CHEM 5960. Science Institute. 1–6 hours. Courses for students accepted by the university for enrollment in special institute courses. May be repeated for credit, not to exceed a total of 6 hours in each course.

CHEM 6010. Seminar for Doctoral Candidates. 3 hours. Demonstration of competence in a specific area of chemistry (analytical, organic, physical, inorganic) as evidenced by criteria established by the faculty of each discipline. May be repeated for credit. Six credit hours required.

CHEM 6900-CHEM 6910. Special Problems. 1–3 hours each. For doctoral students capable of developing a problem independently through conferences and activities directed by the instructor. Problem selected by the student with the consent of the major professor.

CHEM 6940. Individual Research. 1–12 hours. Doctoral research of independent nature. May be repeated for credit. Pass/no pass only.

CHEM 6950. Doctoral Dissertation. 3, 6 or 9 hours. To be scheduled only with consent of department. 12 hours credit required. No credit assigned until dissertation has been completed and filed with the graduate dean. Doctoral students must maintain continuous enrollment in this course subsequent to passing qualifying examination for admission to candidacy. May be repeated for credit.

CHEM 6990-6991. Individual Research. 1–3 hours each. For postdoctoral fellows to further training and research experience in developing and solving research problems independently. Prerequisite(s): consent of department. May be repeated for credit. Pass/no pass only.

Chinese

see Undergraduate Catalog

Communication Studies

Communication Studies, COMM

COMM 5080. Introduction to Graduate Study and Research in Communication Studies. 3 hours. Broad perspective on communication studies content areas.

COMM 5085. Pedagogy and Communication. 3 hours. Study of pedagogy and communication. Examines philosophical, theoretical and practical issues faced by university instructors.

COMM 5180. Qualitative Research Methods in Communication. 3 hours. Qualitative research methodologies for communication studies research.

COMM 5185. Quantitative Research Methods in Communication. 3 hours. Experimental and quantitative techniques usable in research in communication.

COMM 5220. Organizational Communication. 3 hours. Study of the transmission of information and ideas within an organization with emphasis on the problems encountered in the business world.

COMM 5221. Crisis and Disaster Communication. 3 hours. Theoretical and practical examination of communication during crises and/or disasters. The role of communication in crisis/disaster planning, real-time crisis response, and post-crisis recovery and sensemaking.

COMM 5223. Communication and Aging. 3 hours. Examination of the role of communication in the aging process. Theories related to communication and aging are explored in a variety of contexts including intergenerational interactions, interpersonal relationships, family relationships, health care interactions, the workplace, mass media, political communication and cultural contexts.

COMM 5225. Interpersonal Communication. 3 hours. Contemporary research and theory in the study of communication patterns found at various stages of normal interpersonal interactions.

COMM 5226. Seminar in Health Communication. 3 hours. Introduction of communication theories and approaches related to health care in interpersonal, organizational and mass communication settings.

COMM 5227. Seminar in Intercultural Communication. 3 hours. Provides an opportunity to explore existing and emerging issues, theories and practices in intercultural communication.

COMM 5240. Rhetoric and Mediated Culture. 3 hours. Rhetorical consequences of mediated discourse on American culture. May include critical and cultural approaches for theorizing the rhetorical creation and maintenance of political identity, social movements, campaign or war rhetoric, theories of mediated persuasion and political influence, ideological and feminist criticism of media, the rhetorical aspects of popular culture, and theories of aesthetic rhetorics.

COMM 5260. Group Performance. 3 hours. Historical and contemporary theoretical approaches to group performance in performance studies and related disciplines; practical experience in scripting and directing group performance.

COMM 5265. Performance Methods. 3 hours. Survey of 20th- and 21st-century performance methods. Examination of performance methods as critical discourses and how they impact teaching, performance and the means of writing about performance.

COMM 5325. Communication Theory. 3 hours. A survey of scientific and humanistic perspectives on the communication process and social contexts in which it occurs.

COMM 5340. Rhetorical Methods. 3 hours. The use of critical and rhetorical theories in the investigation and evaluation of rhetorical acts and artifacts.

COMM 5345. Rhetorical Theory. 3 hours. An examination of significant rhetorical theories and theorists.

COMM 5360. Performance Criticism. 3 hours. Theories of value and evaluation in performance studies and their influence on the practice of criticism, in general, and performance criticism, in particular. Contexts range from everyday acts of evaluation to formal, public instances of criticism

COMM 5365. Performance Theory. 3 hours. Historical and contemporary theoretical approaches to performance studies, including theories from related disciplines and their impact on theory and practice in performance studies.

