisition Introduction to belief formation, conceptual change, cognitive development, discovery and invention, schema abstraction, skill acquisition and other cognitive change processes. Research and practical applications. **Prerequisite(s):** Grade of C or better in PSCH 242.

PSCH 360 3 hrs. Learning and Conditioning

Principles of learning: emphasis on parameters of acquisition, extinction and retention of classical and instrumental conditioning and stimulus control of reflexive and voluntary behavior. **Prerequisite(s):** Grade of C or better in PSCH 242.

PSCH 361 3 hrs. Laboratory in Learning and

Conditioning Laboratory practicum in conditioning and simple learning using animal subjects. Emphasis on operant conditioning. Animals used in instruction. **Prerequisite(s):** PSCH 343 and credit or concurrent registration in PSCH 360.

PSCH 363 3 hrs. Laboratory in Physiological Psychology

Laboratory practicum and demonstrations of research techniques used to study the physiological bases of behavior. Animals used in instruction. **Prerequisite(s):** PSCH 343 and credit or concurrent registration in PSCH 262.

PSCH 381 3 hrs.

Psychology of Interviewing Theory, research, and practice of interviewing. Emphasis on developing skills for interviewing individuals. **Prerequisite(s):** PSCH 210 or PSCH 231 or PSCH 312; and a grade of C or better in PSCH 242.

PSCH 382 3 hrs.

Psychological Interventions Application of psychological theories and principles used in psychotherapy and behavior change. Emphasis will be on models for assessment of change, the evaluation of psychotherapy, and selecting appropriate interventions. **Prerequisite(s)**: PSCH 210 or PSCH 231 or PSCH 312; and PSCH 270 and a grade of C or better in PSCH 242.

PSCH 383 3 hrs. Psychology of Groups

Application of psychological theory and research to group functioning and change. Survey of intervention methods emphasizing the development of competence in group participation and leadership. **Prerequisite(s):** PSCH 210 or PSCH 231 or PSCH 312; and a grade of C or better in PSCH 242.

PSCH 385 3 hrs. Fieldwork in Applied Psychology

Supervised practicum as a paraprofessional worker for a minimum equivalent of one day per week in a mental health, developmental disabilities, or industrialorganizational setting.

Prerequisite(s): Restricted to the majors in the Applied Concentration of Psychology. Students must have completed PSCH 340 and PSCH 343; and PSCH 330 or PSCH 381 or PSCH 382 or PSCH 383 or PSCH 386.

PSCH 386 3 hrs. Crisis Counseling Techniques I

Application of psychological theories and principles used for telephone crisis counseling, crisis intervention, and referral. Emphasis will be on models for interviewing and assessment and appropriate intervention in crisis situations. **Prerequisite(s):** Grade of C or better in PSCH 242; and PSCH 210 or PSCH 231 or PSCH 270; and consent of the instructor.

PSCH 387 1 hour. Crisis Counseling Techniques II

Students will work a minimum of one three-hour evening shift per week conducting telephone crisis interventions. Fieldwork required. **Prerequisite(s):** PSCH 386; and consent of the instructor.

PSCH 394 1–3 hrs.

Special Topics in Psychology Lectures devoted to an announced topic. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. Prerequisite(s): Grade of C or better in PSCH 242.

PSCH 395 1–3 hrs. Seminar in Psychology

Seminar devoted to special topics in psychology. Satisfactory/ Unsatisfactory grading only. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** PSCH 242.

PSCH 396 1–3 hrs. Directed Research

Participation in ongoing research in psychology under the direction of a faculty member. A final report describing the research and its theory is required. Satisfactory/Unsatisfactory grading only. May be repeated. Students may register in more than one section per term. A combined maximum of 8 hours of credit in PSCH 387, PSCH 396, PSCH 397, and PSCH 399 may be applied toward the degree. Prerequisite(s): Grade of C or better in PSCH 242. Must consult instructor for permission to enroll.

PSCH 397 1–3 hrs. Readings in Psychology

Bibliographic research on a special topic under the direction of a faculty member. Paper is required for course credit. May be repeated. Students may register in more than one section per term. A combined maximum of 8 hours of credit in PSCH 387, PSCH 396, PSCH 397, and PSCH 399 may be applied toward the degree. **Prerequisite(s):** PSCH 343 and consent of the instructor. Must consult instructor for permission to enroll.

UIC

PSYCHOLOGY

Course Descriptions

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Course Descriptions

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PSCH 399 1–4 hrs.

Independent Research Individual research on a special topic under the direction of a faculty member. A paper is required for course credit. May be repeated. Students may register in more than one section per term. A combined maximum of 8 hours of credit in PSCH 387, PSCH 396, PSCH 397, and PSCH 399 may be applied toward the degree. Prerequisite(s): PSCH 343; one from PSCH 313, PSCH 321, PSCH 351, PSCH 353, PSCH 361, PSCH 363; a 3.00 grade point average; membership in one of the departmental distinction programs; consent of the instructor and the director of undergraduate studies.

PSCH 411 3 hrs. Stereotyping, Prejudice, and Racism

Psychological research and theory concerning stereotyping, prejudice, and racism. Historical conceptualization, development, causes, expression, and psychological consequences of prejudice, as well as theories of prejudice reduction. **Prerequisite(s):** Graduate standing in psychology

or consent of the instructor.

PSCH 415 3 hrs. Social Bases of Health Behavior

Psychological theory and research concerning the coronary-prone personality, pain management, controlling adherence to medical regimens, biofeedback, smoking, and weight control. **Prerequisite(s):** PSCH 270 and consent of the instructor, or graduate standing.

PSCH 417 3 hrs. Psychology and Law

Application of psychological theories to the development, operation and effects of law; evaluation of different and similar approaches of law and psychology. **Prerequisite(s):** PSCH 312 or consent of instructor.

PSCH 420 3 OR 4 hrs. Social Development of Urban Children

General principles of social development and socialization during childhood and the factors common to urban children that illustrate and modify these principles. **Same as** EPSY 420. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Admission to a graduate program in education or psychology, or consent of the instructor.

PSCH 422 3 hrs. Advanced Developmental Psychology and Educational Processes

Focuses on cognitive and social development from birth to adolescence. Examines relations between development, learning, and educational processes. **Same as** ED 422. **Prerequisite(s):** PSCH 100 and any one from ED 210, PSCH 259, PSCH 320;

ED 210, PSCH 259, PSCH 320; or graduate standing and consent of the instructor.

PSCH 423 3 hrs. Characteristics of Early Adolescence

Physiological, social, emotional, and cognitive development of early adolescence. The relationship between these developmental characteristics and success in the middle grades. **Same as** EPSY 446. **Prerequisite(s):** ED 210 or ED 421 or ED 422 or PSCH 422 or the equivalent, and approval of the College of Education; or admission to the PhD in Psychology program; or consent of the instructor.

PSCH 429 3 OR 4 hrs. Constructivist Approaches to Development: Piaget and Vygotsky

Plaget's and Vygotsky's theories of development of knowledge. Empirical and logico-mathematical forms of knowledge. Thought and action. Thought and language. **Same as** EPSY 429. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** ED 422 or PSCH 422 or the equivalent and graduate standing in education or graduate standing in psychology or consent of the instructor.

PSCH 443 3 hrs. Advanced Statistics

Design and analysis of experiments: between, within factorial and mixed factorial designs and introduction to multiple regression. For students planning research careers or advanced degrees. **Prerequisite(s):** PSCH 343.

PSCH 452 3 hrs. Cognitive Psychology of Memory and Attention

A survey of empirical research and theories concerning the human memory system and the encoding, retention, retrieval of information in that system, and research and theories of attention. **Prerequisite(s):** Graduate standing; or PSCH 352 and consent of the instructor.

PSCH 454 3 hrs. Cognitive Psychology of Language

Provides students with a survey of methods, theory, and research in language and discourse processing. **Same as** COMM 454 and LING 474. **Prerequisite(s)**: Graduate standing or consent of the instructor.

PSCH 455 3 hrs. Cognitive Psychology of Thinking

Introduces students to research and theory concerning higher mental processes, including problem solving, reasoning, judgment, and decision making.

Prerequisite(s): Graduate standing; or PSCH 352 and consent of the instructor.

PSCH 457 3 hrs. Cognitive Psychology of Skill and Knowledge Acquisition

The course approaches learning from a variety of cognitive perspectives. The instruction is organized around discussions of original research articles. **Prerequisite(s):** Previous knowledge of cognitive psychology (with at least an undergraduate survey course) or admittance into the Cognitive Division graduate program.

PSCH 459 Cognitive Methods

Hands-on training in the methods of cognitive psychology, especially computational modeling and the analysis of verbal protocols and other types of trace data. **Prerequisite(s):** Graduate standing or consent of the instructor.

3 hrs.

3 hrs.

PSCH 460 Advanced Learning

Methods, results, and interpretation of experimental studies of basic learning processes in animal and human subjects. **Prerequisite(s):** Graduate standing; or PSCH 360 and PSCH 361 and consent of the instructor.

PSCH 462 3 hrs. Neural Basis of Learning and Memory

Theory and research on the anatomical, electrophysiological, and chemical bases of learning and memory in humans and other animals. **Prerequisite(s):** Graduate standing; or PSCH 262 and consent of the instructor.

PSCH 465 3 hrs. Neural Basis of Perception

Psychophysical and physiological studies of sensory systems and processes. Primary emphasis on the early processing of visual stimuli. **Prerequisite(s):** Graduate standing; or PSCH 351 and consent of the instructor.

PSCH 466 3 hrs. Neural Basis of Motivation

Review of empirical data and theories concerning the physiological basis of motivational processes in animals and humans. **Prerequisite(s):** Graduate standing; or PSCH 262 and consent of the instructor.

PSCH 467 3 hrs. Fundamentals of Neuroscience

Basic principles of neurophysiology and neuropharmacology, including logic bases of nerve action, chemistry of synapses and actions of pharmacological agents. **Prerequisite(s):** PSCH 262 or graduate standing.

1 hour.

4 hrs.

PSCH 481 Interviewing

Lecture on the theory and practice of clinical interviewing with supervised experience. Satisfactory/Unsatisfactory grading only. **Prerequisite(s):** Graduate standing in psychology or consent of the instructor.

PSCH 483 Neuroanatomy

Organization of the nervous system, with an emphasis on mammals. **Same as** BIOS 483 and NEUS 483. Animals used in instruction. **Prerequisite(s):** BIOS 272 or BIOS 286 or BIOS 325 or PSCH 262; or consent of the instructor.

PSCH 484

Neuroscience I Neuroscience as an integrative discipline. Neuroanatomy of vertebrates, neural development, cellular neurobiology, action potential mechanisms, synaptic transmission and neuropharmacology. Same as BIOS 484 and PHIL 484. Prerequisite(s): BIOS 286 or PSCH 262.

PSCH 485 3 hrs. Neuroscience II

Intergrative neuroscience, continuation of BIOS/PSCH/PHIL 484. Sensory and motor systems; learning, memory, and language. Pathology of nervous systems. Philosophical perspectives, and modeling. **Same as** BIOS 485 and PHIL 485. **Prerequisite(s):** BIOS 484.

PSCH 494 1–4 hrs. Special Topics in Psychology

Advanced treatment of an announced topic. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Graduate standing or consent of the instructor.

PSCH 495 1–3 hrs. Seminar in Psychology

Seminar devoted to special topics in psychology. Satisfactory/ Unsatisfactory grading only. May be repeated to a maximum of 9 hrs. Students may register in more than one section per term. **Prerequisite(s):** Graduate standing or consent of the instructor.

Public Administration

PA 400 3 OR 4 hrs. Public Administration Theory PA as a professional and scholarly area of knowledge and practice focusing on administrative reform and its intellectual roots. Politics versus administration, efficiency, effectiveness, representative bureaucracy, and market versus bureaucraci alternatives. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s)**: Admission

to the MPA program or consent of the instructor.

PA4074 hrs.Data Analysis for PublicAdministration

Topics and methods of analyzing information relevant to the administration and management of public programs and organizations. Includes causation, univariate statistics, significance testing, correlation, and regression. **Prerequisite(s):** Appropriate score on the department placement test; and graduate standing; or consent of the instructor. Admission to the MPA program or consent of the instructor.

3 hrs.

PA 410 3 OR 4 hrs. Economics for Public Administration and Policy Decisions

Basic economic tools and methods relevant to public administration and current policy, including opportunity cost, competition versus monopoly, economic efficiency, equity, market failure, public goods, and externalities. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Appropriate score on the department placement test and graduate standing and admission to the MPA program; or consent of the instructor.

