960. Language, Literacy, and Educational

Fall of odd-numbered years. 3(3-0) Policy in relation to framing curriculum. The linguistic nature of pupil assessment. Gatekeeping functions of schools.

965. The Craft of Policy Analysis in Education

Spring of even-numbered years. 3(3-0) Framing problems, devising alternative solutions, and predicting impacts.

970. Curriculum and Pedagogy in Teacher Education

Spring of odd-numbered years. 3(3-0) Teacher learning opportunities at the preservice, induction, and inservice levels. Intended and enacted curriculum, sources of pedagogy, and their impact on teachers' knowledge, skills, and attitudes.

971. **Teacher Learning in School Settings**

Fall of odd-numbered years. 3(3-0) Research about school-based learning by prospective, beginning, and experienced teachers. Observation, conversation, writing, and classroom research as tools for improving teaching.

Policy Perspectives on Teaching and Teacher Education 975.

Fall of odd-numbered years. 3(3-0) Policy issues such as teacher accountability, teacher knowledge, and political influence.

Seminar in Curriculum, Teaching, and Educational Policy (MTC) Fall, Spring, Summer. 1 to 4 credits. A 982.

student may earn a maximum of 10 credits in all enrollments for this course. Intensive study in an area of curriculum, teaching, and learning; educational policy and social analysis; or teacher education and teacher learning.

Independent Study 000

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open only to doctoral students. Supervised individual study in an area of curriculum, teaching, and educational policy.

991. Special Topics in Curriculum,

Teaching, and Educational Policy Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.

Special Topics in Science Education 991A.

Spring of even-numbered years. 1 to 6 credits. A student may earn a maximum of 6 cred-its in all enrollments for this course.

994. Laboratory and Field Experience in

594. Laboratory and Field Experience in Curriculum, Teaching, and Educational Policy Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to doctoral students. Approval of department.

Supervised practica, observations, and internships in an area of curriculum, teaching and learning; educa-tional policy and social analysis; or teacher education and teacher learning.

995. Research Practicum in Curriculum, Teaching, and Educational Policy Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all

enrollments for this course.

R. Open only to doctoral students. Approval of department.

Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.

999. **Doctoral Dissertation**

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open only to Ph.D. students.

TELECOMMUNICATION TC

Department of Telecommunication College of Communication Arts and Sciences

The Information Society 100.

Fall, Spring, Summer. 3(3-0) Technological and social trends in the information society. Social policy involving information technolo-gies and information services. Examples from the telephone, computer, television, cable, radio and satellite systems. QA: TC 210

History and Economics of Telecommunication 200.

Fall, Spring, Summer. 4(4-0) P: EC 201 or concurrently. R: Not open to freshmen. Institutional, economic and content development of telecommunication including broadcasting, cable, new video technologies, and telephone and data transmis-

sion. QP: EC 201, MTH 108 QA: TC 220

Introduction to Telecommunication 201. Technology

Fall, Spring, Summer, 4(4-0) P: MTH 110 or MTH 116; CPS 100 or CPS 130 or CPS 131 or concurrently. R: Not open to freshmen. Operational principles of audio, data and video telecommunication technologies. QP: TC 210, TC 220 QA: TC 230

240. **Telecommunication Media Arts** Fall, Spring, Summer. 4(2-4)

R: Not open to freshmen.

Characteristics of image and sound media and their role in shaping the meaning of media messages. Application of aesthetic principles in the design of mediated communication. QA: TC 301, TC 302

275. Effects of Mass Communication Fall, Spring, Summer. 3(3-0) Interdepart-mental with Communication.

R: Not open to freshmen. Major social effects of mass media on audience behavior. Political communication. Media effects on chil-dren. Message strategies producing attitude change. Interrelationships between mass media and interpersonal communication. QA: TC 300

310.

310. Basic Telecommunication Policy Fall, Spring, Summer. 4(4-0) P: TC 100, TC 200, TC 201, TC 240. Policy and plans in telecommunication systems and services in the United States and other nations. *QP: TC 210, TC 220, TC 230 QA: TC 310*

342. Basic Video Design and Production Fall, Spring, Summer. 4(2-4) P: TC 240. R: Open only to Telecommunication majors.

Approval of department; application required. Conceptualization, design, planning, producing, direct-ing, editing, and evaluation of video programs. QP: TC 210, TC 220, TC 230 QA: TC 302, TC 361

343. **Basic Audio Production**

Fall, Spring, Summer. 4(2-4) P: TC 201, TC 240. R: Open only to Telecommunication majors. Approval of department: application required

Basic audio production techniques. In-depth audio and radio industry analysis. Media writing. QP: TC 230 QA: TC 301, TC 350

Media Arts Content and Culture 345. Spring. 3(3-0) R: Not open to freshmen and sophomores.

Media content as cultural discourse. Cultural themes in content and structure of media entertainment, news, sports, religious and political programs and commercials. QA: TC 395

Broadcast and Cable Programming and Audience Promotion 352.

