6167 Rhetoric and the Arts (3) Prereq.: CMST 2040, 3041, 3107, or 3167. The arts as a means of transforming experiences and influencing social interaction.

6190 Visual Rhetoric (3) Prereq.: CMST 2060, 2063, or 2862. Methodological approaches useful in understanding how images communicate messages and make arguments.

4200 Practicum in Communication Studies (1-3) Prereq.: consent of instructor. May be taken for a max. of 3 sem. hrs. credit; however, no more than a total of 3 hrs. of CMST 2200 and CMST 4200 may be taken for undergraduate credit. Pass/fail grading. Practical experience in major interdepartmental activities outside the classroom under direct faculty supervision and evaluation.

4312 Topics in Critical Media Theory and Practice (3) Prereq.: CMST 2012, 3012, 3107, or consent of instructor. May be taken for a max. of 3 sem. hrs. credit when topics vary. Topics such as "Basic Concepts of Cinima, "Aesthetics of Film and Video," and "Cyberculture Theory."

4971 Special Topics (1-3) Prereq.: consent of instructor. See MC 4971.

7900 Introduction to Graduate Study in Communication Studies (3) Required of all master's students and of doctoral students on advice of their major professors.

7901 Seminar in Pedagogy for the Communication Profession (3) Introduction and support for first year college teachers; teaching skills; core teaching values and professional responsibilities.

7902 Topics in Communication Studies (3) Required of all graduate students in Communication Studies. Professional development seminar for graduate students in Communication Studies that emphasizes ongoing research and writing skills for careers in the discipline.

7910 Seminar in Interpersonal Communication Theory (3) Prereq.: CMST 4012 or equivalent. May be taken for a max. of 12 hrs. credit when topic varies. Current theoretical approaches to interpersonal communication, including developmental approaches, cognitive and relational theories.

7913 Seminar: Communication Theory (3) May be taken for a max. of 6 hrs. credit when topic varies. Foundational and contemporary theories in communication.

7915 Seminar: Research in Communication Theory (3) Prereq.: CMST 4114 or equivalent. May be taken for a max. of 9 hrs. credit when topics vary. Research activities in the development and implementation of research literature on advanced topics in communication theory.

7923 Seminar in Qualitative Research Methods in Communication (3) Prereq.: consent of instructor. May be taken for a max. of 6 sem. hrs. credit when topic varies. Theoretical and practical considerations of qualitative research methods as they apply to studies of social communication.


7941 Seminar: Studies in the History of Performance (3) Historical development of select Western performance practices outside the institution of theatre; methods of historical research in performance studies.

7943 Seminar: Performance and Culture (3) Theories and research exploring the relations between performance and culture central to the field of Performance Studies. Emphasis on two main trajectories: performance as a subject of cultural inquiry and performance as a method of cultural invention.

7944 Performance and Media (3) May be taken for a max. of 6 sem. hrs. credit when topics vary. Critical, historical, and/or creative research in topics related to media in performance studies.

7962 Seminar: Rhetorical Criticism (3) Prereq.: consent of instructor. Types of speech criticism, criteria, and measures of effectiveness.

7963 Seminar on Southern Oratory (3) Prereq.: CMST 4115 and 7962. Oratory of the South from about 1860 to the present; significant problems in a given historical period (students select period studied).

7964 Seminar: Evolution of Rhetorical Theory, British and American (3) Prepr: cons. of instructor. From Shakespeare to Burke, with a selective study of rhetorical theory in Britain and America from about 1529 to the present; discussion of major works by Campbell, Blair, Whately, and Kenneth Burke.

7966 Problems in Rhetorical Theory, Criticism, and History (3) Prereq.: at least 12 hrs. (four courses) in public address. May be taken for a max. of 12 sem. hrs. credit when content varies. Selected problem that goes beyond present advanced course offerings in public address; topic to be announced.

7967 Development of Contemporary Rhetorical Theory (3) Pivotal questions in contemporary theory from I. A. Richards through postmodernism; future of rhetorical theory and its relationship to the humanities.

7968 Rhetoric and Public Culture (3) Scope and function of rhetoric in formation and dissolution of publics and public opinion, the reciprocal influence of rhetoric and culture.

7979 Visual Culture (3) May be taken for a max. of 6 sem. hrs. of credit when content varies. Intellectual and aesthetic theories of visual culture that are rooted in the visual culture.

7976 Rhetoric and Aesthetics (3) The relationship between form and function in rhetorical discourse; the constitutive nature of aesthetics in language and the arts.

7999 Independent Research in Communication Studies (1-3) Prereq.: consent of instructor and approval of department chair. May be taken for a max. of 6 sem. hrs. credit. For advanced graduate students to pursue research on special topics.

8000 Thesis Research (1-12 per sem.) $774 grading.

9000 Dissertation Research (1-12 per sem.) $774 grading.

COMPARATIVE BIOMEDICAL SCIENCES

7001 Seminar: Comparative Biomedical Sciences (1) F/May be taken for a max. of 8 hrs. of credit. Reports and discussions on topics of current interest in various scientific disciplines.