PA 415 3 OR 4 hrs. Organization Theory and Public Management

Theories and concepts of organizational behavior and public management from economics, sociology, and political science. Organizational decision making, bureaucracy, organizational change and learning, public versus private organizations, leadership, and organizational culture. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Admission to the MPA program or consent of the instructor.

PA4604 hrs.Data Management

Database theory and constructing and managing databases relevant to the operation of government. Utilizes database software and allows students to gain practice with complex database programs and development of a database system. **Prerequisite(s):** Admission to the MPA program or consent of the instructor.

PA4614 hrs.Management of Information
Technology in Government

Concepts and methods of planning, implementing, and managing new information technology or modifying existing technology. **Prerequisite(s):** Admission to the MPA program or consent of the instructor.

PA 462 4 hrs. Project Management for Public Managers

Discusses the theory, principles, tools, and techniques behind solid project management. The Project Management Institute's (PMI) standards for project management will be emphasized throughout the course.

PA4634 hrs.The Internet and PublicAdministration

Application of the Internet for public management. Web-based service delivery, online governance, the technological divide, and the changing role of public managers. **Prerequisite(s):** Admission to the MPA program or consent of the instructor.

PA4644 hrs.Technology and Innovation

Theory The course focuses on theories surrounding the creation, development, transfer, and use of technology. **Prerequisite(S):** Admission to the PhD in Public Administration program or con-

PA 465 4 hrs. Geographic Information Systems for Public Managers

sent of the instructor.

Systems for **rubric mainagers** Individuals completing this course will have an understanding of some fundamental GIS tools and applications as well as the challenges in implementing and sustaining a GIS function in the public setting.

PA 466 4 hrs. Science, Technology and Public Policy

This course addresses the relationships between public policy and science and technology in the United States. **Prerequisite(s):** Admission to the PhD in Public Administration program or consent of the instructor.

PA 494 3 OR 4 hrs. Special Topics in Public Administration

Consideration of timely or enduring issues in public administration not available in regularly offered courses. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. **Prerequisite(s):** Admission to the MPA program or consent of the instructor.

Religious Studies

RELS 115 3 hrs. Understanding the Bible as Literature

A broad overview of various literary genres in the Bible such as origin narrative, historical narrative, poetry, wisdom literature, prophetic/apocalyptic literature, parable, and epistle. **Same as** ENGL 115 and JST 115. *Creative Arts, Past, and World Cultures course.*

RELS 120 3 hrs. Catholic Thought: An Introduction

Introduction Introduction to the main topics, interests, and methods of Catholic thought. **Same as** CST 120. *Past course.*

RELS 124 3 hrs.

Hebrew Bible A study of the Five Books of Moses (a.k.a Torah or Pentateuch) within the contexts of the ancient Near East and biblical literature. Same as CL 124 and JST 124. Taught in English. Past course.

RELS 130 3 hrs. Introduction to Islam

Introductory study of the religion, culture, and present variety of Islam in Islamic countries and in the West. *World Cultures course.*

RELS 150 3 hrs.

Catholicism in U.S. History The Catholic experience in the United States from its colonial origins to the present. Same as CST 150 and HIST 150. U.S. Society course.

RELS 193 3 hrs. The Divine Comedy

An in-depth study of the *Divine Comedy*, read in English, against the philosophical and theological background of the Middle Ages. **Same as** CST 193 and ITAL 193. Taught in English. *Creative Arts course*.

RELS 225 3 hrs. Topics in Muslim-Jewish Relations

Muslim-Jewish interactions from the rise of Islam until contemporary times, the relationship between Biblical and Qur'anic materials, the Jewish and Islamic interpretive tradition and the legal systems of the two religious traditions. **Same as** CL 225 and JST 225.

RELS 2303 hrs.Topics in Islam

Topics, issues, and methodologies in Islamic studies. May be repeated if topics vary. **Recommended background:** ENGL 160. *World Cultures course.*

RELS 235 3 hrs. Introduction to Jewish Thought I

Introduces students to the fundamental Jewish texts, theology, and thought of the Rabbinic period (100CE–900 CE). Topics include: ethics, authority, escuality, excegesis, and law. **Same as** CL 235 and JST 235. **Prerequisite(s):** Sophomore standing or above.

RELS 240 3 hrs. Philosophy and Revelation: Jewish and Christian Perspectives

Introduction to philosophical ways of addressing the claim that a book (the Bible, the Qur'an) comes from God. Texts by Immanuel Kant, Moses Mendelssohn, and Soren Kierkegaard, among others. Previously listed as RELS 141. **Same as** PHIL 240 and JST 240. **Prerequisite(s)**: Two courses in philosophy or consent of the instructor. *Individual and Society, and World Cultures course.*

RELS 242 3 hrs. The History of Jewish Biblical Interpretation

Jewish interpretation of the Hebrew bible. A survey of the span of Jewish history and the wide range of cultural contexts that have impacted the understanding of the Torah. **Same as** CL 242 and JST 242. *Past course*.

RELS 246 3 hrs. Sociology of Religion

Analysis of the structures and functions of religious institutions in modern society. Special attention to the interplay between religion and other social phenomena, such as economics, politics, and secular culture. **Same as** SOC 246. Occasional field trips. **Prerequisite(s):** One social sciences Course Distribution Credit (CDC) course and sophomore standing. *Individual and Society, and U.S. Society course.*

RELS 250 3 hrs. Eastern and Western Philosophies of Religion

Eastern and Western philosophies of religion: Hinduism, Buddhism, Judaism, and Christianity. **Same as** INST 250. *World Cultures course.*

RELS 254 3 hrs. Prophets in Judaism and Islam

A cross-cultural survey of prophets. Texts include the Hebrew Bible, the Qur'an and Islamic and Jewish exegetical material. **Same as** CL 254 and JST 254. *Past course.*

RELS 255 3 hrs. Religious Diversity: Conceptual and Practical Issues

The facts of religious diversity and the questions raised by them. Special attention to Catholic Christian perspectives, treating them from secular and other religious perspectives.

RELS 256 3 hrs. Religious Experiences in American History

A survey of the varieties of religious experience in American history from the sixteenth to the twentieth centuries, with emphasis on social and cultural consequences. **Same as** HIST 256.

RELS 294 3 hrs. Topics in Catholic History

IOPICS IN CATIONC HISTORY An investigation of the impact of human migration and cultural pluralism on Catholicism and an analysis of the role of the Catholic Church in group relations. Topics will vary. **Same as** CST 294 and HIST 294. May be repeated if topics vary.

RELS 295 3 hrs Topics in Catholic Thought

Critical investigation of a topic or topics central to the development of Catholic thought, carried on by study of its proponents and opponents. Topics will vary. **Same as** CST 295. May be repeated if topics vary.

RELS 311 3 hrs. Gender and Sexuality in Early Christianity and Judaism

Examination of the root of contemporary perspectives on gender and sexuality in the early traditions of Judaism and Christianity including the Bible, the Epic of Gilgamesh, the Church Fathers, the Talmud, and legends of the saints. **Same as** GWS 311 and IST 311. UIC

RELS 320 3 hrs.

Major Religious Thinkers An examination of one or more major/classical thinkers and their writings. May be repeated if topics vary. Prerequisite(s): One 100- or 200-level religious studies course.

RELS 330 3 hrs. The Qur'an

Introduction to the text, history of interpretation, and the significance of the Qur'an. Prerequisite(s): Junior standing or above; or consent of the instructor and one 200-level course in Islamic studies.

RELS 343 3 hrs.

Literature and Religion Studies in the relation of literature to doctrines, imagery, practices, experiences, or history of one or more religious traditions. Same as ENGL 343. Prerequisite(s): Grade of C or better in ENGL 240; and grade of C or better in ENGL 241 or grade of C or better in ENGL 242 or grade of C or better in ENGL 243.

RELS 392 3 hrs. Major Problems in Religious Studies

In-depth examination of a major topic or problem in religious thought. Topics will vary. May be repeated if topics vary. Prerequisite(s): At least one course in religious studies.

RELS 394 3 hrs. **Topics in Catholic History** and Culture

Exploration of various topics in Catholic history and culture. Same as CST 394 and HIST 394. Prerequisite(s): One course in history or Catholic studies; or consent of the instructor.

RELS 399 1-3 hrs. Independent Study

Selected topics for individual study. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. Prerequisite(s): Sophomore standing or above; and consent of the instructor. Recommended background: Two courses in religious studies.

RELS 446 3 OR 4 hrs. Race, Ethnicity, and Gender in American Religion

Religious institutions in the U.S. as a crucible for racial, ethnic, and gender identities, group formation, and intergroup relations; major world religions represented in the U.S. Same as SOC 446. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): SOC 100 and junior standing or above; or consent of instructor.

RELS 478 3 OR 4 hrs. The Bible as Literature

Literary analysis of the English Bible (including the Apocrypha) in its historical and religious contexts; study of the King James Version and successive revisions of it. Same as ENGL 478 and JST 478. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in ENGL

240; and grade of C or better in ENGL 241 or grade of C or better in ENGL 242 or grade of C or better in ENGL 243; or consent of the instructor.

3 OR 4 hrs. RFI S 495

Topics in Religious History Specific topics are announced each term. Same as HIST 495. 3 undergraduate hrs. 4 graduate hrs. May be repeated. Students may register in more than one section per term. Prerequisite(s): 3 hours of history or consent of the instructor.

Russian

RUSS 101 4 hrs. **Elementary Russian I**

Phonetics, introductory grammar, and reading. Four additional half hours each week in the language laboratory. Prerequisite(s): For students who have had no formal work in Russian.

RUSS 102 4 hrs. Elementary Russian II

Continues RUSS 101. Four additional half hours each week in the language laboratory Prerequisite(s): RUSS 101 or the

equivalent. **RUSS 103**

4 hrs. Intermediate Russian I Continues RUSS 102. Four additional half hours each week in the language laboratory Prerequisite(s): RUSS 102 or the equivalent.

RUSS 104 4 hrs. Intermediate Russian II Continues RUSS 103. Four addi-

tional half hours each week in the language laboratory Prerequisite(s): RUSS 103 or the equivalent.

RUSS 115 3 hrs. **Russian Culture Before the** Revolution

The main trends of Russian thought and manners from the beginning to the Revolution: literature, philosophy, religion, art, architecture, intellectual life. Audiovisual emphasis. World Cultures course.

RUSS 116 3 hrs. **Russian Culture: The Soviet** Period

The transformation of Russian culture after 1917: literature, art, architecture, philosophy, intellectual trends; emphasis on the ideology of Socialist Realism. Audiovisual emphasis. World Cultures course.

RUSS 120 3 hrs. The Russian Short Story in Translation

Introduction to important Russian short stories of the nineteenth and twentieth centuries; the elements of fiction; close analysis of literary texts. Creative Arts, and World Cultures course.

RUSS 130 3 hrs. Masterpieces of Russian Literature in Translation

Introduction to Russian novellas and novels of the nineteenth and twentieth centuries. Creative Arts. and World Cultures course.

BUSS 150 3 hrs. Introduction to Russian Cinema

Introduction to major themes, trends, and techniques of Russian/Soviet cinema. Explores film as an expression of social reality and political ideology. Comparisons drawn with American cinema. Taught in English. Films screened with English subtitles. Creative Arts, and World Cultures course.

RUSS 241 Dostoyevsky

Selected short stories and novels. Taught in English. Creative Arts course.

3 hrs.

3 hrs.

RUSS 242 Tolstoy

Discussion of selected short stories and plays. Taught in English. *Creative Arts course.*

RUSS 244 3 hrs. Women in Russian Literature Major works by and about women in Russian literature:

experiences of women and societal attitudes toward them. Same as GWS 244. Taught in English. Creative Arts, and World Cultures course.

RUSS 301 3 hrs. **Russian Composition and** Conversation I

Composition and conversation, systematic grammar, vocabulary development, and aural compre-hension. **Prerequisite(s):** RUSS 104 or the equivalent.

RUSS 302 3 hrs. **Russian Composition and** Conversation II

Continues RUSS 301. Prerequisite(s): RUSS 301 or the equivalent.

RUSS 321 3 hrs. Introduction to Russian Literature I

Literature of the nineteenth century. Taught in English. Prerequisite(s): Junior standing or consent of the instructor.

RUSS 322 3 hrs. Introduction to Russian Literature II

Literature of the twentieth century. Taught in English. Prerequisite(s): Junior standing or RUSS 321 or consent of the instructor.

RUSS 399 1-3 hrs. **Independent Study**

Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 6 hrs. Prerequisite(s): Junior standing, consent of the instructor and the head of the department.

