**TEL**

### Telecommunications

**TEL 101 TELECOMMUNICATIONS I: MASS COMMUNICATION SYSTEMS.** (3)  
An overview of electronic technologies used for mass communication, emphasizing their historical development and interrelationships with economics, policy, and society. These include one-way media such as broadcast radio, television, and cable, as well as newer technologies such as wireless cable, HDTV, and other multi-channel video systems. The convergence of technologies is addressed in the treatment of two-way systems now being used for mass communication, including the Internet, World Wide Web, and other interactive communication systems.

**TEL 201 TELECOMMUNICATIONS II: INTERACTIVE COMMUNICATION SYSTEMS.** (3)  
An overview of electronic technologies used primarily for personal communication, emphasizing their historical development and interrelationships with economics, policy, and society. These include telephony, voice mail, and teleconferencing technologies, as well as electronic mail and other text-, voice-, and video-based communication systems. The convergence of technologies is addressed in the treatment of two-way systems now being used for mass communication, including the Internet and the World Wide Web.

**TEL 300 TELECOMMUNICATIONS RESEARCH METHODS.** (3)  
An introduction to quantitative and qualitative social science research relating to telecommunications, including survey and experimental methods. Prereq: TEL 101, TEL 201, STA 200.

**TEL 310 TELECOMMUNICATIONS POLICY AND REGULATION.** (3)  
A study of policy and regulation of telecommunications in the U.S., primarily broadcasting, cable, telephony, and the Internet. This includes traditional issues in the regulation of content, such as freedom of speech, copyright, obscenity, and privacy. It also includes traditional areas in the regulation of the industry structure including monopolies, licensing, cross ownership rules, mergers, and illegal practices. Prereq: TEL 101, TEL 201.

**TEL 312 VIDEO PRODUCTION I.** (3)  
An introduction to the fundamentals of studio video production, from conception to completed product. Practical training with essential production equipment will be offered. Lecture, two hours; laboratory, two hours per week. Prereq: TEL 101, TEL 201 and major status.

**TEL 319 WORLD MEDIA SYSTEMS.** (3)  
A comparison of the communications media in different countries of the world and the theories used to justify them. How various political and social systems affect the media and how the media affect the societies in which they exist. Prereq: COM 101, TEL 101 or consent of instructor. (Same as COM/JOU 319.)

**TEL 320 TELECOMMUNICATIONS PROGRAM ANALYSIS.** (3)  
This course is designed to assist students in developing criteria for analyzing the structure and content of cable and broadcast program material, and for analyzing the relationships of audiences, programs, and American telecommunications systems. Prereq: TEL 101.

**TEL 322 MULTIMEDIA I.** (3)  
Introduction to techniques of multimedia production and the basic principles of communication via multimedia. Practical, hands-on experience with various media used in computer-based multimedia including: text, still graphics, motion graphics, animation, sound, and hyperlinking. Includes stand-alone computer- and Web-based applications. Lecture, two hours; laboratory, two hours per week. Prereq: TEL 101, TEL 201, standing as a major in the School of Journalism and Telecommunications.

**TEL 355 COMMUNICATION AND INFORMATION SYSTEMS IN ORGANIZATIONS.** (3)  
An examination of the role of a variety of communication and information systems used in organizations. This includes the study of communication processes across a variety of systems, including the telephone, e-mail, voice mail, and audio- and video-conferencing. It also includes an examination of the uses for a variety of information systems and technologies, including computer networks, integrated voice response systems, computer-telephony integration, call centers, automated attendants, voice recognition, and synthesis, database management systems, and a variety of additional hardware and software tools used in business today. Prereq: TEL 201 or consent of instructor.

**TEL 390 TELECOMMUNICATIONS TOPICAL SEMINAR (SUBTITLE REQUIRED).** (3)  
In-depth seminar approach to a single topical issue in telecommunications. Different topical issues each offering. Course will be offered on demand. May be repeated to a maximum of six credits under a different subtitle. Prereq: Consent of instructor.
TEL 412 VIDEO PRODUCTION II. (3)
A follow-up to TEL 312, this course is an advanced video production course focusing on electronic field production (EFP). This course features technical and creative aspects of directing, camera work, editing, and lighting. Lecture, three hours; laboratory, one hour per week. Prereq: TEL 312 or consent of instructor.

