MEDIA AND INFORMATION   MI

Department of Media and Information
College of Communication
Arts and Sciences

101   Understanding Media in the Information Age
Fall, Spring, Summer. 3(3-0) SA: TC 100, TC 110, TC 101

Critique and analysis of media including television, radio, film, handhelds, video games, social media and the Internet. Media history, policy, industry structure, and ethics. Technology, industry and social trends affecting the media in the information society.

201   Introduction to Media and Information Technologies and Industries
Fall, Spring, Summer. 3(3-0) P: MI 101 or CSE 231 SA: TC 201

Operational principles and applications of media and information technologies. Overview of the media and information industries.

211   Documentary History and Theory
Fall. 3(3-0) Interdepartmental with Film Studies and Journalism and Writing, Rhetoric and American Cultures. Administered by Media and Information. R: Open to students in the School of Journalism or in the Department of Media and Information or in the Department of Writing, Rhetoric and American Cultures or in the Documentary Studies Specialization or in the Film Studies major.

Documentary history and theory form its origins to the present.

239   Digital Footprints: Privacy and Online Behavior
Fall. 3(3-0) P: Completion of Tier I Writing Requirement R: Open to undergraduate students.

Exploration of digitization and capture of personal information. Issues of privacy, anonymity, and ownership. Technologies involved in capturing personal information.

247   Three-Dimensional Modeling and Design
Fall, Spring, Summer. 3(2-2) P: {(CAS 111 or CAS 112) and (CAS 205 or CAS 206 or CAS 207)} or (STA 110 and STA 113) R: Open to students in the Department of Media and Information or in the Game Design and Development Specialization. SA: TC 247

Principles of 3D of computer graphics applied in cinema, games, illustration, design and sculpture. Use of 3D software to create and manipulate synthetic objects, materials, lights, and cameras.

291   Special Topics
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. A student may earn a maximum of 16 credits in MI 291 and MI 491. SA: TC 291

Contemporary issues in media and communication technology.

300   Media Policy and Economics
Fall. 3(3-0) P: MI 101 SA: TC 200, TC 210, TC 300

Economics and public policy related to traditional, new and emerging media, including radio, television, cinema, telephony, mobile communications, interactive media, and the Internet.

301   Bringing Media to Market
Spring, Summer. 3(3-0) P: MI 101 SA: TC 356, TC 381, TC 301

Process of bringing media to market across multiple delivery platforms including broadcast, cable, satellite, internet and mobile devices. Industry structure of creative and distribution methods, pricing and repurposing of content. Practical and theoretical models of the behavior of media consumers.

311   Introduction to Documentary Production
Spring. 3(2-2) Interdepartmental with Film Studies and Journalism and Writing, Rhetoric and American Cultures. Administered by Media and Information. R: Open to students in the Documentary Studies Specialization. SA: TC 233

Introduction to documentary production using accessible and affordable digital technology.

331   Introduction to Interactive Media Development
Fall, Spring. 3(2-2) P: CAS 204 and CAS 208 R: Open to students in the Department of Media and Information or in the Design Specialization or in the Game Design and Development Specialization. SA: TC 241, TC 331

Brainstorming, planning, implementing, and troubleshooting applications and interfaces for interactive media. Basic principles of programming for interactivity.

337   Compositing and Special Effects
Fall. 3(1-4) P: {(CAS 201 and CAS 202) and (CAS 205 or CAS 206 or CAS 207)} or THR 219 R: Open to students in the Department of Media and Information or in the Department of Theatre or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. SA: TC 437, TC 337 Not open to students with credit in THR 337.

Conceptual and technical use of animation and compositing software for television, cinema, interactive media, and live performance.

341   Film Style Production for Cinema and Television
Fall, Spring, Summer. 3(2-2) P: CAS 112 and CAS 201 and CAS 202 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. SA: TC 341

Advanced film style planning, techniques, and aesthetic principles for cinema and television production.