COMM 5420. Seminar in Computer-Mediated Communication. 3 hours. Examination of communication in technologically mediated environments through principles derived from cognitive and social psychology. Emphasis on theory and research in computer-mediated communication with special emphasis on CMC as an area leading to original research.

COMM 5425. Gender and Communication. 3 hours. Examination of research and theory in gender and communication, investigating how communication structures gender and how gender affects communication.

COMM 5440. Public Address Studies. 3 hours. Research and theory in the critical interpretation and assessment of public discourse.

COMM 5460. Narrative Theory. 3 hours. Examination of theories of narrative and narrative structure and their significance. The study of narrative and nonnarrative phenomena, including fiction, drama, film and politics.

COMM 5480. Practicum. 3 hours. Training in the teaching of some aspect of communication. Under the supervision of a faculty member, the student prepares and presents instructional units, conducts class discussions and handles administrative matters peculiar to the type of course involved. No more than 3 hours may apply toward master's degree. Duties performed under teaching fellowships or graduate assistantships do not earn credit in this course.

COMM 5481. Graduate Internship. 3 hours. Supervised work in a job related to the student's major, professional field of study or career objective. Prerequisite(s): 9 graduate hours in communication; two letters of recommendation from professors in department; and consent of internship director.

COMM 5540. Freedom of Expression. 3 hours. Theories, statutes and cases involving the First Amendment guarantee of freedom of speech.

COMM 5560. History of Performance Studies. 3 hours. Philosophies, conventions and techniques that have contributed to the formation of contemporary performance theory. Examines performance approaches from classical to contemporary eras.

COMM 5625. Communication Consulting. 3 hours. Examination of organization communication consulting and of communication theorists and practitioners. Opportunities to develop and/or refine training and facilitating skills and unique models of communication consulting.

COMM 5640. Classical Rhetoric. 3 hours. Study of classical rhetorical texts, authors and concepts. Emphasis on philosophical, theoretical and pedagogical principles as the foundation for Western thought and education.

COMM 5740. Visual Rhetoric. 3 hours. Study of the effect and effectiveness of images in a number of contexts. An introduction to studies on visual culture, which includes topics such as iconography, memory studies, photojournalism and democracy, desire and the image, archiving, body politics, and spectatorship and the politics of viewing.

COMM 5820. Seminar in Communication Processes. 3 hours. Contemporary research and theory in communication processes. Rotating topics. May be repeated for credit as topics vary.

COMM 5840. Seminar in Rhetorical Studies. 3 hours. Contemporary research and theory in oral rhetorical studies. Rotating topics. May be repeated for credit as topics

COMM 5860. Seminar in Performance Studies. 3 hours. Contemporary research and theory in performance studies. Rotating topics. May be repeated for credit as topics vary.

COMM 5880. Seminar in Communication Studies and Research. 3 hours. Rotating topics. May be repeated for credit as topics vary.

COMM 5900-COMM 5910. Special Problems. 1–3 hours each. For students capable of developing a problem independently through conferences and activities directed by the instructor. Problem chosen by the student with the consent of the department director.

COMM 5920-COMM 5930. Research Problems in Lieu of a Thesis. 3 hours each.

COMM 5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

Community Service

see Public Service

Composition, Music

see Music

Computer Education and Cognitive Systems

see Learning Technologies

Computer Engineering

see Computer Science and Engineering

Computer Science and Engineering

Computer Science and Engineering, CSCE

CSCE 5011. Introduction to Computer Applications. 2 hours. (2;0;1) Use of the computer as a tool in other disciplines. Emphasis is on familiarization with the capabilities of packaged programs such as statistical libraries. Preparation of input for and interpretation of output from these programs. Introduction to programming may not count toward a major in computer science.

CSCE 5012. Computer Methods. 3 hours. Use of software tools for the solution of problems in a variety of disciplines. Prerequisite(s): 3 hours of computer science. May not count toward a major in computer science.

CSCE 5013. Problem-Solving in High-Level Languages. 4 hours. Algorithms, pseudocode, flow charts, structured techniques of problem-solving and program design using high-level programming languages. Prerequisite(s): 6 hours of mathematics and/or statistics. Leveling course for computer science majors.

CSCE 5020. Current Research in Computer Science and Engineering. 1 hour. Weekly seminar series covering current research topics in computer science and engineering, including presentations of active research projects by faculty, graduate students and visitors. Required of all full-time graduate students in their first fall term/ semester of graduate study. Pass/no pass only.