RUSS 401 3 OR 4 hrs. **Russian Composition and** Conversation III

Oral presentations, compositions, conversation: daily life and current events. Problems of grammar and syntax. Improving pronunciation and intonation. Reading. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): RUSS 302 or the equivalent.

RUSS 402 3 OR 4 hrs. **Russian Composition and** Conversation IV

Continuation of RUSS 401. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** RUSS 401 or the equivalent.

RUSS 410 3 OR 4 hrs. Structure of Modern Russian

A synchronic linguistic analysis of Russian substantives, adjectives, pronouns, verbs, deverbal nouns, and minor parts of speech from a syntagmatic and paradigmatic point of view. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): At least 4 semester hours of Russian or the equivalent.

RUSS 450 3 OR 4 hrs. **Studies in the Russian Novel** Study of a major novelist, movement, or special themes. Content varies. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). Prerequisite(s): 24 hours of Russian or consent of the instructor.

RUSS 460 3 OR 4 hrs. **Studies in Russian Literature** Study of a major author, movement, genre, or special topic. Content varies. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). Prerequisite(s): 24 hours of Russian or consent of the instructor.

RUSS 499 1-4 hrs. Independent Study

Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 8 hrs. Graduate students may register for more than one section per term. Prerequisite(s): Senior or graduate standing, consent of the instructor and the head of the department.

Slavic and Baltic Languages and Literatures

SLAV 101 4 hrs. **Elementary Serbian I** Phonetics, introductory grammar and reading. Four additional half hours each week in the language laboratory. **Prerequisite(s):** For students who have had no formal work in Serbian.

SI AV 102 4 hrs. Elementary Serbian II

Continues SLAV 101. Four additional half hours each week in the language laboratory. Prerequisite(s): SLAV 101 or the equivalent.

SLAV 103 4 hrs.

Intermediate Serbian I Continues SLAV 102. Prerequisite(s): SLAV 102 or the equivalent.

SLAV 104 4 hrs. Intermediate Serbian II Continues SLAV 103. Prerequisite(s): SLAV 103 or the equivalent.

SLAV 111 4 hrs. Elementary Ukrainian I

Phonetics, introductory grammar, and reading. Four additional half hours each week in the language laboratory. **Prerequisite(s):** For students who have had no formal work in Ukrainian.

SLAV 112 4 hrs. Elementary Ukrainian II

Continues SLAV 111. Four additional half hours each week in the language laboratory. **Prerequisite(s):** SLAV 111 or the equivalent.

SLAV 113 4 hrs. Intermediate Ukrainian I

Intermediate Ukrainian I Continues SLAV 112. Four additional half hours each week in the language laboratory. **Prerequisite(s):** SLAV 112 or the equivalent.

SLAV 114 4 hrs. Intermediate Ukrainian II

Continues SLAV 113. Four additional half hours each week in the language laboratory. **Prerequisite(s):** SLAV 113 or the equivalent.

SLAV 115 3 hrs. Serbian Culture

Development of Serbian culture and thought from earliest times to the present: intellectual currents, art, architecture, literary landmarks, traditional ethics, and society. World Cultures course.

SLAV 116 3 hrs. Old Slavic and Ukrainian Folklore and Mythology

The mythology and folklore of the Ukrainian culture and its close interrelationship with other Old Slavic mythologies and folklores. World Cultures course.

SLAV 219 3 hrs. Serbian Folklore and Folk Mythology

Serbian folk tales, epic and lyric poetry, and related traditional beliefs, customs and ethical norms. Taught in English. World Cultures course.

SLAV 222 3 hrs. Modern Serbian Literature

Serbian literature of the nineteenth and twenticth centuries. **Prerequisite(s):** Sophomore standing or consent of the instructor. *Creative Arts, and World Cultures course.*

SLAV 301 3 hrs. Serbian Composition and Conversation I

Composition and conversation, systematic grammar, vocabulary development, and aural comprehension. **Prerequisite(s):** SLAV 104 or the equivalent.

SLAV 302 3 hrs.

Serbian Composition and Conversation II Continues SLAV 301. Prerequisite(s): SLAV 301 or the equivalent.

SLAV 324 3 hrs. Writing About Literature

Content and form of literary essay. Selected Slavic literary masterworks analyzed from ethical, structural, historical/sociological and psychological points of view. **Prerequisite(s):** Junior standing.

SLAV 399 1-3 hrs.

Independent Study Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 6 hrs. **Prerequisite(s)**: Junior standing, consent of the instructor and the head of the department.

SLAV 405 3 OR 4 hrs. Problems in Slavic

Grammars Systematic review of important topics in grammar and syntax. Content varies. Required for department undergraduate majors in Slavic programs. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). **Prerequisite(S):** RUSS 302 or POL 302 or SLAV 302 or the equivalent.

SLAV 410 3 OR 4 hrs.

Structure of Modern Serbian A synchronic linguistic analysis of Serbian phonology and morphology, with fundamentals of syntax. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): SLAV 104 or the equivalent or consent of the instructor.

SLAV 460 3 OR 4 hrs. Studies in East European Literatures and Culture

Study of a topic, author, genre, or movement. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). **Prerequisite(s):** 24 hours of Slavic or Baltic or consent of the instructor.

SLAV 470 6 hrs. Educational Practice with Seminar I

The first half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** Good academic standing in a teacher education program, completion of 100 clock hours of pre-student-teaching field experiences, and approval of the department.

SLAV 471 6 hrs. Educational Practice with Seminar II

The second half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** Good academic standing in a teacher education program, completion of 100 clock hours of pre-student-teaching field experiences, credit or concurrent registration in SLAV 470, and approval of the department.

SLAV 499 1–4 hrs. Independent Study

Investigation of special problems under the general direction of a staff member. May be repeated to a maximum of 8 hrs. Graduate students may register for more than one section per term. **Prerequisite(s):** Senior or graduate standing, consent of the instructor and the head of the department.

Sociology

SOC 100 3 hrs. Introduction to Sociology Analysis of human societies, organizations and groups, and the interrelations among individuals, groups, and societies. Individual and Society, and U.S. Society course.

SOC1053 hrs.Social Problems

Contemporary social problems examined from the perspectives of social institutions, culture, inequality, organizations and groups, political and economic structure, social change, and social policy. May be substituted for SOC 100 as a prerequisite for other sociology courses. *Individual* and Society, and U.S. Society course.

SOC 125 3 hrs. Introduction to Asian American Studies

Overview of Asian American experiences and perspectives in sociohistorical context. Introduction to major concepts, issues, and debates in the field of Asian American Studies. **Same as** ASAM 125 and ENGL 125. Individual and Society, and U.S. Society course.

SOC 201 4 hrs. Introductory Sociological Statistics

An introduction to the basic statistical methods used in the analysis of sociological data. 3 hours of lecture and 2 hours of laboratory per week. **Prerequisite(s):** SOC 100 or SOC 105; and either MATH 090 or MATH 092 or MATH 118 or the equivalent or consent of the instructor.

SOC 203 3 hrs. The African American Family in the United States

Examination of the structure and functioning of the African American family. Historical and contemporary analyses. **Same as** AAST 203. **Prerequisite(s):** AAST 100 or SOC 100 or con-

sent of the instructor. Individual and Society, and U.S. Society course.

SOC 212 3 hrs. Human Sexuality: Social Perspectives

Historical and cultural perspectives on contemporary American sexuality; knowledge, attitudes, and practices; sexuality over the life cycle, socialization; affection, interpersonal attraction; marriage, law, other institutions. **Prerequisite(s):** SOC 100.

SOC 215 3 hrs. Sociology of Childhood and Youth

Explores the meanings and social position of children and youth in society and examines how contemporary ideas about these categories emerged. **Prerequisite(s):** SOC 100 or SOC 105; or consent of the instructor. *Individual* and Society, and U.S. Society course.

SOC 224 3 hrs. Gender and Society

Sociological perspectives on gender as a factor in social stratification; gender role acquisition; individual and social consequences of changing social definitions of gender roles. **Same as** GWS 224. **Prerequisite(s):** SOC 100 or GWS 101 or GWS 102. *Individual and Society, and U.S. Society course.*

SOC 225 3 hrs. Racial and Ethnic Groups

Sociological and social-psychological analysis of racial, religious, and other ethnic groups; consideration of historical and current social problems arising from their relationships in society. **Same as** AAST 225 and LALS 225. **Prerequisite(s)**: SOC 100; or consent of the instructor. *Individual and Society, and U.S. Society course.*

SOC 226 3 hrs.

Latinas in the United States Socioeconomic conditions and cultural experiences of Latinas in the U.S. Historical and contemporary views of labor, health, education, family, identity formation, and leadership. Same as GWS 276 and LALS 276.

SOC 228 3 hrs. Sociology of Asia and Asian Americans

Asian and Asian American culture, institutions, and organization; immigration, population, settlement patterns; occupations and poverty; family and ethnic identification; inequality and politics; values, prejudice, discrimination. **Same as** ASAM 228 and ASST 228. **Prerequisite(s):** SOC 100. *Individual and Society, and U.S. Society course.*

SOC 229 3 hrs. Sociology of Latinos

Sociology of Latinos Examines social, political, and economic issues affecting Latino groups. While focusing on the process of racialization, the course also examines immigration, language rights, gender and sexuality, labor market, media, and youth. Same as LALS 229. Prerequisite(s): SOC 100 or LALS 102 or SOC 105 or LALS 103; or consent of the instructor. Individual and Society, and U.S. Society course.

SOCIOLOGY

SOC 231 Criminology

3 hrs.

Introductory survey of the literature developed by criminologists in their study of crime in American society. **Same as** CLJ 220. **Prerequisite(s):** CLJ 101.

SOC 241 3 hrs. Social Inequalities

Dimensions of inequality: economy, education, housing, healthcare; power, status and selfesteem; inequality, and social policy. **Prerequisite(s):** SOC 100. *Individual and Society, and U.S. Society course.*

SOC 244 3 hrs. Sociology of Work

Impact of bureaucracy, technology, and automation; changing composition of labor force: women, youth, elderly, racial and ethnic minorities; international comparisons; policy implications. **Prerequisite(s):** SOC 100 or SOC 105; or consent of the instructor. *Individual and Society, and U.S. Society course.*

SOC 245 3 hrs. Marriage and Family

The family as an interactional system, an organization, and a social institution; extended family ties, mate selection, marital roles, socialization, marital dissolution, family life course and change. **Prerequisite(s):** SOC 100. Individual and Society, and U.S. Society course.

SOC 246 3 hrs. Sociology of Religion

Analysis of the structures and functions of religious institutions in modern society. Special attention to the interplay between religion and other social phenomena, such as economics, politics, and secular culture. **Same as** RELS 246. Occasional field trips. **Prerequisite(s):** One social sciences Course Distribution Credit (CDC) course and sophomore standing. *Individual and Society, and U.S. Society course*.

SOC 251 3 hrs. Health and Medicine

Healthcare systems; special emphasis on United States; dimensions of wellness and sickness including mental health; health providers, organizations, and institutions and their relations. **Prerequisite(s):** SOC 100 or SOC 105; or consent of the instructor. *Individual and Society,* and U.S. Society course.

SOC 258 3 hrs.

Race and Urban Life Examines the experiences of Blacks in urban areas since the 1900s. **Same as** AAST 258.

SOC 265 3 hrs. Sociology of Politics

The exercise of power and power structures; alternative political systems; relationship between state and society; political attitudes, participation, and organizations; political change, reform, and revolution. **Prerequisite(s)**: SOC 100. *Individual and Society course*.

SOC 268 3 hrs. Introduction to Comparative Sociology

Comparisons of population, culture, economics, politics, and social relations among contemporary societies. Relations among institutional areas and among societies. **Prerequisite(s):** 3 hours of social science courses. *Individual and Society, and World Cultures course.*

SOC 271 3 hrs. African Americans and the Politics of Incarceration

Examination of the status of African Americans as offenders, victims, and personnel within the criminal justice system. **Same as** AAST 271 and CLJ 271. Previously listed as SOC 371. **Prerequisite(s):** AAST 100 or CLJ 101 or SOC 100; or consent of the instructor. *Individual and Society, and U.S. Society course.*

SOC 2763 hrs.Urban Sociology

Examination of the history, patterns, and consequences of urban places and life in those places. **Prerequisite(s):** SOC 100. *Individual and Society, and U.S. Society course.*

SOC 296 1–3 hrs. Supervised Study or Research

Special projects arranged in advance by faculty or student initiative. May be repeated to a maximum of 9 hours with approval. Students may register in more than one section per term. Approval to repeat course granted by the department. **Prerequisite(s):** 9 hours of sociology, consent of the instructor, and approval of the department prior to registration.

