924. Air Sampling and Analysis
   Spring of odd-numbered years. 4(3-3)
   SE 922.
   Theory and design of air sampling programs. Quantitative analysis of ambient air samples and stack samples. Analysis for sulfur oxides, nitrogen oxides and particulates.

999. Doctoral Dissertation Research
   Fall, Winter, Spring, Summer. Variable credit. Approval of department.

CLASSICAL STUDIES

See Romance and Classical Languages.

COMMUNICATION COM

College of Communication Arts
and Sciences

100. Human Communication
   Fall, Winter, Spring, Summer. 3(3-0).
   Process and functions of communication. Principles underlying communication behavior. Practice in analyzing communication situations and in speaking and writing.

115. Oral Communication
   Fall, Winter, Spring, Summer. 3(3-0)
   COM 100 or approval of department.
   Principles and practice in adapting to audiences, creating and structuring messages, and developing effective delivery of formal and informal speeches. Critical evaluation of speeches by instructor and peers.

125. Interpersonal Communication
   Fall, Winter, Spring, Summer. 3(3-0)
   COM 100.
   Develop students' abilities to become more effective, responsible participants in interpersonal communication relationships, with emphasis on relating communicatively with others.

195. Methods of Inquiry
   Fall, Winter, Spring, Summer. 3(3-0)
   COM 100.
   Major theoretic orientations toward communication. Primary tools of scholarly inquiry.

205. Persuasion
   Fall, Winter, Spring, Summer. 4(4-0)
   COM 100.
   Process of influencing human behavior through persuasive communication. Experience in creating persuasive messages and in evaluating the acceptability of persuasive attempts.

210. Leadership and Group Communication
   Fall, Winter, Spring, Summer. 4(4-0)
   COM 100.
   Principles and practice in the utilization of communication for effective leadership, with special emphasis on group communication.

250. Argumentation
   Fall, Winter, Spring. 4(4-0) COM 190.
   Development and use of arguments; recent perspectives in argumentation; rhetorical and empirical study of argumentative messages.

299. Individual Projects
   Fall, Winter, Spring, Summer. 1 to 15 credits. May reenroll for a maximum of 15 credits. COM 189, approval of project proposal by department.
   Independent research, experience in communication laboratories, or tutorial work in communication skills.

300. The Effects of Mass Communication
   Fall, Winter, Spring, Summer. 4(4-0)

315. Organizational Communication
   Fall, Winter, Spring, Summer. 4(4-0) COM 100.
   Principles and practice in the management of communication systems, with emphasis on conflict resolution, information exchange, innovativeness, and information management.

326. Communication in Business
   Fall, Winter, Spring, Summer. 4(4-0) Juniors.
   Study and analysis of business and industrial communication problems; extensive instruction and practice in writing.

350. Signs and Sign-Behavior
   Fall, Winter, Spring, Summer. 4(4-0)
   COM 100.
   Theories of symbolic behavior. Language structure and communicative functions.

352. Nonverbal Communication
   Fall. 4(4-0) COM 100.
   Major nonverbal communication codes and functions they perform. Codes: body movement, touch, physical appearance, paralanguage, use of space, time, artifacts. Opportunities to analyze nonverbal communication of self and others.

399. Special Topics in Communication
   Fall, Winter, Spring, Summer. 4(4-0)
   May reenroll for a maximum of 8 credits. Juniors.
   Contemporary issues in communication.

405. Quantitative Strategies in Communication Research
   Fall, Spring, 4(4-0) Seniors.
   Design and statistical strategies in communication research. Project design and evaluation schema. Basic data handling and presentation.

410. Classroom Communication
   Spring. 3(3-0) Majors or minors or approval of department.
   Classroom as a communication system with emphasis on operationalizing philosophies of education in the environment, teacher and student roles and styles, affective and cognitive interactions, methods of systematic observation.