342   Multi Camera Production for Television
Fall, Spring, Summer. 3(2-2) P: CAS 112 and CAS 201 and CAS 202 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. SA: TC 342

Conceptualizing, designing, planning, producing, directing and evaluating multi-camera video programs.

343   Basic Audio Production
Fall, Spring, Summer. 3(2-2) P: CAS 112 and CAS 201 and CAS 202 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. SA: TC 343

Basic audio production techniques. In-depth audio and radio industry analysis. Media writing.

344   Sound Design for Cinema, Television, and Games
Spring, Summer. 3(2-2) P: CAS 112 RB: CAS 201 and CAS 202 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization.

Principles, technology, and techniques of sound design for media projects, including film, games, television, animation, and web.

346   Introduction to Game Design
Fall. 3(2-2) P: (MI 331 or concurrently) or (CSE 331 or concurrently) R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Game Design and Development Specialization. SA: TC 346

Analyze, critique, and design of non-digital and digital games. Overview of game industry.

347   Advanced Three-Dimensional Computer Animation
Spring. 3(2-2) P: MI 247 R: Open to students in the Department of Media and Information or in the Game Design and Development Specialization. SA: TC 347

How aesthetic skill, technical competency, and engaging performance are woven together to create compelling animation using 3D computer graphics. Use of industry standard software to create, manipulate and render synthetic characters and their environments.

348   Advanced Lighting and Camera Techniques
Fall, Spring. 3(1-4) P: MI 341 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. SA: TC 348

Advanced techniques for manipulation of light and image characteristics in film and television settings.

349   Web Design and Development
Fall. 3(2-2) P: (CAS 204 and CAS 205) or MI 331 or CSE 231 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Design Specialization or in the Information and Communication Technology for Development Specialization. SA: TC 349

Design and development of web sites, services, and applications that employ primarily web browser technologies.

351   Producing For Cinema and Television
Spring. 3(3-0) P: CAS 112 and (CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. SA: TC 351

Conceptualizing, designing, planning, and developing projects for cinema and television.

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352 Advanced Video Editing
Spring. 3(2-2) P: MI 341 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization.
Advanced principles, technology and techniques of video editing.

355 Media and Information Research
Spring. 3(3-0) RB: Completion of University Math Requirement R: Open to juniors or seniors in the Department of Advertising and Public Relations or in the Department of Media and Information. SA: ADV 340, ADV 355, TC 376, TC 355
Applied media and information research methods, practices, techniques and ethics.

359 Server-Side Web Development
Spring. 3(2-2) P: MI 331 or CSE 231 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Information and Communication Technology for Development Specialization. SA: TC 449, TC 359
Development of advanced Web sites, services, and applications that employ both browser and server-side technologies.

361 Information and Communication Technology Management
Fall. 3(3-0) P: MI 201 or CSE 231 SA: TC 361
Technologies and organizations that support data communications infrastructure. Case studies of businesses that develop the infrastructure.

362 Web Administration
Spring. 3(2-2) P: MI 331 or MI 349 or CSE 232 RB: (MI 349 or concurrently) or (MI 361 or concurrently) R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Information and Communication Technology for Development Specialization or in the Information Technology Minor. SA: TC 362
Administration of Web servers and the services necessary to support modern information applications.

377 Advanced 3D Modeling
Fall. 3(2-2) P: MI 247 R: Open to students in the Department of Media and Information.
Learn advanced techniques in 3D modeling and texturing for games, movies, television, and motion graphics.

401 Topics in Media Impacts on Society
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P: MI 101 and Completion of Tier I Writing Requirement R: Open to undergraduate students or graduate students in the Department of Media and Information. SA: TC 239, TC 339, TC 375, TC 401
Cultural, technological, and design evolution of media. Current and historical genres, content, audience, and industries for media. Conventional and emerging theories of media processes and effects. Critical examination of empirical research concerning social impacts of media.