SOC 298 3 hrs. Internship in Sociological Applications

Placement in a university or external organization where students participate in a project using sociological skills under the direction of a field supervisor. **Prerequisite(s):** SOC 201 and SOC 202; and approval of the department.

SOC 300 4 hrs. Introduction to Sociological Research Methods

Survey of the principal methods of social research; problem and concept formation, research design, sampling reliability, internal and external validity, control of alternative explanations, ethical responsibilities of researchers. Previously listed as SOC 202. **Prerequisite(s)**: SOC 201; and sophomore standing or above; or SOC 201 and one additional 200-level course in sociology.

SOC 385 3 hrs. Introduction to Sociological Theory

A survey of the major approaches to explaining social phenomena drawn from representative nineteenth- and twentieth-century social theorists. Emphasis on present-day applicability of these approaches. **Prerequisite(s)**: Sophomore standing or above and two 200- or 300- level elective courses in sociology or consent of the instructor.

SOC 401 4 hrs. Sociological Statistics

Descriptive and inferential statistics for graduate and advanced undergraduate sociology majors and related fields. Tests of means, regression, correlation, analysis of variance, and related topics. **Prerequisite(s)**: SOC 201 and two additional 200-level sociology electives; or graduate standing or consent of the instructor.

SOC 402 4 hrs. Intermediate Sociological Statistics

Covers general linear models emphasizing regression, analysis of variance and covariance, simple structural equation models, simple categorical methods, and elementary matrix algebra. **Prerequisite(s):** SOC 401.

SOC 405 3 OR 4 hrs. Writing in the Social Sciences

Leads to effective, clear writing for a social science audience. Teaches how to organize ideas, avoid tiresome jargon, and write with precision. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** 6 hours of upper-division social science courses.

SOC 406 3 OR 4 hrs. Urban Ethnography

The study of processes and meanings in African American communities in urban areas, interviews, participant observation, focus groups. **Same as** AAST 405. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** AAST 100; and junior standing or above.

SOC 407 3 OR 4 hrs. Seminar in Comparative Racialization

Provides an interdisciplinary and comparative approach to the making and remaking of "race" and the resultant racialized experiences of different groups in the U.S. and globally. **Same as** AAST 407. **Prerequisite(s):** AAST 247 or AAST 248 or AAST 340 or SOC 225; and senior standing or above; or consent of the instructor.

SOC 424 3 OR 4 hrs. Sociology of Gender

Variety and change in gender roles; patterns and consequences of gender inequality; gender and sexuality; gender and social institutions such as family, economy. **Same as** GWS 425. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SOC 224, or any 100- or 200-level GWS course and an additional 200- or 300level elective in sociology or gender and women's studies; junior standing or above; or graduate standing; or consent of the instructor.

SOC 425 3 OR 4 hrs. Race and Ethnicity

Critical examination of the conceptual frameworks and empirical findings in the study of race and ethnicity. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SOC 225 an additional 200- or 300-level elective in sociology; or consent of the instructor.

SOC 426 3 OR 4 hrs. Topics in Race, Ethnicity, and Gender

Intensive examination of a specialized topic in race, ethnicity, and gender. The specific topic of the course varies depending on the faculty offering it. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). Students may register in more than one section per term. **Prerequisite(s):** SOC 224; or SOC 225; and junior standing or above and an additional 200- or 300-level elective in sociology; or consent of the instructor.

SOC 428 3 OR 4 hrs. Asian/Asian American Women in the Global Economy

Examines the racialization and feminization of a global division of labor and focuses primarily on Asian and Asian American women's participation and incorporation as workers and key actors in the development of the global economy. Same as ASAM 428 and GWS 428. 3 undergraduate hours; 4 graduate hrs. Prerequisite(s): ASAM 125 or ENGL 125 or SOC 125 or AAST 225 or LALS 225 or SOC 225 or ASAM 228 or ASST 228 or SOC 228 or ASAM 290 or two 200-level courses in either SOC, GWS or ASAM, or a combination of these.

SOC 440 3 OR 4 hrs. Topics in Organizations and Institutions

Intensive examination of a specialized topic announced when the class is scheduled. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). Students may register in more than one section per term. **Prerequisite(s):** SOC 244 or MGMT 340, and an additional 200-level sociology elective, and junior standing; or consent of the instructor.

SOC 441 3 OR 4 hrs. Social Stratification

The nature of systems of differentiation and ranking in societies and their consequences; emphasis on class structure in the United States; prestige, status, power, and social mobility in the United States and other societies. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s)**: SOC 241 and an additional 200- or 300level elective in sociology; and junior standing or above; or consent of the instructor.

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SOC 445 3 OR 4 hrs. Sociology of the Family Variety and change in family patterns; family formation and break-up; parents' and childrens' effects on each other; influences of culture and political economy; consequences for other institu-

tions. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): SOC 224, or SOC 245 and an additional 200- or 300-level sociology elective; and junior standing or above; or consent of the instructor.

SOC 446 3 OR 4 hrs. Race, Ethnicity, and Gender in American Religion

Religious institutions in the U.S. as a crucible for racial, ethnic, and gender identities, group formation, and intergroup relations; major world religions represented in the U.S. Same as RELS 446. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): SOC 246 and an additional 200- or 300level elective in sociology; and junior standing or above; or consent of instructor.

SOC 447 3 OR 4 hrs. Organizations

Characteristics of business, government, and not-for-profit organizations; approaches used to study organizations; theoretical and empirical analysis of organizational processes. Same as MGMT 447. 3 undergraduate hrs. 4 graduate hrs.

Prerequisite(s): SOC 241 or MGMT 340 or SOC 244 and an additional 200- or 300-level elective in sociology; and junior standing or above; or consent of the instructor.

SOC 448 3 OR 4 hrs. Sociology of Development Historical, economic, political, social, and geographic factors shaping national and international development experiences and outcomes. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): 6 hours of upper-division social science courses or consent of the instructor.

3 OR 4 hrs. SOC 451 **Medical Sociology**

Survey of major topics in sociology of health and medicine including social definitions of health and illness, patient-practitioner interaction, the organization of health institutions and professions. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): 6 hours of upper-division sociology or consent of the instructor.

SOC 455 3 OR 4 hrs. **Topics in Medical Sociology**

Intensive examination of a specialized topic announced when the class is scheduled. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. Prerequisite(s): SOC 451 or consent of the instructor.

SOC 465 3 OR 4 hrs. **Topics in Sociology of** Politics

Intensive examination of a specialized topic announced when the class is scheduled. **Same as** POLS 465. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. Prerequisite(s): 6 hours of upper-division sociology or consent of the instructor.

SOC 3 OR 4 hrs. 471 Population

The measurement and study of major trends and differentials in fertility, mortality, migration, growth, and compositional characteristics of the population of the United States and other nations. **Same as** EPID 471. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SOC 201 and an additional 200- or 300level course in sociology; and junior standing or above; or consent of the instructor.

3 OR 4 hrs. SOC 473 **Cities and Regions**

Characteristics, conditions, and consequences of structure and change of cities and metropolitan regions. Spatial, political economy, cultural perspectives. Census, ecological, historical, comparative data for cities. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SOC 201 and an additional 200 or 300level course in sociology; and junior standing or above; or consent of the instructor.

476 SOC 3 OR 4 hrs.

Topics in Urban Sociology Intensive examination of a specialized topic announced when the class is scheduled. 3 undergraduate hrs. 4 graduate hrs. May be repeated to a maximum of 12 hrs. Students may register in more than one section per term. Prerequisite(s): 6 hours of upper-division sociology or consent of the instructor.

SOC 485 3 OR 4 hrs. **Classical Social Theory**

Survey and analysis of classical European and American social theory. Examination of how theorists such as Marx, Weber, Durkheim, Veblen and Park defined and described society within their own social contexts and how we derive meaning from these theories. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): SOC 385; and senior standing or above; or consent of the instructor.

SOC 487 3 OR 4 hrs. **Current Social Theory**

Review and evaluation of major currents in sociological theory since the 1940s. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SOC 385; and senior standing or above; or consent of the instructor.

SOC 490 4 hrs.

Senior Research Experience The course integrates theory, methods and analytical skills to a substantive area of sociology. Students will gain hands-on experience by collecting data, analyzing data, writing up their findings, and presenting their projects to the class. May be repeated to a maximum of 8 hours, with approval of the department. Students may register for more than one section per term. Previously listed at SOC 400. Prerequisite(s): SOC 300 and SOC 385; and senior standing or above and one 400-level elective in sociology and consent of the instructor.

SOC 496 1-9 hrs. Independent Study or Research

Extensive readings in specialized areas of sociology or empirical research for advanced undergraduate or graduate students. May be repeated with approval. Students may register in more than one section per term. Approval to repeat course granted by the department. Undergraduate students may repeat course for maximum of 9 hours of credit. Prerequisite(s): 18 hours of sociology, excluding SOC 296 and SOC 299, consent of the instructor, and approval of the department.

SOC 499 1-4 hrs. Senior Thesis

Individual study for students working on a senior thesis under the supervision of a faculty advisor. This course is required for students graduating with highest departmental distinction. May be repeated to a maximum of 8 hours, with approval of the department. Students may register for more than one section per term. Previously listed as SOC 299. Prerequisite(s): SOC 490; and senior standing or above; and consent of the instructor.

Spanish

SPAN 101 4 hrs. **Elementary Spanish I**

Beginning communication skills in Spanish and introduction to the cultures of the Spanishspeaking world in a technologyenhanced course. Credit is not given for SPAN 101 if the student has credit for SPAN 110. For students who have never studied Spanish. See departmental Web site for placement information. Use of a computer and Internet access are required. This course requires students to complete approximately eight hours of online materials per week. A high-speed connection, while not required, is strongly suggested.

SPAN 102 4 hrs.

Elementary Spanish II Continuation of SPAN 101. Credit is not given for SPAN 102 if the student has credit for SPAN 110. For students who have never

studied Spanish. See departmental Web site for placement information. Use of a computer and Internet access are required. This course requires students to complete approximately eight hours of online materials per week. A highspeed connection, while not required, is strongly suggested. **Prerequisite(s):** SPAN 101 or the equivalent.

SPAN 103 4 hrs. Elementary Spanish III

Continuation of SPAN 102. See departmental Web site for placement information. Use of a computer and Internet access required. This course requires students to complete approximately eight hours of online materials per week. A high-speed connection, while not required, is strongly suggested. Prerequisite(s): SPAN 102 or

SPAN 110 and placement by the department.

SPAN 104 4 hrs. **Topics in Spanish Language** and Culture

Can be used to complete the fourth semester requirement in Spanish. Students work with short literary and cultural readings in Spanish and review some specific grammatical concepts. See departmental Web site for placement information. Use of a computer and Internet access are required. This course requires students to complete approximately eight hours of online materials per week. A high-speed connection, while not required, is strongly suggested. Prerequisite(s): SPAN 103 and appropriate score on the department placement test or placement by department.

SPAN 113 4 hrs.

Spanish for Bilinguals I Introduction to formal written Spanish, grammar, and reading for students who already possess basic to intermediate communicative skills in the language. Emphasis on writing and vocabulary building. This is a blended-online and classroom course. Use of a computer and Internet access is required. A high-speed connection, while not required, is strongly suggested. Prerequisite(s): Placement by the department.

SPAN 114 4 hrs.

Spanish for Bilinguals II Formal written Spanish, grammar, and reading for students who already possess advanced communicative skills in the language. Continuation of Spanish 113. Increased emphasis on composition and reading ability. This is a blended-online and classroom course. Use of a computer and Internet access is required. A high-speed connection, while not required, is strongly suggested. **Prerequisite(s):** SPAN 113 or

placement by the department.

Course Descriptions

SOCIOLOGYSPANISH

SPAN 192 3 hrs. From the Convent to the Streets: Latin American Women Writers in Translation

Introduction to literature by Latin American women from the seventeenth century to the present. Focus on the role literature has played in the negotiation of gender identities in the private and the public spheres. **Same as** GWS 192 and LALS 192. No credit toward any major or minor program in Spanish. Taught in English. *Individual and Society,* and World Cultures course.

SPAN 196 3 hrs. Totalitarianism, Writing, and Cinema

An introduction to French, Spanish, and Italian writing and films dealing with the issue of totalitarianism. Various authors are examined within a broad context of European thinking on totalitarianism. **Same as** FR 196 and ITAL 196. Taught in English. Two additional hours for viewing films (every two weeks). **Prerequisite(s):** Consent of the instructor.

SPAN 200 3 hrs. Spanish Conversation and Basic Writing

Practice of conversational strategies for developing communicative competence in Spanish. Short essay composition for developing writing competence in Spanish. Review of basic grammatical structures. Not open to fluent Spanish speakers. **Prerequisite(s):** Grade of C or better in SPAN 104.