411. Directing the Debate and Forensic Program
   Fall. 3(3-0) Majors and minors or approval of department.
   Principles of and practice in argumentation; methods of coaching debate and individual events and managing tournaments; observation of high school tournaments, practices, and student congress.

413. Seminar in Communication Education
   Winter, Summer. 4(4-0) ED 327.
   Philosophies of curricular and co-curricular programs in communication education. Internship experience in those programs.

425. Communication Campaign Analysis
   Fall. 4(4-0) COM 300 or approval of department.
   Design of persuasive and information campaigns. Techniques and strategies for analyzing and influencing mass audience. Principles and practices in constructing messages and selecting media. Political and public service campaign focus.

430. Information and Technology
   Winter. 4(4-0) COM 315 or approval of department.
   Concepts and principles of information and information technology, with emphasis on effects on organizational processes.

431. Conflict in Communication
   Winter. 4(4-0) COM 125 or approval of department.
   Elaboration of theories in conflict resolution; development of strategies to resolve conflict situations; personal analysis of communication patterns that can affect conflict.

450. Critical Perspectives on Communication
   Fall, Winter, Spring. 4(4-0) COM 100.
   Interdependence of communication and other societal factors, emphasizing criteria for ethical and social appropriateness.

475. Relational Communication
   Spring. 4(4-0) COM 125.
   Theories and current research on relational communication, including stages of relational communication development; verbal and nonverbal relational messages of intimacy, similarity, arousal, privacy and dominance; role of culture and context.

499. Special Projects
   Fall, Winter, Spring, Summer. 1 to 15 credits. May reenroll for a maximum of 15 credits. Approval of project proposal by department.
   Independent research, group research, student-directed group projects.

805. Communication Research
   Fall. 4(4-0) First year graduate majors. Communication research strategy and methodology. Scientific process, bases for derivation and verification of hypotheses, and basic methods of designing research in communication.

806. Communication Research
   Fall. 4(4-0) COM 805; second year graduate majors. Continuation of COM 805.

815. Organizational Communication
   Winter, Spring. 4(4-0)
   Structure and function of communication in organizations, with emphasis on concepts and principles needed for effective management of organizational communication processes.
of Communication

820. Communication Theory and Process
Fall, Summer. 4(4-0)
Theoretic models of communication, with emphasis on the applications of communication theory to various professional communication areas.

821. Mass Communication Theory and Research
Fall, Spring. 4(4-0)
Current behavioral science theories and research, e.g., media institutions, decision-making, mass media exposure patterns, diffusion of news and influence, effective message strategies, political communication, and mass media in socialization.

822. Interpersonal Communication
Winter, Summer. 4(4-0)
Current theories and research in interpersonal communication. The role of interpersonal communication in such processes as conflict resolution and information exchange will be considered.

823. Cross-Cultural Communication
Fall, Summer. 4(4-0)
Role of communication in the economic, social and political development of less developed countries. Problems in communicating across cultural boundaries.

830. Nonverbal Communication
Winter. 4(4-0)
A review of theory and empirical research on nonverbal communication. Emphasis on social functions such as impression management, regulation and social influence.

860. Persuasive Communication
Spring. 4(4-0)
Use of communication to gain compliance and effect social change. Study of persuasion and attitude change from classical theories to contemporary situations.

870. Communication and Change: The Diffusion of Ideas and Information
Fall, Winter. 4(4-0)
Research traditions underlying the diffusion of ideas and information, and acceptance of innovation and change. Strategic principles for introduction of change through the use of communication.

880. Message Behavior, Signs and Communication
Spring. 4(4-0)
Language and message behavior. The nature of messages, their structure and the contexts (e.g. dyads, groups, organizations) that promote certain message behavior.

890. Special Problems
Fall, Winter, Spring, Summer. 1 to 6 credits. Approval of department.
Special problems as arranged with instructor.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

905. Communication Research Design
Fall, Winter, Spring. 4(4-0) May reenroll for a maximum of 15 credits.
Methods of data collection and analysis in communication research. Designing exploratory studies of the communication process. Interviewer training and bias. Content analysis of the mass media. Writing and critiquing research reports.

