

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.

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

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

5081. Research Methodologies in Communication. 3 hours. Qualitative and quantitative methodologies for communication studies research.

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.

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

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

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

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.

5280. Communication and Information in the Classroom. 3 hours. The study of the major variables in the communication process and their impact on student learning and satisfaction. Designed primarily for teachers of all levels and content specialties.

5320. Quantitative Research Methods in Communication. 3 hours. Experimental and quantitative techniques usable in research in communication.

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

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

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

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.

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.

5380. Theory and Research in Persuasion. 3 hours. Recent theory and research on the persuasive process. Includes effects of variables in public, interpersonal, organizational and mass communication contexts.

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.

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

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.

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.

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.

5520. Communication and Conflict. 3 hours. Examines the role of communication used in managing conflict in its most common contexts: intrapersonal, interpersonal, group, organizational, professional, social and international. Theory and research are examined to develop more effective communication in conflict situations.

5525. Communication and Change. 3 hours. A study of the impact of human communication on the process of change in formal and informal organizations with emphasis on understanding and planning change.

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

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.

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.

5720. Communication Style and Competence. 3 hours. Examination of the major theoretical and empirical approaches to style and competence in communication. Issues of conceptualization, assessment, instruction and training in communication style and competence are covered.

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

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

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

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

5900-5910. 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.

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

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 Affairs and Community Service

Composition, Music

see Music

Computer Education and Cognitive Systems

see Technology and Cognition

Computer Engineering

see Computer Science and Engineering

Computer Science and Engineering

Computer Science and Engineering, CSCE

5011. Introduction to Computer Applications. 3 hours. 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.

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.

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.

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.

5150. Analysis of Computer Algorithms. 3 hours. Study of efficient algorithms for various computational problems. Topics include advanced techniques of algorithm design: divide-and-conquer, the greedy method, dynamic programming, search and traversal, back-tracking and branch-and-bound. Other topics include NP-Completeness theory, including approximation algorithms and lower bound theory, and probabilistic algorithms. Prerequisite(s): CSCE 4110.

5160. Parallel Processing and Algorithms. 3 hours. Taxonomy of parallel computers; shared-memory vs. message-passing architectures; theoretical models; parallel algorithm design strategies; parallel data structures; automatic parallelization of sequential programs; communication; synchronization and granularity. Prerequisite(s): CSCE 4110 or 5150.

5170. Graph Theory. 3 hours. Computer science oriented graph theory. Topics include connected and disconnected graphs, Hamiltonian circuits, trees and fundamental circuits, coloring, algorithms and computer programs, switching and coding theory, and electrical network analysis. Prerequisite(s): CSCE 3110 and 4110 or equivalent, or consent of the instructor.

5200. Information Retrieval and Web Search. 3 hours. Covers traditional material and recent advances in information retrieval, study of indexing, processing and querying textual data, basic retrieval models, algorithms and information retrieval system implementations. Covers advanced topics in intelligent information retrieval, including natural language processing techniques and smart web agents. Prerequisite(s): CSCE 3110 or equivalent.

5210. Artificial Intelligence. 3 hours. Advanced study of issues relevant in the design of intelligent computer systems. Topics included in this course are search techniques, knowledge representation, issues in natural language processing and the design of expert systems. Prerequisite(s): CSCE 5211 or consent of department.

5211. Non-Numeric Programming. 3 hours. Programming techniques and data structures appropriate to non-numeric programming, including object-oriented programming. Use of languages similar to LISP and PROLOG. Prerequisite(s): CSCE 3110 or equivalent.

5212. Foundations of Logic Programming. 3 hours. Logic programs, including definite, normal and general types. Inference methods, including forward-chaining, backward-chaining and deduction graphs. Theorem proving and deductive databases. Unification, soundness and completeness of resolution-refutation process and PROLOG. Prerequisite(s): CSCE 4310.

5213. Modeling and Simulation. 3 hours. Modeling of business and scientific discrete-event processes. Directed graphs. Critical path analysis. Queuing theory. Markov processes. Stochastic models. Introductions to systems simulation and industrial dynamics. Programming languages for simulation. Prerequisite(s): 6 hours of programming and 3 hours of statistics. (Same as DSCI 5250.)