SPAN 202 3 hrs. Spanish Grammar in Practice

Reviews basic concepts in Spanish grammar, including verb conjugations, tense, mood, aspect, prepositions, and pronouns. Previously listed as SPAN 305. **Prerequisite(s):** Grade of C or better in SPAN 104 or grade of C or better in SPAN 114; or appropriate score on the department placement test.

SPAN 203 3 hrs. Extensive Reading and Writing for Nonnative Speakers of Spanish

Development of linguistic, rhetorical, organizational, and analytical skills in Spanish composition. Development of reading and critical thinking skills in Spanish. Practice of oral skills. Review and practice of grammar. Open only to nonnative speakers of Spanish. **Prerequisite(s):** Grade of C or better in SPAN 104; and credit or concurrent registration in SPAN 202; and completion of the University Writing requirement.

SPAN 204 3 hrs. Extensive Reading and Writing for Heritage Speakers of Spanish

Development of linguistic, rhetorical, organizational, and analytical skills in Spanish composition. Development of reading and critical thinking skills in Spanish. Practice of oral skills. Review and practice of grammar. Open only to heritage speakers of Spanish. **Prerequisite(s):** Grade of C or better in SPAN 114; and credit or concurrent registration in SPAN 202; and completion of the University Writing requirement.

SPAN 206 4 hrs. Introduction to Hispanic Linguistics

General introduction to the major areas of linguistic analysis: syntax, phonology, meaning and variation. The writing of essays that prepare students for formal research in the field of linguistics. **Prerequisite(s):** Credit or concurrent registration in SPAN 202.

SPAN 210 3 hrs. Introduction to the Formal Analysis of Hispanic Texts

Formal and content analysis of Hispanic essays, short stories and novels, poems, and plays. Application of basic literary concepts through the writing of critical and argumentative analysis. **Prerequisite(s):** Credit or concurrent registration in SPAN 203 or credit or concurrent registration in SPAN 204; and completion of the University Writing requirement. *Creative Arts, and World Cultures course.*

SPAN 212 4 hrs. Cultural and Literary Studies in Spain and Latin America

Prepares students to examine problems of cultural and literary analysis from a theoretical perspective. It will provide a foundation for the more advanced topic courses at the 300-level. **Prerequisite(s):** Grade of C or better in SPAN 210; and completion of the University Writing requirement; and sophomore standing or above.

SPAN 220 3 hrs. Spanish for Business and Law I

Introduction to conversation, composition, and grammar, emphasizing usage specific to the areas of business and law. Intended for students who want to acquire basic knowledge of Spanish for the legal and business professions. **Prerequisite(s):** Credit or concurrent registration in SPAN 202; and completion of the University Writing requirement; or approval of the department. **Recommended**

background: Grade of C or better or concurrent registration in SPAN 203 or grade of C or better in SPAN 204.

SPAN 221 3 hrs. Spanish for Health Personnel I

Introduction of Spanish vocabulary and specialized communication skills in the area of the health professions. **Prerequisite(s):** Credit or con-

current registration in SPAN 202; and completion of the University Writing requirement; or approval of the department.

Recommended background:

Grade of C or better or concurrent registration in SPAN 203 or grade of C or better or concurrent registration in SPAN 204.

SPAN 224 3 hrs. Bilingual/Bicultural Hispanic American Writers

Introduces students to the phenomenon of the bilingual and bicultural Hispanic American writer. Taught in English. **Prerequisite(s):** Completion of the University Writing requirement. U.S. Society course.

SPAN 225 3 hrs. Spanish and Latin American Culture through Literature and Film

Introduces students to the Hispanic cultures, both Peninsular and Latin American, as represented in literature and film throughout the 20th and 21st centuries. Taught in English. Two hours per week to view films. **Prerequisite(s):** Completion of the University Writing requirement. *World Cultures course.*

SPAN 226 3 hrs. Early Modern Spanish and Colonial Latin American Literature and Culture in Translation

Introduces students to a variety of Early Modern Peninsular and Colonial Latin American literary texts and other cultural artifacts in translation. Taught in English. **Prerequisite(s):** Completion of the University Writing requirement. Creative Arts, and World Cultures course.

SPAN 228 3 hrs. Introduction to Translation Theory

Introduction to the theory of translation and translations of simple texts in both directions: Spanish/English and English/ Spanish. **Prerequisite(s):** SPAN 202 and sophomore standing or above; or consent of the instructor.

SPAN 230 3 hrs. Civilization and Culture of Spain

Historical, social, and cultural aspects of Spanish civilization. Taught in Spanish. **Prerequisite(s):** Credit or concurrent registration in SPAN 203 or credit or concurrent registration in SPAN 204. *Past, and World Cultures course.*

SPAN 231 3 hrs. Civilization and Culture of Latin America

Historical, social, and cultural aspects of Latin American civilization. Taught in Spanish. **Prerequisite(s):** Credit or con-

current registration in SPAN 203 or Credit or concurrent registration in SPAN 204. *Past, and World Cultures course.*

SPAN 278 3 hrs. Latin American/Latino Film Studies

Latin American and U.S. Latino film as expressing and impacting socioeconomic, political, ideological and literary systems, modes of elite and popular culture, everyday life. **Same as** LALS 278. **Prerequisite(s):** LALS 101 or LALS 102 or LALS 109.

SPAN 295 3 hrs. Latino Literary Studies

Major trends, genres, works, themes, and writers related to Latino history and culture, mainstream and minority U.S., Latin American and third world literatures. **Same as** ENGL 295 and LALS 295. *U.S. Society course*.

SPAN 3033 hrs.Advanced Oral Presentation,
Writing, and Analysis

Advanced instruction in linguistic, rhetorical, organizational, and analytical skills in Spanish composition. Further development of reading and critical thinking skills in Spanish. **Prerequisite(s)**: Grade of C or better in SPAN 203 or grade of C or better in SPAN 204; and completion of the University Writing requirement.

SPAN 320 3 hrs. Business for Spanish and Law II

Advanced instruction in conversation, composition, and grammar, emphasizing usage specific to the areas of business and law. **Prerequisite(s):** Grade of C or better in SPAN 220; and completion of the University Writing requirement; and sophomore standing or above.

Recommended background:

Grade of C or better or concurrent registration in SPAN 203 or grade of C or better or concurrent registration in SPAN 204.

SPAN 321 3 hrs. Spanish for Health Personnel II

Advanced training in Spanish vocabulary and specialized communication skills in the area of the health professions. **Prerequisite(s):** Grade of C or

better in SPAN 221; and sophomore standing or above. **Recommended background:**

Grade of C or better or concurrent registration in SPAN 203 or grade of C or better or concurrent registration in SPAN 204.

SPAN 328 3 hrs. Advanced Translation

The translation of specialized texts from the source language into the target language. Overview of legal, commercial and health-related vocabulary and concepts. Introduction to the translation of literary texts. **Prerequisite(s):** SPAN 228; and sophomore standing or above; or consent of the instructor. **Recommended background:** Grade of C or better in SPAN

210; or grade of C or better in SPAN 220; or grade of C or better in SPAN 220; or grade of C or better in SPAN 221.

0–18 hrs.

3 hrs.

Subjects taken in a variety of areas while studying abroad in Spain, or Central or South America during the student's sophomore, junior or senior year of study at UIC. May be repeated. **Prerequisite(s):** Approval of the Department. **Recommended background:** SPAN 104 or SPAN 114.

SPAN 361

The Structure of Spanish Introduction to the syntactic

analysis of the Spanish sentence. **Prerequisite(s):** Grade of C or better in SPAN 206; and sophomore standing or above.

SPAN 362 3 hrs. Sounds of Spanish

Introductory analysis of and practice in the Spanish sound system. Contrastive work in English and Spanish sounds. Laboratory exercises. Previously listed as SPAN 205. **Prerequisite(s):** Grade of C or better in SPAN 206; and sopho-

SPAN 363 3 hrs. Spanish in Society

more standing or above.

Spanish in Society Investigation of the role of language in society or of society in language with a focus on Spanish and issues of Latinos. Sociolinguistics investigates aspects of language structure and use. **Prerequisite(s):** Grade of C or better in SPAN 206; and sophomore standing or above.

SPAN 364 3 hrs. Acquisition of Spanish

Acquisition of Spanish Examination of the psychological and social aspects of the acquisition of Spanish as a first language, a second language, and in bilingual contexts. **Prerequisite(s):** Grade of C or better in SPAN 206; and sophomore standing or above.

SPAN 365 3 hrs.

Meaning in Language Introduction to the study of meaning in human language. Prerequisite(s): Grade of C or better in SPAN 206; and sophomore standing or above.

SPAN 366 3 hrs. Current Topics in Spanish Linguistics

Topics will reflect the general agenda of linguistics. May cover advanced issues in phonetics or phonology, syntax, semantics or pragmatics, second language acquisition or heritage language instruction. **Prerequisite(s):** Grade of C or better in SPAN 206; and sophomore standing or above.

SPAN 370 1 hour. Writing and Research in the Maior

Perfecting writing and expository skills in English. Required for majors in the department. **Same as** FR 370 and ITAL 370. **Prerequisite(s):** Junior or senior standing and approval of the department.

SPAN 375 3 hrs. Current Topics in Hispanic

Studies Study of Hispanic literary and/or cultural production focusing on a specific theme, critical approach, or genre-related issue which currently has special relevance within the discipline. **Prerequisite(s)**: Grade of C or better in SPAN 212; and completion of the University Writing requirement; and sophomore standing or above.

SPAN 376 3 hrs. Topics in Politics, the Economy, and Law in

Hispanic Culture Basic introduction to the syntax and rhetoric of legality, order and hierarchy in Spain and/or Latin America as these elements are manifested in literary and cultural texts. **Prerequisite(s):** Grade of C or better in SPAN 212; and completion of the University Writing requirement; and sophomore standing or above.

SPAN 377 3 hrs. Topics in Health, the Psyche, and the Human Body in Hispanic Culture

Topics will address issues regarding the representation of the body, and different notions of illness and health in Hispanic literature, film, and other media. **Prerequisite(s):** Grade of C or better in SPAN 212; and completion of the University Writing requirement; and sophomore standing or above.

SPAN 378 3 hrs. Topics in Hispanic Cultural and Media Studies

Studies of transculturation as a guiding principle in the development of Hispanic identities. Exploration of changing definitions of race, nation, immigration, hybridity, and consumption. **Prerequisite(s):** Grade of C or better in SPAN 212; and completion of the University Writing requirement; and sophomore standing or above.

SPAN 379 3 hrs. Topics in Cultural Difference and the Politics of

Translation Exploration of the ways in which different forms of cultural production participate in the construction and deconstruction of national, regional, class, and gender identities. **Prerequisite(s):** Grade of C or better in SPAN 212; and completion of the University Writing requirement; and sophomore standing or above.

SPAN 380

0 hrs.

Professional Development Students will be trained in the preparation of resumes, curriculum vitae, and presentation letters for academic and professional settings. Will practice interviewing skills. Prorequisite(s): Grade of C or better in SPAN 206 and grade of C or better in SPAN 212. Open only to seniors; or approval of the department with the completion of at least two 300- and/or 400-level Spanish courses, excluding SPAN 320, SPAN 321, and SPAN 360.

SPAN 399 1–3 hrs. Independent Study

Individual reading or research project under the supervision of a faculty member. May be repeated for a maximum of 6 credit hrs. Students may register for more than one section per term. **Prerequisite(s):** SPAN 206 and 212; and consent of the instructor.

SPAN 400 3 OR 4 hrs. History of the Spanish Language

Origins and development of Spanish; phonological, morphological, syntactic development of the language; foreign influences; origin of dialects. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 362 or SPAN 401 consent of the instructor.

SPAN 401 4 hrs. Intensive Introduction to Hispanic Linguistics

An intensive introduction to phonetics/phonology, syntax, and semantics of Spanish. **Prerequisite(s):** Graduate standing.

SPAN 402 3 OR 4 hrs. Spanish Syntax

Introduction to the generative approach to Spanish syntax. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 361 or SPAN 401; or consent of the instructor.

SPAN 403 3 OR 4 hrs. Advanced Spanish Syntax

In-depth examination of current theoretical issues in Spanish syntax. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 402 or consent of the instructor.

SPAN 404 3 OR 4 hrs. Spanish Phonology and Morphology

Analysis of the phonological and morphological structure of Spanish. Emphasis on the production and mental representation of sounds. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 362 or

SPAN 401; or consent of the instructor.