940. Seminar in Communication Theory and Research
Fall, Winter, Spring, Summer. 2 to 8 credits. May reenroll for a maximum of 45 credits. Approval of department.
Theoretic and research issues in communication.

990. Special Problems
Fall, Winter, Spring, Summer. 1 to 6 credits. Approval of department.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. 1 to 36 credits. Approval of department.

COMMUNICATION ARTS AND SCIENCES (COLLEGE OF)

492. Special Topics
Fall, Winter, Spring, Summer. 1 to 6 credits. Approval of department.
Varied topics pertaining to the study of communication processes.

499. Doctoral Dissertation Research
Fall, Winter, Spring. Variable credit. Approval of department.
Dissertation research for the doctoral program in Mass Media.

COMMUNITY HEALTH SCIENCE CMS

College of Human Medicine College of Osteopathic Medicine

512. Epidemiology and Biostatistics
Winter. 2 to 5 credits. Admission to a college of medicine or approval of department.
Epidemiology and biostatistics in clinical medicine and health care delivery. Evaluation of medical investigations. Applicability to preventive medicine and health maintenance. Field experiences and seminars in community medicine.

513. Medical Jurisprudence
Fall, 2 to 5 credits. Admission to a college of medicine or approval of department.
Basic concepts of the legal process and the health care system. Law suits, malpractice, statutory and case law. Insurance and tax consideration. Continuing field experiences and seminars in community medicine.

514. Topics and Issues in Health Care Delivery
Fall. 2 to 5 credits. Admission to a college of medicine or approval of department.
Medical economics, health care financing and organization, personnel utilization, resource allocation, health services administration, patterns of medical practice, politics of health care. Continuing field experiences and seminars in community medicine.

518. Aging: Clinical and Community Perspectives
Spring. 4(3-3) Medical student or approval of instructor.
Multi-dimensional aspects of aging and their application to long-term continuing care of the chronically ill older adult.

519. Health Education in Clinical Settings
Spring. 3(2-3) Approval of instructor.
Application of concepts from social and behavioral sciences to clinical health education through laboratory and classroom experiences including development of a model educational plan for a specific health problem.

520. Biostatistics and Epidemiological Reasoning
Fall. 4(4-0) Approval of instructor. Interdepartmental with the Department of Statistics and Probability.
Concepts and principles from biostatistics and epidemiology to facilitate critical reading literature relevant to clinical medicine and community health. Emphasis on design and interpretation.

521. Evaluation of Health Services
Spring. 2 to 4 credits. Approval of instructor. Interdepartmental with the College of Nursing.

522. Principles of Gerontology for Medical Practice
Spring. 3(3-0) Admission to a college of medicine or approval of department.
An introductory course relating the biological, psychological and social implications of aging to health care of the elderly.

530. Care of the Elderly
Fall, Spring. 3(3-2) Student in H M, OST or other clinical program or approval of instructor. Interdepartmental with and administered by the Department of Family Practice.
Case studies of the care of the elderly based on the physician-patient interaction with elderly persons and their families. Family systems applications to health care. Associated clinical experience.

543. Health and Adaptation of the Aged Individual
Fall. 3(3-0) Baccalaureate degree in health science; approval of instructor. Interdepartmental with and administered by the College of Nursing.
Health and adaptation of the aged individual experiencing the normative biologic and psychosocial changes related to the aging process.

590. Special Problems in Community Medicine
Fall, Winter, Spring. 1 to 8 credits. May reenroll for a maximum of 32 credits. Approval of department.
Each student will work under direction of a faculty member on an experimental, theoretical or applied problem.

600. Preventive Medicine and Public Health Clerkship
Fall, Winter, Spring. 2 to 12 credits. Successful completion of first two years of medical school.
Clinical and community experiences in personal and community health services, environmental health, and other health and medical programs which meet health needs of various population groups.