TEL 420 ELECTRONIC MEDIA CRITICISM. (3)
Examination of each of several critical theories and approaches to the criticism of telecommunications program content. Practical experience in evaluating critical writing and in the writing of critical pieces. Prereq: Telecom major status or permission of instructor.

TEL 432 AUDIO PRODUCTION. (3)
Elements of audio production, including basic machines, microphones, patch panels, the production mixing. Different audio products are discussed. Lecture, two hours; laboratory, two hours per week. Prereq: TEL 101, TEL 201, or major status in School of Journalism and Telecommunications.

TEL 442 ON-AIR PERFORMANCE. (3)
Offers the students the unique opportunity to develop essential skills for professional on-air performance. Development of on-camera presence, pleasing and articulate vocal presentation and a thorough understanding of the performer’s radio and television performance are covered. Lecture, two hours; laboratory, two hours per week. Prereq: TEL 101, TEL 201, or major status.

TEL 453 MASS COMMUNICATION AND SOCIAL ISSUES. (3)
A course devoted to the examination of criticism of the mass media and an evaluation of the relationship of mass communication to contemporary social issues. Prereq: COM 249 or TEL 101. (Same as COM 453.)

TEL 482 ELECTRONIC MEDIA SALES MANAGEMENT. (3)
The data and techniques of radio and television advertising, including problems of coverage and circulation, spot campaigns, testing, time buying, the agency, measuring broadcast effectiveness, merchandising radio and television advertising and time selling. Prereq: TEL 320 or consent of instructor.

TEL 504 MEDIA ORGANIZATIONS. (3)
An examination of the structure of video entertainment and on-line communications organizations and industries. Includes the organization and management of various types of telecommunications properties, as well as their traditional and new competitors. Prereq: TEL 310 or consent of instructor.

TEL 510 MEDIA ECONOMICS. (3)
Exploration of the economics of information industries, with particular attention to the special characteristics of information, the economic behavior of communications channels, and the role of information in decision making, the economy, organizational behavior, and other domains. Prereq: TEL 310 or consent of instructor.

TEL 520 SOCIAL EFFECTS OF THE MASS MEDIA. (3)
An examination of the political, social, cultural and behavioral effects of telecommunications systems in American society. Focus on theory and empirical research generated since 1940. Prereq: TEL 300 or equivalent.

TEL 525 THEORY OF MULTIMEDIA. (3)
This course is an advanced treatment of theories and principles of computing, electronic communication, personal communication, and interactivity. Covers basic aspects of computer architecture, multimedia software, information representation, transmission, error detection and correction, user interface issues, and computer-based communication. Emphasis on applying principles and theories to the production of multimedia. Prereq: TEL 322.

TEL 530 PRO-SEMINAR IN TELECOMMUNICATIONS. (3)
Discussion and reports on current trends in telecommunications industries and the behavioral, political and regulatory implications attending such trends. Prereq: Consent of instructor.
TEL 555 CYBERSPACE AND COMMUNICATION. (3)
An examination of the political, social, and behavioral effects of on-line communication systems, including systems for various forms of personal communication, information retrieval, transaction processing, monitoring, and other purposes. Lecture, three hours; laboratory, one hour per week. Prereq: TEL 201 or TEL 355 and a research methods course (TEL 300, COM 365, or equivalent), or consent of instructor. (Same as COM 555.)

TEL 590 ADVANCED TELECOMMUNICATIONS TOPICAL SEMINAR (SUBTITLE REQUIRED). (3)
An advanced seminar focusing on a single topical issue in telecommunications. Different topical issues each offering. Course will be offered on demand. May be repeated to a maximum of six credits under different subtitles. Prereq: Consent of instructor.