SPAN 4053 OR 4 hrs.Advanced Spanish Phonologyand Morphology

Advanced and detailed study of the phonological and morphological structure of Spanish. Emphasis on current theories. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 404 or the equivalent or consent of the instructor.

SPAN 406 3 OR 4 hrs. Spanish Sociolinguistics

Past and current theoretical and empirical sociolinguistics as applied to the study of variation within Spanish and U.S. Hispanic communities. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 402 or SPAN 404 or consent of the instructor.

SPAN 407 3 OR 4 hrs. Methods of Literary and Cultural Analysis

Introduction to basic tools and critical vocabulary to conduct advanced work in Hispanic literatures. 3 undergraduate hrs. 4 graduate hours. Taught in Spanish or English. **Prerequisite(s):** Junior standing

or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 408 3 OR 4 hrs. Hispanic Dialectology

Descriptive and historical analysis of the most salient linguistic phenomena of peninsular and American Spanish dialects. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 362 or SPAN 401; or consent of the instructor.

SPAN 409 3 OR 4 hrs. Semantics and Pragmatics in Spanish

Introduction to the study of meaning in language with a focus on Spanish. Includes formal/ compositional semantics and an introduction to pragmatics. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPAN 365 or SPAN 401; or consent of the instructor.

SPAN 411 3 OR 4 hrs. Topics in Medieval and Early Modern Spanish Literature and Culture

Exploration of topics and theoretical approaches to the literature and culture of medieval and early modern Spain. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above. Completion of two 300-level courses in Spanish literature; or consent of the instructor.

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SPAN 414 3 OR 4 hrs. Topics in Cervantes' Don Quijote

Examination of current critical and theoretical approaches to Cervantes' *Don Quijote*, including questions of gender, class, historiography, and ideology. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 421 3 OR 4 hrs. Topics in 18th- and 19th-Century Spanish

Literature and Culture Exploration of topics and theoretical approaches to peninsular literature and culture from the Neoclassical period through the Generation of 1898. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 422 3 OR 4 hrs. Topics in 20th- and 21st-Century Spanish Literature, and Culture

Exploration of topics; sociological and historical approaches to the literature and culture from the vanguard movements of the early 20th century through the present day. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 427 3 OR 4 hrs. Studies in Language Policy and Cultural Identity

Examines the development, articulation, and effects of language policies on identity formation and culture. Focuses on the United States and the Spanish language, although other countries and languages are included. **Same as** LALS 427. 3 undergraduate hrs. 4 graduate hrs. Taught in English. **Prerequisite(s):** Junior standing or above. Reading and writing knowledge of Spanish.

SPAN 430 3 OR 4 hrs. Topics in Colonial History, Literature, and Culture

Topics in colonial literature, history and culture intended to introduce students to the main methodologies, paradigms, issues and critical approaches to colonial studies. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 431 3 OR 4 hrs. Topics in Latin American Letters from the Revolutionary Era to Independence

Nineteenth-century literary trends from the beginnings of the novel through Romanticism and Realism to Urban Naturalism. Prose and poetry. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 434 3 OR 4 hrs. Topics in Latin American Letters from Modernismo to the Early 1970s

Emergence of new literary and cultural trends from the beginning of the 20th century to the end of the so-called Latin American Boom. It may include fiction, poetry, film, theater, as well as less traditional genres. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 435 3 OR 4 hrs. Topics in Contemporary Urban Latin American and Latino Culture, Literature, and the Arts

Study of particular cultural, artistic or literary phenomenon in urban Latin American and Latino culture, literature or the arts. Emphasis on cultural studies and/or literary analysis. Critical writing is an important component of the course. 3 undergraduate hrs. 4 graduate hrs. May be repeated if topics vary. **Prerequisite(s):** Junior standing or above and completion of two 300-level courses in Spanish literature; or consent of the instructor.

SPAN 436 1–4 hrs. Special Topics in the Teaching of Spanish

Course content is announced prior to each term in which course is given. May be repeated. Students may register in more than one section per term. Taught in English. Some semesters, may be taught in Spanish. **Prerequisite(s):** Approval of the department.

SPAN 448 3 OR 4 hrs. Foundations of Second Language Teaching

Provides an introduction to second language acquisition research and its implications for communicative language teaching. Emphasis is on creating activities to develop high school students' communicative abilities in speaking and listening. **Same as** FR 448 and GER 448. 3 undergraduate hrs. 4 graduate hrs. Taught in English. **Prerequisite(s)**: Junior standing or above; and consent of the instructor and three courses at the 200- and 300-levels.

SPAN 449 3 OR 4 hrs. Teaching Second Language Literacy and Cultural Awareness

Examines the nature of literacy as a reciprocal relationship between readers, writers, texts, and culture. Students learn the practical and theoretical foundations of classroom teaching of second language reading and writing skills. **Same as** FR 449 and GER 449. 3 undergraduate hrs. 4 graduate hrs. Taught in English. **Prerequisite(s):** Junior standing or above; and consent of the instructor.

SPAN 451 6 hrs. Educational Practice with Seminar I

The first half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** Good academic standing in a teacher education program, completion of 100 clock hours of pre-student-teaching field experiences, and approval of the department.

SPAN 452 6 hrs. Educational Practice with Seminar II

The second half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades six through twelve. Graduate credit only with approval of the department. **Prerequisite(s):** Good academic standing in a teacher education program, completion of 100 clock hours of pre-studentteaching field experiences, credit or concurrent registration in SPAN 451, and approval of the department.

SPAN 487 3 OR 4 hrs. Computer-Assisted Language Learning

An introduction to computerassisted language learning (CALL): the use of computer technology in second language reading and research. The effectiveness of CALL technology is assessed based on SLA theory and research studies. **Same as** GER 487 and LING 487. 3 undergraduate hrs. 4 graduate hrs. Taught in English. Extensive computer use required. **Prerequisite(s):** LING 483 or

CIE 483 or GER 448 or FR 448 or SPAN 448 or GER 449 or FR 449 or SPAN 449; or SPAN 502 or FR 502 or the equivalent; and senior standing or above.

SPAN 494 3 OR 4 hrs. Special Topics

Topics will vary from term to term and may cover such areas as literary theory or culture. **Same as** FR 494 and ITAL 494. 3 undergraduate hrs. 4 graduate hrs. May be repeated. Students may register in more than one section per term. Taught in English. **Prerequisite(s)**: Junior standing or above; and approval of the department.

Special Education

SPED 410 3 hrs. Survey of Characteristics of Learners with Disabilities Fulfills requirements for Illinois House Bill 150. Field experience required. Learning and personal-

ity characteristics of exceptional learners. Diagnostic processes and educational approaches are examined. **Prerequisite(s):** ED 210 or ED 421 or graduate standing and consent of the instructor.

SPED 415 3 hrs. Characteristics of Exceptional Learners

Provides a foundation for the understanding of the exceptional learner in an inclusive environment. No graduation credit for students enrolled in a secondary education, social work or any graduate degree program. **Prerequisite(s):** Junior standing or above and admission to the Bachelor of Arts in Elementary Education program or consent of the instructor.

SPED 416 2 hrs. Methods of Instruction for Exceptional Learners

The purpose of this course is to address issues of instruction for individuals with special needs. Topics include effective instructional and accommodative practices and strategies in multiple areas (math, literacy, science, social studies, art).

Prerequisite(s): Junior standing or above and Admission to the Bachelor of Arts in Elementary Education program. Successful completion of SPED 415.

SPED 423 4 hrs. Assessment of Monolingual and LEP Children with Disabilities

Psychoeducational assessment of monolingual and limited English proficient children with learning disabilities. First and second language development. Theoretical and practical aspects of measurement and testing. **Prerequisite(s)**: Graduate standing; and SPED 410 or the equivalent.

SPED 424 3 OR 4 hrs. Assessment of Students with Special Needs

Theoretical basis and practical application of standardized and alternative testing of children with learning and behavior difficulties. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPED 410.

SPED 426 3 OR 4 hrs. Curricular/Behavioral Considerations for Learners

with Special Needs Instructional practices related to academics, classroom management, individualized and group instruction for students with special needs. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPED 424 or the equivalent or consent of the instructor.

SPED 427

Curricular and Behavioral Considerations for LEP Learners with Special Needs Exploration of best practice instruction and behavior management for limited English proficient students with learning disabilities, behavioral disabilities, and/or mild cognitive delays. Prerequisite(s): Graduate standing; and SPED 410 or the equivalent or consent of the instructor.

4 hrs.

SPED 442 3 OR 4 hrs. Language Development and Disorders

Theory and research on the acquisition of phonology, syntax, semantics, and pragmatics in children with and without disabilities. Models for language assessment and intervention. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** SPED 410.

SPED 444

3 hrs. Assistive Technology for Literacy, Learning, and Participation in Pre-K through High School

Use of communication systems, computers, adapted equipment, and strategies to foster participation and inclusion of students in grades preschool through high school. Same as DHD 444.

SPED 448 1-4 hrs. **Topics in Special Education**

Course or workshop on prean-nounced topic on the education of handicapped children, adolescents, or adults. May be repeated. Students may register in more than one section per term. Prerequisite(s): SPED 410 and consent of the instructor.

SPED 449

Early Childhood/Early Childhood Special Education: Perspectives, Policies and History

3 hrs.

Perspectives, policies, history, and foundations of early childhood education and early childhood special education. Émphasis on the effects of changing economic, political, legal, social, and views of human development. **Same as** EPSY 449 and EDPS 449.

SPED 461 3 hrs. **Political and Sociocultural Perspectives on Special** Education

Students will examine issues of access and equity through legislation, litigation, and sociocultural perspectives and be introduced to major theoretical frameworks that influence special education programs. Same as ED 461. Fieldwork required.

SPED 462 3 hrs. Assessment of Individuals with **Disabilities**

To prepare students in the use of formal and informal assessment in making decisions regarding placement, instructional planning, and evaluation of students with disabilities. Fieldwork required. Prerequisite(s): ED 461 or SPED 461 or the equivalent or consent of the instructor.

SPED 463 3 hrs.

Instructional Adaptations in Reading and Writing I Emphasizes the components of designing, implementing, and assessing reading and writing instruction for individuals with disabilities at the elementary level. Fieldwork required. Prerequisite(s): ED 461 or SPED 461 or the equivalent or consent of the instructor.

SPED 465 3 hrs. **Cognitive Development and** Disabilities

Theory and research on cognitive development in children with disabilities from infancy through adolescence, in the context of typical development. Models for cognitive assessment and intervention. Same as EPSY 465. Fieldwork required. Prerequisite(s): SPED 461 or ED 461 or the equivalent or consent of the instructor.

SPED 466 3 hrs. Language Development, **Diversity, and Disabilities**

Theory and research on language development in children with disabilities, in the context of typical development. Models for language assessment and intervention. Same as EPSY 466. Fieldwork required. Prerequisite(s): SPED 461 or ED 461 or the equivalent or consent of the instructor.

SPED 467 3 hrs.

Social and Emotional **Development and Disabilities** Exploration of the risk factors and different theoretical approaches associated with the social and emotional development of youth ages 5-21 with and without disabilities. Same as EPSY 467. Fieldwork required. Prerequisite(s): SPED 461 or ED 461 or the equivalent or consent of the instructor.

SPED 471 3 hrs. **Curricular Adaptations for** Learners with Significant

Disabilities Addresses methods of instruction, assessment, planning for instruction, development and evaluation of learning environments, and instructional delivery for students with significant disabilities. Fieldwork required. Prerequisite(s): SPED 465 and SPED 466 and SPED 467; or consent of the instructor.

SPED 472 3 hrs. **Promoting Academic and**

Prosocial Behavior I The importance of school-wide and classroom structure and climate in the educational process. Strategies to promote academic success and desired social behavior. Same as ED 472. Fieldwork required. Prerequisite(s): SPED 461 or ED 461 or the equivalent or consent of the instructor.

SPED 473 3 hrs. Teaching Math and Science with Adaptations

Provides prospective teachers

with assessment strategies and a range of adaptations, modifica-

tions, and interventions in math and science for students with disabilities. Same as ED 473. Fieldwork required. Prerequisite(s): SPED 461 or ED 461 or the equivalent or consent of the instructor.

SPED 480 3 OR 4 hrs. Technology and Multimedia:

Learning Tools in the Classroom

New technologies to support teaching and learning in pre-col-lege classrooms. **Same as** CI 480. 3 undergraduate hrs. 4 graduate hrs.

SPED 481 4 hrs. Theoretical Foundations of **Bilingual/ESL Special** Education

Overview of historical, political, pedagogical, and theoretical issues involved in the education of students with special learning needs and who are second lan-guage learners. **Prerequisite(s):** Graduate standing; and SPED 410 or the equivalent or consent of the instructor.