Fall, Spring, Summer. 3(3-0) P: TC 200, TC 240, or approval of department. R: Not open to freshmen. Evaluation, selection and scheduling of cable and broadcast programming. Audience promotion strate-

gies and techniques. QP: TC 302 QA: TC 325

354. **Telecommunication Marketing and** Sales Promotion

Fall, Spring. 3(3-0) P: TC 200, ML 300. Application of advertising and marketing concepts to broadcast stations, cable systems, program networks and telecommunications. QA: TC 401

361. **Telecommunication** System and Service Policies

Spring, 3(3-0) P: TC 200, TC 201, TC 310; ACC 230. Services, systems, and public policy related to tele-phone and telecommunication. QP: TC 310 QA: TC 360

History of Film and Documentary Fall, Spring. 4(2-4) R: Not open to freshmen.

Analysis of fiction and non-fiction forms, emphasizing social background and cultural values. Screening of significant feature and documentary films. *QA: TC 280, TC 396*

442. Advanced Video Design and Production

Fall. 4(2-4) P: TC 342, TC 343. R: Open only to Telecommunica-tion majors. Approval of department; application reautred

Advanced principles of studio and field production. Techniques of design, recording, editing and writing. Emphasis on electronic field production and editing. QP: TC 301, TC 302, TC 361 QA: TC 421, TC 351, ŤC 451

443. Audio Industry Design and Management

Fall, Spring. 4(2-4) P: TC 342, TC 343. R: Open only to Telecommunica-tion majors. Approval of department; application required

Advanced audio production specializing in multi-chan-nel techniques. Industry focus on all aspects of the audio field.

QP: TC 301, TC 302 QA: TC 350

446. Hypermedia Design

Fall. 4(3-2) P: CPS 100 or CPS 130 or CPS 131; TC 342 or ap-

proval of department. Current and future hypermedia capabilities. Applications and design of systems. QP: TC 302, CPS 115 QA: TC 440

452. **Telecommunication and Information** Industries

Spring, Summer. 4(4-0) P: TC 100, TC 200, TC 201.

Telecommunication and information industry issues including economic dynamics, market structures, business practices, and interfaces with other industries. QP: TC 220 QA: TC 452

456. Multichannel Television

Fall, Spring. 4(4-0) P: TC 352, TC 354. R: Open only to Telecommunica-

tion seniors and graduate students. Television in a multichannel environment; developments in broadcasting, cable, satellite master anten-nae TV, direct broadcast satellite, multipoint distribution systems, and home video applications. QP: TC 325, TC 401 QA: TC 415

458. **Telecommunication Management**

Fall, Spring, Summer. 4(4-0) P: TC 354, MGT 302.

Theoretical and practical aspects of telecommunication management including case studies. QP: TC 220, TC 310, TC 335 QA: TC 401

Courses

462A. **Telecommunication Applications:** Organizational Impacts

Fall of even-numbered years. 3(2-2) P: TC 361. R: Approval of department; application required.

Uses and effects of telecommunication and information technology in organizational settings. QP: TC 230, TC 360

462B. **Telecommunication Applications:** Teleconferencing Fall. 3(2-2)

P: TC 240. R: Approval of department; application required.

Methods of teleconferencing including assessing requirements for teleconferencing, system design and implementation, and system evaluation. *QP: TC 230, TC 360*

462C. Telecommunication Applications: Electronic Information Services

Spring of even-numbered years. 3(2-2) P: TC 361. R: Approval of department; application required.

Advanced electronic information services applications including electronic bulletin board, audio text and video text services, and voice and electronic mail. QP: TC 360 QA: TC 440

463. **Digital Telecommunication Networks** Fall. 3(3-0) P: TC 361. C: TC 464 R: Approval of department.

Operation and management of common carrier, digital telecommunications systems. Digital telephony busi-ness planning and financial analysis for public telecommunication networks. QP: TC 360 QA: TC 470, TC 430

465. **Telecommunication** Network Management

Spring. 4(3-2) P: TC 463, TC 464, MGT 302. R: Open only to Telecommunication and College of Engineering majors. Techniques for analyzing organizational requirements for voice, data and image communication systems. QP: TC 470 QA: TC 480, TC 430

Telecommunication Research Methods 476. Spring. 4(4-0)

R: Open only to seniors and graduate students. Telecommunication research methods including content analysis, sampling, experiments, surveys, statistics, ratings, polling and qualitative research. QA: TC 335

477. International Telecommunication

Fall, Spring, Summer. 4(4-0) R: Open only to seniors and graduate students. Comparison of national approaches to use of televi-sion, radio, cable, telephone, data and satellite communication. Development, international interaction, data flows, propaganda, impact on cultures. QA. TC 498

490. Independent Study

Fall, Spring, Summer. 1 to 7 credits. A student may earn a maximum of 7 credits in all enrollments for this course. P: TC 310. R: Open only to Telecommunication majors.

Approval of department; application required. Directed study under faculty supervision. QP: TC 230, TC 301, TC 302, TC 302 QA: TC 499

Special Topics in Telecommunication 491.

Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Approval of department. Contemporary issues in telecommunication.