7002 Research Techniques in Comparative Biomedical Sciences (1-4) F,S,Su Prereq.: May be taken for a max. of 8 hrs. of credit when topics vary. Specialized research techniques related to selected scientific disciplines in the department.

7003 Special Topics in Comparative Biomedical Sciences (1-4) F,S,Su Prereq.: May be taken for a max. of 8 hrs. of credit when topics vary. Specialized research techniques related to selected scientific disciplines in the department.

7106 Biomedical Electron Microscopy (4) F,S,S,Su Prereq.: consent of instructor. May be taken for a max. of 9 hrs. of credit when topics vary. Theoretical and practical basic techniques of studying a literary topic through the comparative method; examples taken from different national literatures and traditions.

7140 Topics in the Interdisciplinary Study of Literature (3) May be taken for a max. of 9 hrs. of credit when topics vary. Relationship between literature and other domains, such as art, religion, and film.

8000 Thesis Research (1-12 per sem.) $774 grading.

8900 Independent Study (1-12) May be taken for a max. of 3 hrs. in the master's program and 9 hrs. in the doctoral program.

9000 Dissertation Research (1-12 per sem.) $774 grading.

COMPUTER SCIENCE

249 General education courses are marked with stars (*).

2201 Introduction to World Literatures (3) Also offered as ENGL 2201. Study of the world’s most important literary classics. Exposure to Western literatures and traditions, from beginnings to 1650; emphasis on reading and writing about literature.

2202 Introduction to Modern World Literature (3) Also offered as ENGL 2202. Overview of the literature of the world from 1650 to the present day; introduction of the concept, and theory of world literature.

7010 Research Methods and Bibliography (3) Instruction in methods of research; specific projects in bibliography and research leading toward a final thesis.

7020 History and Theory of Criticism (3) Historical survey of major works in literary theory from the classical through the modern period designed to ground subsequent work in criticism.

7120 Topics in Theory of Criticism (3) May be taken for a max. of 9 hrs. of credit when topics vary. Study of a particular school of critical thought and its applications to specifically comparative literary scholarship.

7130 Topics in Comparative Literature (3) May be taken for a max. of 9 hrs. of credit when topics vary. Relationship between literature and other domains, such as art, religion, and film.

8000 Thesis Research (1-12 per sem.) $774 grading.

8900 Independent Study (1-12) May be taken for a max. of 3 hrs. in the master's program and 9 hrs. in the doctoral program.

9000 Dissertation Research (1-12 per sem.) $774 grading.
7000 Computer Architecture (Prereq.): CSC 7002 or equivalent. Background in electronics not required. Functional architecture of modern digital computer systems; detailed description of instruction set implementation with microprocessor and multiprocessor structures; design and analysis of instruction sets and compilers for text-free languages; selected advanced language theoretical topics; emphasis on techniques.

6100 Advanced Independent Elements of Computer Science for Teachers (Prereq.): computer science programming course or knowledge of a programming language. Advanced programming techniques using a high-level, structured language; data structures and computer systems software.

7080 Computer Architecture (Prereq.): CSC 7002 or equivalent. Background in electronics not required. Functional architecture of modern digital computer systems; detailed description of instruction set implementation with microprocessor and multiprocessor structures; design and analysis of instruction sets and compilers for text-free languages; selected advanced language theoretical topics; emphasis on techniques.

4000 Advanced Independent Undergraduate Research (1-3 Prereq.: consent of department chair. May be taken for a max. of 4 hrs. of credit per semester.)

3999 Independent Undergraduate Research (1-3 Prereq.: consent of department chair. May be taken for a max. of 4 hrs. of credit per semester.)

2250 Assembly Language Programming (5 Prereq.: credit in CSC 1550 or 1551, or equivalent, background. Fundamentals of machine function; basic concepts of programming at the machine level; assembly language; machine representation of information, machine language, addressing techniques, program linkage, macroprogramming, and assembler construction.

2259 Discrete Structures (3 Prereq.: MATH 1532 and CSC 1254 or 1351. Set algebra including mappings and relations; algebraic structures including semigroups and groups; elements of the theory of directed and undirected graphs; Boolean algebra and propositional logic; these structures applied to various areas of computer science.

2262 Numerical Analysis (3 Prereq.: MATH 1532 and CSC 1254 or 1351. Credit will be given for only one of the following: CSC 1240, 2262, 2533 or IE 2060.

2270 COBOL Programming and Business Data Processing Systems (3 Prereq.: credit in a course in computing. Primarily for students in computer science and related disciplines. COBOL programming; its use in business data processing systems.

2280 Computer Organization (4 Prereq.: CSC 2252. 3 hrs. lecture; 2 hrs. lab. Credit will not be given for both this course and CSC 2350. Basic digital circuits; Boolean algebra and combinatorial logic, data representation and transfer, and digital arithmetic; digital storage and accessing, control functions, input/output facilities, system organization, and reliability; computer architecture, instruction set design, features needed for multiprocessing, multiprocessing, and real-time systems; other advanced topics and alternative organizations.