Statistics

STAT 101 4 hrs. Introduction to Statistics

Applications of statistics in the real world, displaying and describing data, normal curve, regression, probability, statistical inference, confidence intervals, and hypothesis tests. Credit is not given for STAT 101 for majors in Mathematics and Computer Science, Mathematics, and Teaching of Mathematics. Extensive computer use required. This course is offered in both a blended and traditional format. If the section is marked "Blended-Online and Classroom," use of a computer and Internet access is required. Blended sections require students to do some of their course work online. A highspeed connection, while not required, is strongly suggested. Prerequisite(s): Satisfactory grade in MATH 090, or appropriate score on the department placement test, or consent of the instructor.

STAT 381 3 hrs. Applied Statistical Methods I

Graphical and tabular representation of data; introduction to probability, random variables, sampling distributions, estimation, confidence intervals, and tests of hypotheses. Includes SAS and SPSSX applications. **Prerequisite(s):** Grade of C or better in MATH 210.

STAT 401 3 OR 4 hrs. Introduction to Probability

Probability spaces, random variables and their distributions, conditional distribution and stochastic independence, special distributions, sampling distributions, limit theorems. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MATH 210.

STAT 411 3 OR 4 hrs. Statistical Theory

Estimation, tests of statistical hypotheses, best tests, sufficient statistics, Rao-Cramer inequality, sequential probability ratio tests, the multivariate normal distribution, nonparametric methods. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in STAT 401.

STAT 416 3 0R 4 hrs. Nonparametric Statistical Methods

Distribution free tests for location and dispersion problems, one-way and two-way layouts, the independence problem, regression problems involving slopes, detecting broad alterna-tives, resampling methods. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in STAT 381 or STAT 411.

3 OR 4 hrs. **STAT 431** Introduction to Survey Sampling

Simple random sampling; sampling proportions; estimation of sample size; stratified random sampling; ratio estimators; regression estimators; systematic and cluster sampling. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in STAT 411 or STAT 481.

3 OR 4 hrs. STAT 461 Applied Probability Models I

Computing probabilities and expectations by conditioning, Markov chains, Chapman-Kolmogorov equations, branching processes, Poisson processes and exponential distribution, continuous-time Markov chains, reversibility, uniformization. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in STAT 401.

STAT 462 3 OR 4 hrs. Applied Probability Models II

Renewal theory, regenerative processes, semi-Markov processes, queueing theory, exponential models, M/G/1 and G/M/1 systems, reliability, bounds on the reliability function, system life, Brownian motion, stationary processes. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in STAT 461.

3 OR 4 hrs. **STAT 471** Linear and Nonlinear Programming

Linear programming, simplex algorithm, degeneracy, duality theorem sensitivity analysis, convexity, network simplex methods, assignment problems. Constrained and unconstrained minima. Quasi-Newton methods. Ellipsoidal methods of Kachian. 3 undergraduate hrs. 4 graduate hrs. Prerequisite(s): Grade of C or better in MATH 310.

Course Descriptions



 STATISTICS SPECIAL EDUCATION

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STAT 473 3 OR 4 hrs. Game Theory

Games in extensive and normal form. Minimax theorem. Solving matrix games via linear programming. Nash equilibria for nonzero-sum games, Shapley value, bargaining models. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in MATH 310 or STAT 401.

STAT 477 3 OR 4 hrs. Introduction to Reliability Theory

Structural and probabilistic properties of coherent systems, notions of aging and classes of life distributions, preservation properties, dependent components, optimal allocation models. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in STAT 401 or consent of the instructor.

STAT 481 3 OR 4 hrs. Applied Statistical Methods II

Applied Statistical methods in Linear regression, introduction to model building, analysis of variance, analysis of enumerative data, nonparametric statistics, product and system reliability, quality control. SAS and SPSSX applications. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in STAT 381.

STAT 486 3 OR 4 hrs. Statistical Consulting

Introduction to statistical consulting methods and techniques. Handling and transformation of raw data sets in CMS. Statistical analysis of data sets with SAS and SPSSX. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of C or better in STAT 411 or STAT 481.

STAT 494 3 OR 4 hrs. Special Topics in Statistics, Probability and Operations Research

Course content announced prior to each semester in which it is given. Topics drawn from areas such as distribution theory; Bayesian inference; discrete optimization; applied probability models; resampling techniques; biostatistics; environmental sampling. 3 undergraduate hrs. 4 graduate hrs. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Approval of the department.

STAT 496 1–4 hrs. Independent Study

Reading course supervised by a faculty member. May be repeated. Students may register in more than one section per term. **Prerequisite(s):** Approval of the instructor and approval of the department.

Theatre

THTR 1093 hrs.Introduction to Theatre

Understanding the theatre experience through production examples and the critical examination of the contributions of playwright, actor, director, designer, and audience. Play attendance required. *Creative Arts, and Past course.*

THTR 140 3 hrs. Polish Drama in Translation

Elementary aspects of Polish dramatic theory and close reading of representative scripts selected from various periods. **Same as** POL 140. Taught in English. *Creative Arts, and World Cultures course.*

THTR 1503 hrs.Technical Theatre

Basic techniques of play production. Survey of methods and materials of set construction, painting, stage lighting, backstage organization. Practical work with University Theatre.

THTR 151 3 hrs. Fundamentals in Costume Construction

Fundamentals of costume construction from conception to realization, through the use of sewing machines, pattern making, and historical research with practical projects.

THTR 161 3 hrs. Introduction to Acting I

Basic vocal and physical stage performance techniques including the role of character in relation to the intellectual and emotional landscape of a play.

THTR 2093 hrs.Modern Theatre

Theatre theories and techniques developed between 1870 and the present, notably those of Ibsen, Appia, Stanislavsky, Meyerhold, Brecht, Artaud, and Grotowski. **Prerequisite(s):** THTR 109. *Creative Arts course.*

THTR 2103 hrs.Movement for Stage I

Techniques in the physicalization of performance. Focus on the body in space as both primary and integrated theatrical communication. **Prerequisite(s):** Credit or concurrent registration in THTR 161.

THTR 2453 hrs.East Asian Theatre

Survey of traditional theatre forms in China, Japan, and Korea, their cultural contexts, and influence on today's theatre. Students may also choose to research theatres of Southeast Asia. *Creative Arts course.*

THTR 250 Set Design I

Fundamental principles of visual perception: space, mass, balance, line, texture, shape, color, light, movement, tension and their use in creating visual environments for performance. Practical design projects required. **Prerequisite(s)**: Grade of B or better in THTR 150.

3 hrs.

3 hrs.

3 hrs.

3 hrs.

THTR 255 Set Design II

Basic interpretive and practical techniques in creating 3-dimensional performance environments including conceptualization, research, drafting, rendering, and model building. Students create a design solution for one of the theatre productions. **Prerequisite(s):** Grade of B or

better in THTR 250.

THTR 2563 hrs.Lighting Design

Basic interpretive and practical techniques in creating and enhancing 3-dimensional performance environments through lighting. **Prerequisite(s):** Grade of B or better in THTR 150.

THTR 257 Costume Design I

Basic interpretive and practical techniques in designing stage costumes including conceptualization, rendering, and construction techniques. **Prerequisite(s):** Grade of B or better in THTR 151.

THTR 258 3 hrs. Costume Design II

Practical research and rendering techniques in designing stage costumes for use in theatrical productions. **Prerequisite(s):** Grade of B or better in THTR 257.

THTR 259 Makeup Design

Principle of designing and applying makeup for stage performances including prosthetics and wigs. **Prerequisite(s):** Grade of B or better in THTR 150 or grade of B or better in THTR 151.

THTR 260 3 hrs. Voice for the Stage I

Fundamentals of vocal production, their physical and emotional characteristics, and their relationship to body, space, action, and emotion.

THTR 261 3 hrs. Voice for the Stage II

The relationship between speech, sound, and dramatic sense. Detailed work on the principles of speech. Advancement of breath and phonation skills from Voice I. **Prerequisite(s):** Grade of B or better in THTR 210 and grade of B or better in THTR 260.

THTR 262

Acting II: Scene Study Techniques of interpreting text, character, and dramatic action. Includes attention to alternative dramatic forms and modes of performance. **Prerequisite(s):** Grade of B or better in THTR 210 and grade of B or better in THTR 260; and sophomore standing or above.

3 hrs.

THTR 263 3 hrs. Acting II: Adaptations

Techniques of adapting and interpreting text from fiction, short stories and novels into short dramatic scenes which the students write and act in.

Prerequisite(s): Grade of B or better in THTR 161 and grade of B or better in THTR 210; and sophomore standing or above.

THTR 280 3 hrs. Practicum in Performance

Rehearsal and performance techniques, including script analysis, characterization, voice, movement, directing, or design. May be repeated to a maximum of 18 hrs. Students may register in more than one section per term. **Prerequisite(s):** Approval of the department and completion of a successful audition.

THTR 281 1–6 hrs. Practicum in Theatre Administration

Planning and execution of specific projects in administration and box office; publicity, budget, marketing, house management, and scheduling. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

THTR 282 1–6 hrs. Practicum in Costuming

Practical experience in all aspects of construction and maintenance, including millinery, mask making, wig making, pattern drafting, and makeup application. May be repeated to a maximum of 15 hrs. Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

THTR 283 1–6 hrs. Practicum in Technical Theatre

Practical experience in various technical areas: scenery construction, set painting, stage lighting, sound, and properties construction. May be repeated to a maximum of 15 hrs. Students may register in more than one section per term. **Prerequisite(s)**: Consent of the instructor.

THTR 284 3 hrs. Seminar on Play in Production

Research and development for play production using the current University production as an example. Special topics. May be repeated to a maximum of 6 hrs. **Prerequisite(s):** Consent of the instructor.

THTR 299 1–3 hrs. Individual Topics

Individual investigation of special problems. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** Junior standing, a 2.50 grade point average, and consent of the instructor.

THTR 310 3 hrs. Movement for Stage II

Advanced techniques in the physicalization of performance and the correlation of body and text as communicators of dramatic action. **Prerequisite(s):** Grade of B or better in THTR 210; and junior standing or above. **Recommended background:** Advanced actor training and voice training.

THTR 410 3 OR 4 hrs. Movement for Stage III

Specialized topics in performance skills and physical theatre incorporates clown, circus techniques, and mask work. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 310 and advanced physical performance experience; or consent of the instructor.

THTR 4233 OR 4 hrs.Playwriting

The development of scripts for stage performance. **Same as** ENGL 495. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Junior standing or above; and approval of the department and submission and approval of a playwriting sample or dialog-centered fiction prior to registration.

THTR 444 3 OR 4 hrs. Drama in Its Cultural Context I

Drama in its social and cultural context, through the seventeenth century. 3 undergraduate hrs. 4 graduate hrs.

THTR 4453 OR 4 hrs.Drama in Its

Cultural Context II Drama in its social and cultural context, eighteenth to twentieth centuries. 3 undergraduate hrs. 4 graduate hrs.

THTR 451 3 OR 4 hrs. Advanced Acting: American Drama

Techniques of performing classical and modern American drama. Focus on character development and interpreting dramatic action. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 210 and grade of B or better in THTR 260; and grade of B or better in THTR 262 or grade of B or better in THTR 263; and sophomore standing or above.

THTR 452 3 OR 4 hrs. Advanced Acting: Shakespeare

Techniques of performing monologues and scenes from Shakespeare's plays. Focus on magical realism and techniques of performing in verse. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 210 and grade of B or better in THTR 261; and grade of B or better in THTR 262 or grade of B or better in THTR 263; and junior standing or above; or consent of the instructor.

THTR 455 3 OR 4 hrs. Acting: Comedy

Techniques of performing classic comedy. Emphasis on the "Commedia dell'arte" and improvisational comedy. Topics vary. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 262 or graduate standing in theatre.

THTR 458 3 OR 4 hrs. Advanced Acting: Chekhov

Techniques of performing scenes from Chekhov's plays and short stories. Focus on naturalistic theater, psychological realism and craft of transforming into the character. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 452; or consent of the instructor or graduate standing in theatre.

THTR 459 3 OR 4 hrs. Advanced Acting: Ensemble

Advanced Acting: Ensemble Process and scoring of character development in a full-length twentieth-century play. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time. **Prerequisite(5):** Grade of B or better in THTR 451 and grade of B or better in THTR 452 and grade of B or better in THTR 458; and junior standing or above; or consent of the instructor.

THTR 462 3 OR 4 hrs. Voice for the Stage III

Advanced techniques in the integration of voice, speech, dialects, and other text-related vocal performance skills. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 452; and junior standing or above or graduate

THTR 464 3 OR 4 hrs. Special Projects in Theatrical Design

standing in theatre.