411 Collaborative Documentary Design and Production (W)
Spring. 3(2-2) Interdepartmental with English and Journalism and Writing, Rhetoric and American Cultures. Administered by Media and Information. P: Completion of Tier I Writing Requirement R: Open to students in the Documentary Studies Specialization. SA: TC 411
Design and development of documentaries in a team setting using video and audio, still photography, web design, and print media. Participation in a production cycle including idea generation, research, design, production, and distribution.

442 Design of Cinema and Television Projects (W)
Fall, Spring, Summer. 3(2-2) P: MI 341 and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information. SA: TC 442
Design and development of television and cinema projects in a team setting. Participation in a production cycle including planning, budgeting, design, proposal writing, production, testing, and evaluation. Issues of professionalism, ethics, and communication.

443 Audio Industry Design and Management (W)
Fall, Spring. 3(2-2) P: MI 343 and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information. SA: TC 443
Advanced audio production specializing in multichannel techniques. Industry focus on all aspects of the audio field.

445 Game Design and Development I
Fall. 3(2-2) P: (MI 331 or CSE 331 or CSE 335 or STA 360) and Completion of Tier I Writing Requirement RB: TC 247 or TC 347 R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information. SA: TC 445
Design, architecture, and creation concepts related to the development of interactive digital games.

447 Three-Dimensional Modeling and Animation Workshop (W)
Fall. 3(1-4) P: (MI 347 or MI 377) and Completion of Tier I Writing Requirement RB: MI 337 R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Game Design and Development Specialization or approval of department. SA: TC 447
Design of advanced three-dimensional models and animation.

450 Human Computer Interaction and User Experience Design (W)
Fall, Spring. 3(2-2) P: (MI 331 or MI 346 or MI 349) and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Department of Computer Science and Engineering. SA: TC 450
Development, formalization, and communication of information designs. Gathering and structuring information and requirements to meet technological, personal, and business communication goals. Systematic usability evaluation of information designs.

452 Media Strategy (W)
Fall. 3(3-0) P: (MI 300 and MI 301) and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information. SA: TC 452
Strategic options, with their attendant risks and opportunities, available to media firms in an industry that is being transformed by new information and communication technologies.

455 Game Design and Development II
Spring. 3(2-2) P: MI 445 and Completion of Tier I Writing Requirement R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information. SA: TC 455
Advanced design, architecture, and creation concepts related to the development of real-time interaction 3D design for gaming, simulation, and immersive virtual environments.

458 Project Management (W)
Spring. 3(3-0) P: (MI 301) and completion of Tier I writing requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Applied Engineering Sciences Major. SA: TC 458 Not open to students with credit in MI 499.
Managing complicated and multidisciplinary projects. Organizing projects into manageable elements: scope, time, cost, quality, human resources, communication, risk, procurement, and integration. Communicate with stakeholders. Analyze organizations. Develop a budget. Identify roles and responsibilities during the critical planning, deployment, and evaluation stages.

462 Social Computing (W)
Fall. 3(2-2) P: (MI 349 or MI 361) and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Information and Communication Technology for Development Specialization. SA: TC 462B, TC 462
Social and technological perspectives on how people collaborate using information and communication technology. Experience with using multiple collaboration platforms and analysis of differences between enabling technologies.

472 Electronic Commerce (W)
Spring. 3(2-2) P: (MI 349 or MI 361) and completion of Tier I writing requirement RB: MI 359 or concurrently R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Information and Communication Technology for Development Specialization. SA: TC 462C, TC 472
Technologies, business models, and organizational and social implications of electronic commerce. Design of e-commerce sites.

480 Information and Communication Technologies for Development
Fall. 3(3-0) Interdepartmental with Engineering. Administered by Media and Information. P: Completion of Tier I Writing Requirement SA: TC 480
This course will prepare students with the knowledge and skills necessary to understand the role of information and communications technologies (ICT) in developing countries. This includes theories and case studies that link ICT and social, political, economic, and environmental change.

482 Building Virtual Worlds (W)
Fall. 3(2-2) P: (MI 331 and MI 346) and completion of Tier I writing requirement RB: MI 247 R: Open to students in the Department of Media and Information.
Theoretical and practical approaches to the planning, design, and development of virtual worlds for games and simulations.