2533 Introduction to Engineering Computation (3 Prereq.: CSC 1550. 2 hrs. lecture; 3 hrs. lab. Also offered as ME 5253. Credit will be given for only one of this course and CSC 1240 or 2262 or OCS 2111. Problem solving techniques and structured programming for engineers, scientists and mathematicians. Specialization in computer science.

3102 Advanced Data Structures and Algorithm Analysis (3 Prereq.: CSC 1254 or 1351 and credit or concurrent enrollment in CSC 2259 or EE 2720. Description and utilization of various data structures. Specialize on those lists, sets, and graphs; time and space analysis of recursive and nonrecursive algorithms, including graph and sorting algorithms; application of these techniques to problems in science and engineering.

3300 Object Oriented Design (3 Prereq.: CSC 1254 or 1351. Advanced object oriented software development; emphasis on the use of the unified modeling language as a design tool.

3501 Computer Organization and Design (3 Prereq.: CSC 2252 or ME 2533. Credit will not be given for both this course and CSC 2258 or 3253 or ISDS 3107. Fundamentals of algorithm development, program design, and structured programming using an object-oriented language.

3502 Programming Languages (3 Prereq.: credit in CSC 1550 and MATH 1550. Credit will be given for only one of this course and CSC 2450 or 2533 or ISDS 3107. Fundamentals of algorithm development, program design, and structured programming using an object-oriented language.

3504 Systems Programming (3 Prereq.: CSC 3102. Design techniques, process management, processor scheduling, deadlock detection in multiprocessor hardware configurations; adressing techniques, core management, file system design and management, system accounting, and other user-related services; collection of data configurations, processor scheduling, and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3505 Compiler Construction (3 Prereq.: CSC 2258 or MUS 2732 or permission of instructor. The essentials of video game design and implementation, including platform-specific programming and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3508 Software Engineering (3 Prereq.: CSC 4101 or equivalent. Program structures, their components, operating characteristics, user services and limitations; implementation techniques for parallel processing of output-input and interrupt handling; overall structure of multiprogramming systems on multiprocessor hardware configurations; addressing techniques, core management, file system design and management, system accounting, and other user-related services; collection of data configurations, processor scheduling, and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3580 Computer Organization and Design (3 Prereq.: CSC 1254 or 1351. Advanced object oriented software development; emphasis on the use of the unified modeling language as a design tool.

3581 Computer Organization and Design (3 Prereq.: CSC 2252 or ME 2533. Credit will not be given for both this course and CSC 2258 or 3253 or ISDS 3107. Fundamentals of algorithm development, program design, and structured programming using an object-oriented language.

3582 Programming Languages (3 Prereq.: credit in CSC 1550 and MATH 1550. Credit will be given for only one of this course and CSC 2450 or 2533 or ISDS 3107. Fundamentals of algorithm development, program design, and structured programming using an object-oriented language.

3583 Systems Programming (3 Prereq.: CSC 3102. Design techniques, process management, processor scheduling, deadlock detection in multiprocessor hardware configurations; adressing techniques, core management, file system design and management, system accounting, and other user-related services; collection of data configurations, processor scheduling, and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3585 Compiler Construction (3 Prereq.: CSC 2258 or MUS 2732 or permission of instructor. The essentials of video game design and implementation, including platform-specific programming and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3588 Software Engineering (3 Prereq.: CSC 4101 or equivalent. Program structures, their components, operating characteristics, user services and limitations; implementation techniques for parallel processing of output-input and interrupt handling; overall structure of multiprogramming systems on multiprocessor hardware configurations; adressing techniques, core management, file system design and management, system accounting, and other user-related services; collection of data configurations, processor scheduling, and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3589 Computer Organization and Design (3 Prereq.: CSC 1254 or 1351. Advanced object oriented software development; emphasis on the use of the unified modeling language as a design tool.

3591 Computer Organization and Design (3 Prereq.: CSC 2252 or ME 2533. Credit will not be given for both this course and CSC 2258 or 3253 or ISDS 3107. Fundamentals of algorithm development, program design, and structured programming using an object-oriented language.

3592 Programming Languages (3 Prereq.: credit in CSC 1550 and MATH 1550. Credit will be given for only one of this course and CSC 2450 or 2533 or ISDS 3107. Fundamentals of algorithm development, program design, and structured programming using an object-oriented language.

3593 Systems Programming (3 Prereq.: CSC 3102. Design techniques, process management, processor scheduling, deadlock detection in multiprocessor hardware configurations; adressing techniques, core management, file system design and management, system accounting, and other user-related services; collection of data configurations, processor scheduling, and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3596 Compiler Construction (3 Prereq.: CSC 2258 or MUS 2732 or permission of instructor. The essentials of video game design and implementation, including platform-specific programming and testing. Focus is on a semester-long, small-team, interdisciplinary project to develop and present a complete full-featured game.

3599 Computer Organization and Design (3 Prereq.: CSC 1254 or 1351. Advanced object oriented software development; emphasis on the use of the unified modeling language as a design tool.