Design Twentieth-century styles: design for the contemporary stage. Problems in conceptualization, realization, and execution. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). **Prerequisite(s):** THTR 250 or THTR 256; or THTR 257 and THTR 259; or graduate standing in theatre.

THTR 465 3 OR 4 hrs. Stage Direction

Exploration of conceptual planning and implementation skills for the stage director ranging from script interpretation to rehearsal and performance. Performance projects required. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Grade of B or better in THTR 210 and grade of B or better in THTR 250; and grade of B or better in THTR 256 or grade of B or better in THTR 257; or graduate standing in theatre.

THTR 466 3 OR 4 hrs. Special Projects in

Performance Training Training in varying advanced techniques of performance. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 2 time(s). **Prerequisite(s):** THTR 262; or for graduate students, consent of the instructor.

THTR 470 3 OR 4 hrs. Contemporary Performance Techniques

The relationship of contemporary theory and performance techniques with attention to both text- and nontext-based forms. Topics vary. Performance projects required. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time.

THTR 472 3 OR 4 hrs.

Investigative Collaboration Collaboration as the primary means for theatrical creation. Production teams assigned to joint-production projects. Topics vary. 3 undergraduate hrs. 4 graduate hrs. May be repeated up to 1 time.

THTR 474 1–8 hrs. Internship

Students work in an approved professional setting. Individual projects developed through conferences with a faculty member and a field supervisor. May be repeated for a maximum of 1-6 hours for undergraduate students; or 1-8 hours for graduate students. Undergraduate credit should be in multiples of 3. Only three hours may be applied toward theatre major requirements. Prerequisite(s): Senior standing or above and 12 hours of upper-division courses in theatre, with a 3.00 grade point average in those courses.

THTR 475 3 OR 4 hrs.

Advanced Acting: Audition Selection and performing of audition pieces from theater, film, and television. Professional seminars and discussions with actors, directors, agents and casting directors. 3 undergraduate hrs. 4 graduate hrs.

Prerequisite(s): Senior standing or above; or consent of the instructor.

THTR 491 0–16 hrs. Study Abroad in Theatre

Study abroad within an approved foreign exchange program or department-sponsored program. May be repeated with approval. Approval to repeat course granted by the department.

Prerequisite(s): Approval of the department.

THTR 498 1–4 hrs. Independent Study

Individual investigation of special problems that may be studentinitiated or related to faculty research. May also be used for special University-sponsored projects, such as interdisciplinary seminars. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** Senior or graduate standing and approval of the department.

Urban and Public Affairs

UPA 300 3 hrs. Introduction to Urban Policy Processes

Basic structure of the policy process within the urban context including the nature of urban policy, its formulation, evaluation, and implementation. Emphasis on state and local policy development as it relates to urban areas. Fieldwork required. **Prerequisite(s)**: College-level microeconomics and admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 301 3 hrs. Political Economy of Urban Development

Political and economic approaches to the study of urban life, urban problems, and the built environment. Fieldwork required. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 303 3 hrs.

Urban Government I: Managing the Internal Environment

Personnel management, organizing, budgeting, finance, leadership, motivation, economic development, accountability, ethics, legal and constitutional foundations. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 304 3 hrs. Visualizing the City: Methods and Tools for Representing the City

Addresses basics of visualization methods and techniques of representing the physical environment. Fieldwork r required. **Prerequisite(S):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 305 3 hrs. Urban Government II: Managing the External Environment

Intergovernmental finance, interjurisdictional competition, intergovernmental cooperation, intergovernmental cooperative agreements, and contractual and informal relations with nonprofit organizations and governmental actors. **Prerequisite(s):**

Admission to the BA in Urban and Public Affairs program or consent of the instructor.

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URBAN AND PUBLIC AFFAIRS

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UPA 306 3 hrs. Urban Policy Analysis Methods

Introduces students to the basics of policy and program evaluation using rational model. Needs analysis, performance evaluation, data collection methods and analysis, discounting valuation problems. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 307 3 hrs. E-Government in Urban and Public Affairs

This course will investigate the implications of electronic forms of service delivery, for example via the Internet, for citizens, for managers, for elected officials, and for the relationships between citizens and their elected representatives. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 308 3 hrs. Globalization in Urban and Public Affairs

Study of urban and public affairs as they relate to globalization. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 490 0–18 hrs. International Student Exchange Program

The student exchange program enables the reciprocal exchange of students between UIC and colleges or universities in other countries. There are a variety of programs tailored to meet the needs of CUPPA students. May be repeated for a maximum of 36 credit hours per academic year or for a total of 48 hours, all of which must be earned within one calendar year. Determination of the number of credits to be granted is part of the proposal approval process. Fieldwork required. **Prerequisite(s):** Completion of the University Writing requirement; and junior standing or above; and approval of the College of Urban Planning and Public Affairs; and approval of the Office of International Affairs.

UPA 492 3 hrs. Topics in Urban and Public Affairs

In-depth study of selected issues of urban and public affairs. May be repeated to a maximum of 6 hrs. Students may register for more than one section per term. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 493 3 hrs. Topics in Urban and Public Affairs and Administration

Arrairs and Administration In-depth study of selected issues on urban and public affairs. May be repeated to a maximum of 6 hrs. Students may register for more than one section per term. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 494 3 hrs. Senior Capstone I in UPA

A selection of a capstone topic and introductory research on the topic. Fieldwork required. **Prerequisite(s):** Senior standing or above; Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 495 3 hrs. Senior Capstone Experience in Urban and Public Affairs II

Students synthesize and draw upon knowledge learned in the program to engage in projects in the urban community. Fieldwork required. **Prerequisite(s):** Senior standing or above; Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 496 3 hrs. Senior Capstone Experience in Urban and Public Affairs I: Public Administration

Selection of capstone topic and introductory research on that topic. Fieldwork required. **Prerequisite(s):** Senior standing or above; admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 497 3 hrs. Senior Capstone Experience in Urban and Public Affairs II: Public Administration

Students synthesize and draw upon knowledge gained in the UPA major to engage in projects in the urban community. This course is an extension of UPA 496. Fieldwork required.

Prerequisite(s): Senior standing or above; Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 498 1–3 hrs. Independent Study in Urban Planning and Public Affairs

Provides an opportunity for students to pursue an independent project that is not available through the required UPA course work. May be repeated for a maximum of 6 hrs. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

UPA 499 1–3 hrs. Independent Study in Urban Planning and Public Affairs and Administration

Provides an opportunity for students to pursue an independent project that is not available through the required UPA course work. May be repeated for a maximum of 6 hrs. **Prerequisite(s):** Admission to the BA in Urban and Public Affairs program or consent of the instructor.

Urban Planning and Policy

UPP 101 3 hrs. Introduction to Urban Studies General survey of urban issues and experience using an interdisciplinary approach. U.S. Society course

UPP 199 1–3 hrs. Independent Study in Urban and Public Affairs

Study and analysis of topics selected by the student under the guidance of a faculty advisor. May be repeated to a maximum of 6 hrs. Students may register in more than one section per term. **Prerequisite(s):** Consent of the instructor.

UPP 202 3 hrs. Planning Great Cities

What makes a city great, how cities change, can cities be planned, and how planners plan; characteristics of Great Cities and current urban planning issues. U.S. Society course.

UPP 302 6 hrs. Great Cities Internship

Provides students an opportunity to apply theoretical knowledge and conduct research in metropolitan organizations through field placements and seminars. **Same as** POLS 302. **Prerequisite(s):** Junior or senior

standing and grade point average of 3.00, or consent of the instructor.

UPP 403 3 OR 4 hrs. Introduction to Urban Planning

Patterns of city growth, physical, socioeconomic, and environmental issues. Contemporary planning issues. Future of cities. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Advanced undergraduate standing or consent of the instructor.

UPP 420 1–8 hrs. Great Cities: London and Chicago

Comparative investigation of urban, economic, social, and political issues in the two global cities. Includes classes, study, and living in London. Fieldwork required. **Prerequisite(s):** Junior standing or above and selection by the Study Abroad Office admission committee.

UPP 460 3 OR 4 hrs. Introduction to Geospatial Analysis and Visualization

Exploration of geospatial analysis and visualization theory and tools; how to appropriately choose and use tools. Cognition, communication, modeling, cartography, web authoring, 3-D visualization, and aerial and satellite photography. 3 undergraduate hrs. 4 graduate hrs. Extensive computer use required. Centrino 2 Duo processor, 2 GB RAM and 100 GB hard drive minimum recommendations. **Prerequisite(s):** Junior standing or above; and approval of the deparment. Priority registration will be given to students admitted to the campus certificate program in Geospatial Analysis and Visualization.

UPP 462 3 OR 4 hrs.

Intermediate GIS for Planning Introduce more advanced features of GIS and its applications to urban planning and policy. 3 undergraduate hrs. 4 graduate hrs. Extensive computer use required. Prerequisite(s): Junior standing or above; and approval of the department. Priority registration will be given to students admitted to the campus certificate program in Geospatial Analysis and Visualization.

UPP 463 3 OR 4 hrs. Complexity-Based Models for Planning and Policy

Introduction to complexity-based models and their possible applications to a range of planning and public policy issues. 3 undergraduate hrs. 4 graduate hrs. Extensive computer use required. **Prerequisite(s):** Junior standing or above; and approval of the department. Priority registration will be given to students admitted to the campus certificate program in Geospatial Analysis and Visualization. **Recommended background:** Experience in object-oriented programming is helpful but not required.

UPP 464 3 OR 4 hrs. Advanced Visualization Techniques

Specialized computational abilities for various planning areas including: database and spreadsheet analyses, spatial information systems, imageries and image editing, 3-D modeling and virtual reality, hypermedia or multimedia, and the Internet. 3 undergraduate hrs. 4 graduate hrs. Extensive computer use required. Centrino 2 Duo with at least 2GB RAM and 110 GB hard drive minimum recommended specifications. Prerequisite(s): Junior standing or above; and approval of the deparment. Priority registration will be given to students admit-ted to the campus certificate program in Geospatial Analysis and

UPP 470 3 OR 4 hrs. Cohort Seminar for Urban Developers

Visualization.

Application of the financial calculator, use of spreadsheets, and other tools commonly used in real estate-based urban development projects. 3 undergraduate hrs. 4 graduate hrs. **Prerenuisite(s):** Consent of the

Prerequisite(s): Consent of the instructor.

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UPP 471 3 OR 4 hrs. Housing and Community Development for Urban Developers

Housing policy at federal, state, and local levels affecting urban housing markets. Emphasis on assessment of market conditions affecting community development decisions. 3 undergraduate hrs. 4 graduate hrs.

Prerequisite(s): UPP 470 or consent of the instructor.

UPP 472 3 OR 4 hrs. Development Finance For Urban Developers

Key financial principles of real estate development, particularly those related to the financing of affordable housing. How to develop a real estate pro forma. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Consent of the instructor.

UPP 473 3 OR 4 hrs. Organizational Essentials for Urban Developers

Theory and practice of management in public and nonprofit settings. Focus on developing communication, leadership, and legal skills for each step in development. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Consent of the instructor.

UPP 474 3 OR 4 hrs. Community Development Process for Urban Developers

Developing affordable housing: development team, acquisition strategy, legal issues, construction management, and project sustainability, as it pertains to different types of housing developments. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Consent of the instructor.

UPP 475 3 OR 4 hrs. Sustaining the Housing for Urban Developers

Introduces students to a range of management issues: property management and maintenance, resident relations and services, and financial/asset management as it relates to sustaining affordable housing. 3 undergraduate hrs. 4 graduate hrs. **Prerequisite(s):** Consent of the instructor.

UPP 493 1–4 hrs. Topics in Urban Planning and Policy

Intensive analysis of selected planning problems or policy issues. May be repeated to a maximum of 12 hrs. Students may register for more than one section per term. **Prerequisite(s):** Junior standing or above; and consent of the instructor.

Women's Health Nursing

NUWH 450 3 hrs. Women and Mental Health Nursing

Theories of female psychology; women's daily lives and mental health; gender differences in mental illness; strategies for improving women's mental health. **Same as** GWS 450 and NUSC 450. **Prerequisite(s):** Consent of the instructor. Students enrolled in the College of Liberal Arts and Sciences must have credit in PSCH 100 and either PSCH 270 or PSCH 315 or GWS 315.

NUWH 455 3 hrs. Women's Health: A Primary Healthcare Approach

Health promotion and disease prevention in women's health. Includes community experience with community women. Primary healthcare approaches examined. **Same as** CHSC 456 and NUSC 455. **Prerequisite(s):** Consent of the instructor.

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