484 Building Innovative Interfaces (W)
Spring. 3(2-2) P: (MI 331) and completion of Tier I writing requirement R: Open to students in the Department of Media and Information.
Designing, implementing and evaluating new interaction devices using mobile and sensor technologies.

488 Information and Communication Technology Development Project (W)
Spring, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Engineering. Administered by Media and Information. P: Completion of Tier I Writing Requirement RB: MI 480 SA: TC 488
Students will learn about the challenges and opportunities of implementing an information and communication technology in a developing country or underprivileged region of the United States. Students will gain hands-on experience conducting field work on location.

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. R: Open to undergraduate students in the Department of Media and Information. Approval of department; application required. SA: TC 490
Directed study under faculty supervision.

491 Special Topics
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. A student may earn a maximum of 16 credits MI291 and MI491. R: Open to juniors or seniors or graduate students in the Department of Media and Information. SA: TC 491
Contemporary issues in media and communication technology.

493 Internship
Fall, Spring, Summer. 1 to 7 credits. A student may earn a maximum of 7 credits in all enrollments for this course. RB: MI 101 and MI 201 and MI 301 R: Open to undergraduate students in the Department of Media and Information. Approval of department; application required. SA: TC 493
Supervised professional experience in a media or information institution, business or facility.

497 Game Design Studio
Fall. 3(1-4) P: MI 455 R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information. SA: TC 497
Conceptualization, design documentation, planning, prototyping, and distribution of games.

498 Collaborative Game Design (W)
Spring. 3(2-2) P: (MI 445 and MI 455 and MI 497) and completion of Tier I writing requirement R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information. SA: TC 498
Design and development of comprehensive digital games in a team setting working with a client. Participation in a design cycle including specification, design, prototyping, implementation, testing, and documentation. Issues of professionalism, ethics, and communication.

499 Media and Information Capstone (W)
On Demand. 3(2-2) P: (MI 331 or MI 341 or MI 300) and Completion of Tier I Writing Requirement R: Open to juniors or seniors in the Department of Media and Information. SA: TC 499 Not open to students with credit in MI 458.
Design and development of comprehensive media and information projects in a team setting working with a client. Participation in a design cycle including specification, design, prototyping, implementation, testing, and documentation. Issues of professionalism, ethics, and communication.

803 Introduction to Quantitative Research Methods
Fall, Summer. 3(3-0) Interdepartmental with Advertising and Communication and Journalism. Administered by Communication. SA: ADV 875, COM 800, JRN 817, TC 802
Introduction to quantitative social science research methods and applied analyses for understanding research reports and developing graduate level research projects.

820 Theories of Media and Information
Fall. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 820
Classic and contemporary theories of communication with special emphasis on applications to telecommunication, extant and emerging media, and technology.

830 Foundations of Serious Games
Spring. 3(3-0) R: Open to students in the Educational Technology Major or in the Educational Technology Graduate Certificate or in the Serious Game Design and Research Certificate or in the Media and Information Major or approval of department. SA: TC 830
Rationales, principles, processes, and pedagogies for serious game design. Applications of serious game genres and simulations. Funding and distribution.

831 Theories of Games and Interaction Design
Fall. 3(3-0) R: Open to students in the Educational Technology Major or in the Educational Technology Graduate Certificate or in the Serious Game Design and Research Certificate or in the Media and Information Major or approval of department. SA: TC 831
Theories of interaction in games and other mediated contexts including communication, learning, health, global and local development, and social justice to inform the design of social systems, games and other interactive media products.

839 Implementing Interactivity
Fall. 3(2-2) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 839
Foundational visual design principles and theories for interactivity. Implementation of user interfaces. Current industry practices.

841 Understanding Users
Fall. 3(3-0) RB: Direct experience with the creative process in interactive media R: Open to students in the Educational Technology Major or in the Educational Technology Graduate Certificate or in the Serious Game Design and Research Certificate or in the Media and Information Major or approval of department. SA: TC 841
Methods of user-centered media and interaction design. Iterative cycles of user and product conceptualization.