493. Telecommunication Internship Fall, Spring, Summer. 1 to 7 credits. A student may earn a maximum of 7 credits in all

enrollments for this course. P: TC 100, TC 200, TC 201. R: Open only to Telecom-munication majors. Approval of department; application required.

Supervised professional experience in a telecommunication institution, business or facility. QA: TC 399

801. **Telecommunication** Technologies Fall, Spring, Summer. 3(3-0)

Trends in mass media and information technologies and their applications. Topics include broadcast systems, telephone systems, data communications, satellite systems, and fiber optic systems. QA: TC 801

Telecommunication Policy Analysis 810.

Fall, Spring, Summer. 3(3-0)

R: Open only to graduate students in Telecommunica-tion or approval of department. Analysis of major public and private telecommunica-tion policies. Applying concepts and data from law, political science, economics, communication and general social science. QA: TC 810

821. Mass Communication Theory and Research

Fall, Spring. 3(3-0)

Current telecommunication and mass communication research and theories, including exposure patterns, diffusion of news and social effects of mass media. QA: TC 821

Media Campaigns and Formative 824. Evaluation

Spring. 3(3-0) Impact of public communication campaigns aimed at educating and persuading mass audiences. Strategies for message development and ongoing assessment. Techniques for audience analysis and evaluation. QA: TC 875

840. **Telecommunication Media Arts** Theory Fall, 3(3-0)

Theoretical perspectives which inform mediated expression. Processes of creating, analyzing, and disseminating knowledge with telecommunication media. QA: TC 830

842. Design and Development of Media Projects Spring. 4(3-2)

P: TC 442 or approval of department; TC 840. R: Open only to graduate students in Telecommunication or approval of department.

verview of production industry and technology. Message design and development. Project management and production techniques. QP: TC 451, TC 830

Financial Aspects of 851. Telecommunication Fall. 3(3-0)

P: TC 458 or approval of department. R: Open only to graduate students in Telecommunication or approval of department.

Telecommunication properties and systems. Broad-cast, common carrier, and cable capitalization. Pric-ing, acquisition criteria, and forecasting techniques. *QP: TC 401 QA: TC 851*

Economic Structure of Telecommunication Industries 852. Spring, Summer. 3(3-0)

R: Open only to graduate students in Telecommunica-tion or approval of department. Economic aspects of telecommunication and informa-tion industries. Emphasis on market structure, con-duct, performance. Content diversity, new technologies, recent regulatory policies, and antitrust. QA: TC 852

856. Multichannel Telecommunication Management Spring. 3(3-0)

R: Open only to graduate students in Telecommunica-tion or approval of department. Management and promotion issues in broadcast

television, multichannel television and programming. QA: TC 815, TC 850

860. Theory and Research in Information Technologies and Services Fall, 3(3-0)

Social science perspectives on the study of information technologies and services. Work from economics, sociology, geography, communication and organization studie QA: TC 860

872. Telecommunication and National Development Fall. 3(3-0)

Role of electronic mass media and telecommunication in facilitating national development in Asia, Africa, Latin America, the Caribbean and the Middle East. Examples from agriculture, health, family planning, nutrition, and education. QA: TC 869

Research Methods in 876. Telecommunication

Fall. 3(3-0) R: One undergraduate statistics or research design course.

Course. Methodological foundations for the examination of telecommunication issues. Topics include telecommu-nication market research, syndicated audience sur-veys, and content analysis of media messages. QP: TC 335 QA: TC 831

Comparative and International 877. Telecommunication

Spring. 3(3-0) Comparison of various national approaches to broadcasting, cable, satellite and telephone systems. Policy, economic, institutional and content issues. Interactions and media flows among countries. International regulatory bodies. QA. TC 870, TC 871

890. Independent Study

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.

R: Open only to graduate students in Telecommunication. Approval of department; application required. Individualized study under faculty supervision. QA: TC 890

891. Special Topics in Telecommunication

Fall, Spring, 3(3-0) R: Open only to graduate students in the College of Communication Arts and Sciences or approval of department.

Contemporary issues. Topics vary.

899 Master's Thesis Research

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R:Open only to graduate students in Telecommunica-tion. Approval of department.

QA. TC 899

960. Media and Technology

Spring, 3(3-0) Interdepartmental with Advertising and Journalism. R: Open only to Ph.D. students in Communication Arts

and Sciences-Mass Media or Communication or approval of department. Theoretical frameworks concerning media and com-

munication processes, and their interactions with technology. Social, organizational, critical, and economic perspectives.

965. Media Economics

Spring. 3(3-0) Interdepartmental with Advertising and Journalism. R: Open only to Ph.D. students in Communication Arts

and Sciences-Mass Media or Communication or approval of department. Economic theory and analysis relevant to the mass

media. Economic structure and performance of mass media and advertising industries. Competition among media and within related industries. QA: ADV 965

THR

THEATRE

Department of Theatre College of Arts and Letters

100. Theatre and Society

Fall, Spring. 3(2-2) Theatre as social comment. Translation of social vision into dramatic art. Demonstration and application of theatrical conventions, play genres, and production techniques. QA: THR 101