842 Design and Development of Media Projects
Spring. 3(2-2) RB: Strongly recommended to be taken in final or near-final semester of graduate studies, so that majority of graduate degree program coursework has already been completed and can serve as relevant background. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 842
Team projects in Human Computer Interaction and Media and Information Management. Proposal development, team building, project management and workflow methods.

844 Interaction Design
Spring. 3(2-2) RB: Basic familiarity with computers and Internet. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 844
Design of user interactions in information and media systems. Prototyping and presentation tools. Example topics include information architecture, task analysis, use cases, wire frames, scenarios.

845 Human Computer Interaction
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 845
Principles and theories of how humans and technical systems interact in traditional media, networked environments, social and mobile computing, virtual environments and information appliances.

850 Media and Information Policy
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 810, TC 850
Analysis of major public and private media and information policies, including Internet governance. Applying concepts and data from law, political science, economics, communication, technology and general social science.

851 Understanding Social Media
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 851
Overview of social media applications and services and their effects on individuals, organizations, and society.

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852 Economic Structure of Telecommunication Industries
Fall. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 852

Economic aspects of telecommunication and information industries. Emphasis on market structure, conduct, performance. Content diversity, new technologies, recent regulatory policies, and antitrust.

854 Economics of Media Markets and Strategies
Spring of odd years. 3(3-0) RB: MI 852 or concurrently R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 854

Conceptual tools and analytical perspectives on economic forces and incentives underlying structure, conduct, and responses to new technologies in media markets.

861 Information Networks and Technologies
Fall. 3(3-0) RB: Academic or professional background in telecommunication field. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 861

Fundamental characteristics, components, standards and applications of information networks and services. Local and wide area network technologies, fundamentals of the Internet, and private network technologies and services from a management perspective.

862 Information Networks in Organizations and Commerce
Spring. 3(2-2) RB: MI 861 or concurrently R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 862

Design and management of electronic commerce strategies and the telecommunications infrastructure. Impact of information and communication technology on organizations and markets.

875 Information and Communication Technology for Development
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 875

Information and communication technology in developing areas, cases studies, implementation. International and domestic contexts.

877 Comparative and International Telecommunication
Fall of even years. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 877

Comparison of various national approaches to broadcasting, cable, satellite, telephone, mobile communications, and the Internet. Policy, economic, institutional and content issues. Interactions and media flows among countries. International governance bodies.

890 Independent Study
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Department of Media and Information. Approval of department; application required. SA: TC 890

Individualized study under faculty supervision.

891 Special Topics in Telecommunication
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 891

Contemporary issues. Topics vary.

893 Media and Information Internship
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 893

Internships in media and information industries.

898 Master's Project
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to masters students in the Department of Media and Information. Approval of department; application required. SA: TC 843, TC 898

Plan B individual project demonstrating master's level professional competence.

899 Master's Thesis Research
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Department of Media and Information. Approval of department; application required. SA: TC 899

Master's thesis research.

900 Theory Building in Media and Information Studies
Fall. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Advertising.

Concepts and issues relating explanation, scientific inquiry, theory building and applications to interdisciplinary studies in media and information.

960 Media and Technology
Spring. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Media and Information. R: Open to doctoral students in the Communication Major or in the Media and Information Studies Major or approval of department. SA: TC 960

Theoretical frameworks concerning media and communication processes, and their interactions with technology. Social, organizational, critical, and economic perspectives.

975 Quantitative Research Design
Fall. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Advertising. RB: One graduate-level research design or statistics course. R: Open to doctoral students.

Survey, experimental and content-analytic techniques applied to the study of media. Academic and applied research methods. Univariate and multivariate techniques.

985 Advanced Quantitative Analysis for Media
Spring. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Media and Information. P: ADV 975 RB: Masters-level research course in addition to ADV 975.

Multivariate research methods for media and information studies research.